



**Health Literacy in Adult Education
Settings Grant Project:**

Final Evaluation Report

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Committed to building the capacity of organizations and institutions to develop the health, economic equity, and social justice of communities.

Preface

This *Health Literacy in Adult Education Settings Grant Project: Final Evaluation Report* was prepared for the Connecticut Health Foundation by Community Science (formerly the Association for the Study and Development of Community). It summarizes the evaluation's findings for 2008 and 2009 (for two grantees that were given no-cost extensions).

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Executive Summary

Six adult education centers throughout the state of Connecticut received one-year grants from the Connecticut Health Foundation (“CT Health”) to increase their capacity to teach health literacy. A total of 21 teachers participated in a series of study circles facilitated by a trained professional from the Literacy Assistance Center in New York to develop skills in integrating health literacy instruction into their classes. These teachers were expected to transfer their knowledge and skills to other teachers at their centers.

CT Health was interested in answering the following evaluation questions:

1. To what extent did the teachers implement or modify the health literacy curriculum?
2. Did the adult learners improve the health literacy skills needed to navigate systems, manage chronic diseases, and engage in preventive behavior?
3. Did self-efficacy for health literacy increase among the adult learners?
4. How did the adult education centers increase their capacity (i.e., staff professional development, partnerships with healthcare organizations, institutional support, knowledge transfer, and sustainability of health literacy education) to teach health literacy skills to adult learners from racial and ethnic minority groups?

All the teachers implemented the health literacy curriculum as planned. Most of them spent the amount of time expected to prepare for and teach health literacy (between 20% [minimum amount of time expected] to 50% of their total preparation and teaching time). This pattern remained fairly steady during the spring and fall semesters, suggesting that it may be reasonable to expect adult education teachers to spend between 20% and 50% of their time preparing for and teaching health literacy. As expected, the majority of teachers had to modify or create new lessons, and most of the modification and innovation occurred with lessons about chronic disease management. This was the biggest challenge faced by the teachers because of the amount of time it took to tailor the sample lessons to their specific student populations, especially ESL/ESOL students. As the teachers became more familiar with their students' health needs and capacities, they focused more on specific health topics instead of attempting to cover as many subjects as possible.

Approximately 2,502 adult learners were exposed to health literacy instruction during 2008 and spring 2009.¹ A sample of 565 students from the classes taught by the teachers who participated in the study circles were tested at the beginning and end of the spring and fall semesters for changes in their health knowledge and self-efficacy in health literacy.² Test scores improved and the differences were statistically significant, indicating that the **students**

¹ The Norwich Adult Education Center and Stamford Public School Adult Education were offered a no-cost extension through May 2009.

² No students exposed to health literacy in 2009 were tested.

improved their knowledge about health issues and increased their confidence in their ability to navigate the health system, manage their health conditions, and seek preventive care, as a result of the health literacy instruction they received. Essays from students confirmed the trend observed in the quantitative findings; slightly more than one-quarter of the 148 essays received showed an increase in the students' confidence to ask questions and talk to their provider.

All six centers clearly improved their capacity to teach health literacy. By the end of the Health Literacy Project, **almost three-quarters of classes across all six centers included some type of health literacy instruction.** This finding includes classes beyond those taught by teachers who participated in the study circles due to the diffusion of health literacy at each center. Additionally, **an average of six partnerships with other healthcare providers was developed by each center.** The centers also purchased more health-related materials and have instilled the value for health literacy among the leadership and staff of the centers. Further, almost half of the teachers who participated in the study circles have continued to attend professional development activities for health literacy beyond the circles; they also have continued to share their knowledge and skills with other teachers at their centers. These capacities will be sustained, which in turn increases the likelihood that health literacy will continue to be taught at the six centers. Progress reports from the centers and interviews with the center directors confirmed this likelihood.

In conclusion, **integration of health literacy instruction into the curricula taught by adult education centers appears to be an effective strategy for increasing the capacity of racial and ethnic minorities to care for their own health.** With sufficient support, including training, funding, and leadership commitment, health information can be used as content to teach adult students English, computer skills, and conversational and writing skills.

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1. Introduction

The Health Literacy in Adult Education Settings grant project (“Health Literacy Project”), funded by the Connecticut Health Foundation (“CT Health”), began in October 2007 and ended in May 2009.³ The following six adult education centers received grants of approximately \$72,166 for that period:

- Capitol Region Education Council (CREC);
- JUNTA for Progressive Action, Inc. (JUNTA);
- Mercy Learning Center of Bridgeport, Inc. (Mercy);
- New Haven Adult and Continuing Education (NHACE);
- Norwich Adult Education (NAE); and
- Stamford Public School Adult Education (SPSAE).

The primary purpose of the grant project was to increase the capacity of these adult education centers to teach their learners to become health literate. A total of 21 teachers from the six centers participated in a series of study circles facilitated by a trainer from the Literacy Assistance Center in New York (a total of 56 hours of training); 19 of the teachers participated in all nine study circles, one teacher joined the study circles part-way through the process (and therefore, received 18 hours of professional development), and another teacher left in the middle of the year (and therefore, received 36 hours of professional development training). In fall 2008, three of the trained teachers left their centers; the classes taught by two of these teachers (from the same center) continued to receive health literacy instruction from another trained teacher. Anecdotal information about the movement of adult education teachers has shown that these teachers, where they leave one location, tend to find jobs fairly quickly and easily in another location. This information, therefore, suggests that the skills acquired by the teachers through the study circles training are likely to be transferred to another adult education program or center.

Each of the following topics was addressed over the course of the study circles: health care access and navigation (October through November 2007), chronic disease management (January through February 2008), and disease prevention and screening (April through May 2008). The teachers were expected to spend at least 20% of their instruction teaching tasks and skills related to these three topics as they learned about them during the study circles. Teachers were encouraged to tailor the materials to their students’ levels of education, English proficiency, and cultural backgrounds.

³ The Norwich Adult Education Center and Stamford Public School Adult Education were granted a no-cost extension through May 2009.

The evaluation questions for the Health Literacy Project were:

1. To what extent did the teachers implement or modify the health literacy curriculum?
2. Did the adult learners improve the health literacy skills needed to navigate systems, manage chronic diseases, and engage in preventive behavior?
3. Did self-efficacy for health literacy increase among the adult learners?
4. How did the adult education centers increase their capacity (i.e., staff professional development, partnerships with healthcare organizations, institutional support, knowledge transfer, and sustainability of health literacy education) to teach health literacy skills to adult learners from racial and ethnic minority groups?

The evaluation of the Health Literacy Project consisted of five primary activities:

1. Pre- and post-test of adult students' health literacy and related self-efficacy (at the beginning and end of each semester for two semesters);
2. Survey of teachers' experiences with the study circles and health literacy instruction (at the end of each semester);
3. Interviews with adult education center directors (at the beginning and end of the grant period)⁴;
4. Review of progress reports submitted by the adult education centers in May 2008, February 2009, and June 2009⁵; and,
5. Analysis of student story essays (at the end of the fall 2008 semester).⁶

A detailed description of the evaluation methodology is included in Appendix A.

This report summarizes the evaluation's findings from all the above activities for the entire year of 2008 and part of 2009. Where appropriate, we describe the trends we found in the spring semester compared to the fall semester. Where appropriate, we also share quotes from student stories to further demonstrate the impact of the Project in the students' own words.

The report is organized as follows: Section 2 summarizes the implementation of the health literacy curriculum across the six centers; Section 3 describes the changes in students' health knowledge, self-efficacy, and behaviors; Section 4 describes changes in the adult education centers' capacity to teach health literacy; Section 5 includes information about teachers and centers received from the study circles team and evaluator; and Section 6

⁴ Center directors were asked different questions at the beginning and at the end of the initiative (please see Appendix A for the list of questions).

⁵ For Norwich Adult Education Center and Stamford Public School Adult Education only.

⁶ Students attending classes in the fall semester were asked to write a paragraph or two about how they used what they learned in class about talking to their doctors, nurses, or any health professionals; this decision was made in response to teachers' concerns that the quantitative data (i.e., the pre- and post-test scores) were not sufficient to capture the students' learning.

summarizes the challenges faced by teachers and the centers. Section 7 discusses lessons learned and the centers' sustainability of health literacy. Section 8 concludes with key themes that emerged from the findings and recommendations for future health literacy initiatives.

2. Implementation of the Health Literacy Approach

Over the course of the initiative, students in 45 classes received health literacy instruction from the teachers who participated in the study circles and also received technical assistance. At the same time, students in another 81 classes also were exposed to health literacy through the infusion of health literacy instruction to the rest of the centers. As a result, **a total of 126 classes with an enrollment of 2,502 students were exposed to health literacy during 2008 and spring 2009** (more information about the diffusion is included in Section 4).

2.1 Preparation

The 20 teachers varied in the amount of time they spent preparing for and teaching health literacy to their classes. During both the spring and fall semesters, for **almost two thirds of the classes (63.6%)**, teachers spent 20% to 50% of their total preparation time preparing to teach health literacy. However, in the fall semester, the percentage of teachers who spent 50% or more of their preparation time preparing to teach health literacy decreased, while the percentage who spent less than 20% increased slightly. Perhaps the teachers had become more familiar with the materials and required less time to prepare to teach health literacy. This finding also suggests that **it generally takes about 20% to 50% of teachers' total preparation time to teach health literacy to adult education students.**

"And I'm so happy to come at this program because we learn a lot off thing even the language and also we talk each other where and how to go or get help about healthy."

We asked teachers whether or not they modified each sample lesson or used the lesson as originally designed for each of the classes they taught. **We learned that at least 42.8% of the teachers had to modify the sample lessons or create new ones in all three modules** (healthcare access and navigation, chronic disease management, and disease prevention and screening). Most of the modification and innovation occurred in the chronic disease management module. The extent to which teachers had to modify the sample lessons or create new ones was in line with the study circles facilitator's expectation since the teachers knew their student populations best. We did not ask this question in the fall in order to keep the teacher survey brief; we also assumed that once the lessons were modified to suit the level and type of class, no further major modifications were necessary.

2.2 Instruction

Teachers were asked to indicate how much time they actually spent teaching health literacy. Over the course of the year, for a majority of classes (almost three-quarters), teachers spent 20% to 50% of their total instruction time teaching health literacy, in line with expectations of the study circles facilitator. This range is consistent with the range of time teachers spent preparing to teach health literacy. For a small percentage of classes (18.2% during both spring and fall semesters), the teachers spent less than 20% of their total instruction time teaching health literacy.

Teachers also reported the number of tasks (e.g., develop a treatment plan) and skills (e.g., ask health provider questions) related to each module that they taught during each semester. Teachers tended to teach fewer tasks and skills during the fall semester than during the spring. They taught four to six tasks and skills for each of the three modules during the spring, while in the fall, they taught three or fewer for two of the three modules. The teachers indicated in the teacher survey questionnaire that during the second semester of teaching the health literacy curriculum they delved deeper into certain subject matters instead of trying to cover every possible topic, perhaps because they had become more familiar with the lessons and more knowledgeable about the health needs of the students they taught.

Over the course of the year, almost all the teachers reported enhancing their teaching methods through existing materials, information gleaned from the Internet, and engagement of guest speakers. During the first half of the year, 90.9% of teachers said they utilized new materials; during the second half of the year, only 45.5% reported doing this, perhaps because they had already gathered as much new information as they could early on. Alternatively, the percentage of teachers who reported that they attended professional development activities for health literacy beyond the study circles increased by approximately 23% between the first and

"Before I took this class I can not did question for the doctor. Now I know that how I can talked to the doctor. This class was very important because I learned new things about the health, like how I can prevent disease, how I can eat healthy, and how I can fill out the documents in the hospital."

second halves of the year. In the fall semester, teachers also reported an increase in "other activities," such as health fairs and resource sharing with other teachers by about 27%.

3. Changes in Students' Health Literacy and Related Self-Efficacy

All students were informed that they would be asked to complete a questionnaire about their self-efficacy in health (Self-Efficacy Assessment or SEA, see Appendix B for a copy of the questionnaire) at the beginning and end of the semester. Students in the 21 higher-level classes (including "Beginning High") taught in the spring and fall semesters also were informed that they would be asked to complete a questionnaire about their health literacy (Short Test of Functional Health Literacy in Adults or S –TOFHLA, see Appendix C for a copy of the questionnaire). Because student attendance varied throughout the semester, not all were present to complete the assessments at the beginning and end of the semester.

Over the course of the initiative, 414 students (195 in the spring and 219 in the fall) completed the SEA pre- and post-test. A total of 227 (107 in the spring and 120 in the fall) students completed the S-TOFHLA pre- and post-test. As the analysis of the scores was limited to students who had not been previously exposed to health literacy,⁷ our analysis utilized a smaller sample: 361 and 204 SEA and S-TOFHLA respondents, respectively.

3.1 Health Literacy

The health literacy results were scored on the following scale: *inadequate* (1), *marginal* (2), or *adequate* (3). Over the course of the year, **students' scores significantly improved from below marginal to marginal or better, with students in the fall semester demonstrating an even greater improvement over time.** Across the centers, students' scores increased from 1.81 (*almost marginal*) at pre-test to 2.08 (*marginal*) at post-test during the spring. During the fall, the average pre-test score was 1.84 (*almost marginal*), and the average post-test score was 2.53 (*between marginal and adequate*); this difference in pre- and post-test scores is statistically significant (i.e., the likelihood this difference occurred by chance is less than 5%).

We examined class types (i.e., General Education Development [GED], Adult Basic Education [ABE], and English as a Second Language/English for Speakers of Other Languages [ESL/ESOL]) separately to identify differences in health literacy scores. Due to the relatively

"Before I came to this school my husband helped with my appointments. And now I go to the doctor by my self. ...I am making avery effort for me, for my husband and my baby. Every day I want to learn more than I learned yesterday. My family's health is very importante to me."

⁷ Note that students from Mercy were not excluded from the analysis based on previous exposure to health literacy. Unlike the other centers, which enroll students by semester, Mercy enrolls students for a full year; therefore, to exclude Mercy students with previous exposure to health literacy (i.e., 57 students from the spring semester whose teachers began the study circles in October 2007) would mean eliminating the entire site from the evaluation. To confirm that the Mercy students' test scores did not affect the overall findings, we analyzed these students' scores separately and found that they did not differ substantially from those of students at other sites.

small sample sizes in the non-ESL classes in the fall semester, we collapsed these classes into a GED/ABE group to examine differences in class type. Over the course of the year, ESL students showed statistically significant improvement in their health literacy scores after being exposed to health literacy instruction for a semester, with students enrolled in the fall demonstrating an even greater improvement over time. During the spring, ESL/ESOL students tended to score between *inadequate* and *marginal* on both pre- and post-tests; although their scores were in the same category, the scores were significantly higher at the end of the semester. In the fall, ESL students tended to score between the *inadequate* and *marginal* categories at pre-test and between *marginal* and *adequate* at post-test. In contrast to the ESL/ESOL students, only GED/ABE students enrolled in the fall showed statistically significant improvement in their health literacy scores. Although their scores were between *marginal* and *adequate* for both semesters, the difference between the scores was statistically significant for students in the fall.

3.2 Related Self-Efficacy

The self-efficacy results were scored on a six-point scale ranging from *strongly disagree* (1) to *strongly agree* (6), where lower scores suggest poorer self-efficacy in health literacy. Over the course of the year, students showed a statistically significant increase in their self-efficacy after being exposed to health literacy for a semester. During the spring, the students' average pre- and post-test scores were 4.48 and 4.92. During the fall, the average pre- and post-test scores were 4.58 and 4.82. The differences in both instances were statistically significant.

When we examined class types separately, we found that ESL/ESOL students in both semesters tended to report lower self-efficacy at both pre- and post-test (average scores of 4.46 and 4.67, respectively) than did GED/ABE students (average scores of 4.94 and 5.24, respectively). Unlike the spring semester where ABE students showed a slight decrease in their post-test scores while the ESL/ESOL and GED students showed a statistically significant increase, all the ESL/ESOL and GED/ABE students in fall 2008 showed a statistically significant increase in their self-efficacy.

As part of the SEA, respondents were asked to rate their health on a five-point scale from *poor* to *excellent* and indicate the type of health insurance they have. We examined the relationship between these variables and SEA to determine whether people's health insurance status or perception of the quality of their health may influence how confident they feel about their health literacy skills. Our findings suggest that people's perception of the quality of their health, and not necessarily whether or not they have health insurance, may be related to how confident they feel about their health literacy skills.

Some teachers expressed concern about the difficulty of the SEA questions and response categories; therefore, the evaluation team conducted separate analyses for students

in the higher-level and lower-level classes. The reliability coefficients for both class groups' scores were high (i.e., above .70). Although the pre- and post-test scores of students in the higher-level classes were higher than were those of their counterparts, both class groups showed a statistically significant increase in their self-efficacy scores at post-test. Further, qualitative data from the centers' progress reports were consistent with improved health literacy among some of the students. Therefore, the evaluation team is confident in our interpretation that the students generally improved their health literacy and related self-efficacy.

3.3 Health Behaviors

The six centers' progress reports and the 148 student essays received in fall 2008 indicated that students became more knowledgeable about health behaviors and showed enthusiasm, eagerness, and an overall positive reaction to the health literacy instruction.

In spring 2008, five centers documented that students told their teachers they had a better understanding of the following related to health care access and navigation: the health care system, medical vocabulary and terminology, and patient rights and responsibilities. The students also learned about the following related to prevention and screening: breast cancer prevention and screening, dental screenings, and other health screenings to prevent illness. The centers also reported that students had applied the skills they developed to situations outside the classroom. **The two most frequently reported skills that were applied outside the classroom included 1) healthier eating and living, and 2) making doctor's appointments.** For example, one student reported that she stopped drinking Coca-Cola because she was worried that the high sugar content could lead to diabetes. Another student reported taking her daughter to the doctor for asthma after learning about asthma in class. In another noteworthy example, one of the teachers brought in healthy snacks as an incentive on one of the days when students were tested for their health literacy. After that day, the teacher noticed that the students started to bring their own vegetables and fruits for snacks and stopped going to the vending machine. Other skills that were applied included the ability to describe symptoms in English to a health care provider and being able to follow medical directions (e.g., prescription directions).

Our analysis of the student essays revealed that **slightly more than one-quarter (27.0%) reported increased confidence to ask questions of their provider, 12% reported developing skills associated with healthy eating and living, and 19.5% of students also indicated that they had learned useful information related to taking medication, dental care, first aid, and injury prevention.** Here are examples of some of the students' stories (more quotes are included in Appendix D):

I feel confident when I want to ask something about my illness because some times they try to answerd to other way. When they gave me a medication I have a idea how to read the labels before I take it.

This class is the only information that the community has about medical services... I want to thank you in the name of my community for all this support.

Now I fell good because I can say everything what I fell with the doctor and any person. And also I get the oportunite to learn many things about health care. Now I can get a apoiment with some doctor in this country.

4. Organizational Capacity to Teach Health Literacy

We evaluated the adult education centers' capacity to teach health literacy based on: 1) diffusion of health literacy and related instruction throughout the center (i.e., study-circle teachers' sharing their knowledge, skills, and resources with their colleagues at the center), 2) presence of a supportive environment for health literacy instruction, and 3) formation of partnerships with health organizations in the surrounding area.

All center directors indicated that their center was better able to teach health literacy skills now than they were before the initiative. The center directors identified the following evidence to support this:

- Access to more health-related materials,
- Study circles helped increase the teachers' capacity to teach health literacy, and
- More partnerships and connections with outside organizations were formed that will continue into the future.

Center directors most frequently cited the availability of materials, the study circles, and networking with other teachers as factors that facilitated the implementation of health literacy instruction.

4.1 Diffusion of Health Literacy Instruction

The number of classes offering some form of health literacy increased by 21.4% between the beginning and end of the Health Literacy Project. At the beginning of the initiative, almost half of the classes offered at all six centers (44 out of 89 classes or 49.4%) offered some form of health literacy instruction. At the end of the initiative, however, the

majority of classes (126 out of 178 classes or 70.8%) offered some form of health literacy. In one adult center, the teaching schedules were rearranged such that all of the students could be involved in health literacy.

Table 1 shows the aggregate number and type of classes for the total grant period. The column marked “Total” indicates the total number of classes offered, and “w/HL” indicates the number of classes in which health literacy was taught. Classes not offered at a particular center are marked “n/a” for not applicable.

Table 1: Proportion of Classes with Health Literacy Instruction for Total Grant Period, by Center and Class Type

Class Type	CREC		JUNTA		Mercy		NHAE		NAE		SPSAE	
	Total	w/HL	Total	w/HL	Total	w/HL	Total	w/HL	Total	w/HL	Total	w/HL
ABE	n/a		n/a		4	4	13	10	n/a		3	3
ESL/ESOL	9	8	9	9	12	12	60	54	14	4	40	12
GED	n/a		2	2	2	2	7	3	n/a		3	3
TOTAL	9	8	11	11	18	18	80	67	14	4	46	18
Total number of students exposed to health literacy to date	180		250		946		515		211		400	
Percentage of classes with health literacy at beginning of initiative	100%		100%		100%		20.5%		33.3%		42.9%	
Percentage of classes with health literacy at end of initiative	88.9%		100%		100%		83.8%		28.6%		39.1%	

The table shows that two of the six centers had incorporated health literacy instruction into all of their ABE, ESL/ESOL, GED classes; across all centers, the instruction was most frequently incorporated into ESL/ESOL classes. Three centers (CREC, NAE, and SPSAE) reported a decrease in the number of classes with health literacy instruction. One ESL/ESOL class was added at CREC where health literacy was not part of the curriculum. For NAE, two ESL/ESOL classes were added over the grant period but the total number of classes with a health literacy component remained the same. SPSAE reported a slight decrease because not all of their ESL/ESOL classes incorporated health literacy and because of their grant extension, additional

⁸ Because the Norwich Adult Education Center and Stamford Public School Adult Education extended their grant period to May 2009, the total number of classes includes classes in session for spring 2009 for these two centers.

classes in spring 2009 were considered. NHAE, showed a dramatic increase in the number of classes where health literacy was part of the curriculum. The NHAE's director attributed this increase to the growing number of teachers who had the capacity to teach health literacy as a result of information sharing by teachers who participated in the study circles.

Center directors most frequently cited teachers' willingness and eagerness to teach health literacy as the reason health literacy has been infused into other parts of their centers. This was most likely one of the reasons for the increase in the number of classes that offered some form of health literacy instruction.

The number of study circle teachers who formally shared information with other teachers increased by 27.3% during the fall. During the spring semester, approximately half of teachers who participated in the study circles reported formally sharing information about health literacy with other teachers; by the second half of the year, slightly more than three-quarters (77.3%) reported doing so during the fall semester. Examples of shared information included sharing at staff meetings (one center made health literacy an agenda item for their weekly staff meetings); exchanging Internet resources, books, and lesson plans; sharing health information with other students (e.g., flyers, bulletin board); and participating in discussions with other teachers. **Approximately 45.0% of teachers during both the spring and fall semesters also reported that other teachers at their centers have started to incorporate health literacy information into their instruction.** This supports the above finding that the majority of classes offered some form of health literacy instruction.

4.2 A Supportive Environment for Health Literacy Instruction

Survey responses from the teachers and progress reports from the centers indicated a supportive environment for teaching health literacy across all six centers. All teachers who participated in the study circles reported that their centers have added to their resources information about health literacy. Over the course of the year, the majority of teachers reported that their centers' leadership understands the importance of health literacy (85.0% in the spring versus 90.9% in the fall), and acknowledged champions at their centers committed to incorporating health literacy into their instruction (70.0% in the spring versus 86.4% in the fall). All described themselves as either *satisfied* or *very satisfied* with the support from their center.

All center directors indicated some form of institutional support, either formal or informal, available to facilitate the teaching of health literacy. Qualitative information obtained during interviews with center directors corroborates the presence of a supportive environment, for example, support for teachers' attendance at trainings offered by the grant, team meetings during which teachers share information, giving teachers autonomy/flexibility in the classroom to cater to student interests, implementation of an adult education curriculum

that includes health literacy, support from outside organizations, upper level management support, and support from professionals (e.g., clinical psychologists, clinical social workers) on staff. In sum, the data suggest that **center directors are providing a supportive environment for teachers to integrate health literacy into their classes**. Such upper leadership support is essential for any type of institutional change.

All center directors noted the availability of some form of professional development opportunity for teachers to learn about health literacy and to develop health literacy teaching skills. The most common professional development opportunity indicated was attendance at conferences or workshops (indicated at four of six centers in the spring). The following forms of professional development also were mentioned: study-circle participation, meetings, partnerships with outside organizations, and continuing education units for teachers. The center directors' encouragement of professional development is likely to have a positive impact on the teachers' capacity to teach health literacy. Data from the center's last progress report indicated that professional development for teachers and other staff (e.g., workshops, sharing information with other teachers) has been institutionalized so that health literacy does not live solely in the classroom, and extends throughout the center.

4.3 Partnerships

On average, each center developed or strengthened six partnerships with health service providers in its region at the beginning of the initiative. The partnerships remained more or less stable for the rest of the year. At one site, the center developed a first-time partnership with a health organization a block away; despite being in such close proximity for years, the two organizations had never worked together before. These partnerships also have led to unanticipated benefits, such as the following:

- Discovery of job opportunities at a local hospital during a field trip;
- New knowledge about prescription discount programs and free antibiotics during a workshop; and
- Development of healthy food shopping habits after a visit to a neighborhood farmer's market.

The evaluation team reviewed the centers' progress reports for information about the number, type, and function of partnerships developed to date (see Table 2 for the number of partnerships, by center). The greatest and least numbers of partnerships developed or strengthened were 13 and two, respectively. Responses from the teacher survey and center director interviews confirmed the centers' reports that partnerships had been developed or strengthened. Furthermore, all centers indicated plans to continue developing partnerships.

Table 2: Number of Partnerships, by Center

	CREC	JUNTA	Mercy	NHAE	NAE	SPSAE
Number of Partnerships (spring 2008)	6	6	5	3	13	2
Number of Partnerships (fall 2008)	6	7	5	2	13	4

Note: The number of partnerships is not intended to be combined to obtain an aggregate number; for most centers, partnerships reported in the spring were the same ones reported in the fall. Stamford Public School Adult Education added one new partnership in the spring of 2009 during their grant extension.

The activities of each partnership were coded into four categories: *provide health services, gave a presentation, hosted a field trip, or other*. (Note that NAE indicated the name of each organizational partner and did not discuss the nature of the partnership). In some cases, one partnership involved two or more of these activities.

Throughout the year of 2008, a presentation by a health provider/educator was the most frequently reported activity, followed by an activity where students received health services (e.g., mammograms, dental screenings, flu shots, and cardiovascular screening).

5. Support from the Connecticut Health Foundation's Study Circles Team

Through the survey, all teachers described themselves as *satisfied or very satisfied with support (e.g., guidance, tools, and resources) from the study circles team*. Interviews with center directors in the fall 2008 confirmed that the study circles were one of the reasons why the centers were better able to teach health literacy. Specifically, as noted in the progress reports from the centers, teachers received an abundance of information from the study circles facilitator, as well as assistance from the facilitator through email, phone, and site visits. All centers in their last progress reports noted that the study circle facilitator was helpful and supportive with the implementation of the health literacy curriculum. Criticisms were minimal and reflected the experiences of a small number of teachers only; these teachers mentioned that the facilitator dwelled too long on certain topics, the teachers were not given sufficient warning about assignment due dates, and the teachers underestimated their capacity to write their own lessons.

Even though support from the study circles facilitator will no longer be available, data from progress reports revealed that all the center directors believed that the teachers will

continue to participate in professional development opportunities to enhance their capacity to teach health literacy.

During the spring semester, teachers also were asked to rate each study circle component as *not helpful at all* (0), *slightly helpful* (1), *helpful* (2), or *very helpful* (3). (We did not ask this question in the fall because the study circles were completed by then; they met only a two times to continue to share information and provide support to each other.) Table 3 shows the average ratings for each component. As seen in the table, the most helpful part of the study circles was the opportunity for teachers to work with each other (rated as close to *very helpful*), while sample lessons were rated as least helpful (close to *slightly helpful*). As mentioned in Section 2.1, teachers modified or created new lessons in many cases; as will be evident in Section 6, the teachers found they had to tailor lessons to their students' level of English language proficiency and cultural backgrounds.

Table 3: Study Circle Component Helpfulness

Component	Average Helpfulness Rating
Opportunities to work with peers in developing lessons	2.65
Opportunities to view online resources	2.55
A framework to teach health literacy	2.33
Health partners to support work	2.16
Sample lessons	1.95

The amount of contact with the health educator varied. For example, one center noted that the health educator had provided an abundance of information; another center reported that the health educator provided useful information when contacted, even though the contact was minimal; and the last center reported that the health educator provided resources, but the center was left to handle any follow-up with the resources provided. This variation in experience was expected, as teachers lacked a structured forum for using the health educator more effectively.

"I didn't know about all the help we can get with the information that they provide. For example, you have to keep in shape through exercise and eating healthy. I try to do that with my children."

In the spring, half (3 out of 6) of the centers noted in their progress reports that the evaluation was helpful; by the fall, most (4 out of 6) found the evaluation to be helpful. The Mercy Learning Center was the only center that reported reasons for the challenges with the evaluation. They indicated problems with

the SEA and TOFLA assessment during the fall, reporting that students found the “thumbs up” and “thumbs down” illustration confusing.

6. Challenges and Benefits

Data from the teacher survey indicated that **the biggest challenge faced by teachers was inadequate time. For more than half the classes (63.6%), teachers reported that sample lessons needed too much modification to teach in a single lesson.** Teachers also reported that the topic competed with other content area objectives for 40.9% of the classes; for slightly more than a third of the classes (36.4%), the health literacy curriculum took too much time to prepare and implement.

Progress reports from five centers in the spring and four in the fall supported this finding, describing the grant project as overwhelming because of long training sessions, excessive paperwork, and the large amount of time needed to implement instruction.

Findings from the teacher survey corroborate this; 40.9% of teachers felt the health literacy curriculum took too much time to prepare and implement. Teachers reported other challenges, including:

- Not enough sample lessons for beginning ESL/ESOL students;
- Culture and language differences among students;
- Student attendance (two centers noted in their progress reports that student attendance was a challenge; at the same time two other centers reported that student attendance had increased as a result of the health literacy curriculum and was a contributing factor to the success of the instruction in the classroom); and
- Literacy level and vocabulary of students.

Three of six centers’ progress reports supported the above finding from the teacher survey, stating that the health literacy concepts were too complex for beginner students. For example, one center reported having to spend a lot of time developing vocabulary so that the students could understand the lesson. Other challenges that centers reported included lack of teaching time due to sporadic attendance and holidays, a level of language too difficult for some students, lack of explanation of basic topics, lack of feedback on lesson plans, the rigidness of the lesson plans (even though teachers were encouraged to tailor the lessons), lack of computer lab access, and difficulty in scheduling events with outside partners.

Noteworthy here is the Literacy Assistance Center’s recommendation, based on its pilot testing of the study circles, that the instruction not include students with very limited English proficiency and low-level literacy. Thus, the challenges were somewhat expected for the centers and teachers who decided to still pursue the opportunity.

Interviews with center directors during the fall 2008 semester most frequently reported time (e.g., training was on Fridays, had to add health literacy information without increasing class time, and did not have access to computers as much as would have liked) and sensitivity issues with respect to health (making sure health material was culture, age, and gender appropriate) as the biggest challenges to implementing health literacy. While challenges were noted, half (50%) of center directors indicated that these challenges were not a hindrance to the initiative. The other half of center directors indicated that there were hindrances and gave examples such as time, student attendance, and the administration of the SEA and TOFHLA.

While there was no consensus among centers, all reported that there were unanticipated challenges for their organization or partner organizations as a result of this Project. The following challenges were noted:

- Losing a project team member and the knowledge that they took with them;
- Dealing with students concerns about their own health (e.g., in one instance, a student received a positive tuberculosis test and was so frightened that she never returned to class);
- Finding time to deal with the enormity of health literacy materials; and
- Finding out that although students became more knowledgeable about health, they still lacked the financial resources to act upon their own health needs.

At the same time, all centers reported in their last progress reports that there were unexpected benefits as well; again, there was little consensus among centers. The following unexpected benefits were noted:

- Scores on reading and listening tests improved;
- Local health clinics benefited from students knowledge about their services;
- Partnerships and relationships were developed with organizations that the adult centers had not thought about partnering with before;
- Press coverage about the Project also increased the visibility of adult education needs; and
- Professional collegiality among adult education center staff improved.

7. Lessons Learned and Sustainability

There were lessons learned as a result of this initiative. In general, center directors' lessons learned reflect two key themes: first, **flexibility is critical because of the varying levels of knowledge, skills, and experiences among students as well as their irregular class attendance; and, second, it is important not to assume anything about the students' understanding of health issues.** The following were some of the specific lessons reported by center directors during their interviews and in their progress reports:

- Students need to be educated first (because you cannot assume that they know very much about health issues) and only then can the students get the most out of field trips to health facilities;
- Students' demographic characteristics need to be understood to better tailor the health literacy instruction to the students' education levels, culture, age, and gender;
- Collaboration with other health providers is important when teaching health literacy;
- Health literacy is also about saving lives;
- Health literacy knowledge and skills, especially around HIV/AIDS needs to be increased;
- Lessons need to be focused on practicality of using the material; and
- Technology (e.g., Internet) can be used to supplement health literacy material.

"If you don't ask, never you learn. Learning never ends."

The infusion of health literacy continued at a steady pace throughout 2008; all center directors indicated that health literacy will continue into the future. Center directors most frequently cited the following plans as indicators of their commitment to sustainability: looking for grant money to continue health literacy instruction, continuing partnerships and field trips, and making sure health literacy is a part of all or most classes. In their last progress report, all of the centers reported that strategies had been institutionalized so that health literacy is not a priority solely in the classroom and will continue into the future. These strategies included professional development opportunities, "marrying" health literacy with other classes and programs, continually engaging outside partners, and creating resource areas at their center (e.g., in the lobby, in the library) to display health literacy information. For instance, one center now uses health information as content when teaching students how to put together a PowerPoint presentation.

8. Conclusion and Recommendations

In summary, the teachers implemented the health literacy curriculum as planned, despite the challenges they faced with regards to the amount of time it took to prepare for and teach health literacy as well as other issues. They spent a great deal of the preparation time modifying the sample lessons or creating new ones to suit the needs and capacities of their students. It is important to note here the Literacy Assistance Center's recommendation, communicated by Connecticut Health, that the health literacy instruction be targeted at students with higher-level literacy and English proficiency. Therefore, the difficulty of the materials for lower-level students was somewhat expected. Nevertheless, the findings of this evaluation show that the model of using adult education centers to impart health literacy skills could be effective with lower-level students. The findings also suggest that careful consideration must be given early on to the amount of support needed to help teachers modify sample lessons or create new ones to suit their student populations.

As a result of the teachers' health literacy instruction, students improved their knowledge about health issues and increased their confidence in their ability to navigate the health system, manage their health conditions, and seek preventive care.

Clearly, the Health Literacy Project increased the six adult education centers' capacities to teach health literacy. This capacity lies not only in the improved knowledge and skills of their teachers, but also in the resources they have purchased, in the partnerships they have developed with other health organizations in the community, in the organizational support they have (e.g., support of upper management), and in the value they now place on health literacy as part of adult education instruction. As such, **health literacy instruction will likely be sustained in all six centers.**

Integration of health literacy instruction into the curricula taught by adult education centers appears to be an effective strategy for increasing the capacity of racial and ethnic minorities to care for their own health. With sufficient support, including training, funding, and leadership commitment, health information can be used as content to teach adult students English, computer skills, and conversational and writing skills. The sample lessons and other materials developed by the six centers are now available to other adult education centers to prevent any unnecessary duplication.

The teachers' experiences also taught us that many of them were unsure about what to expect since the integration of health literacy instruction into adult education settings was somewhat of a new idea. It clearly took more time than they anticipated preparing for and teaching health literacy. They also did not take full advantage of the health educator who was available to assist them because there was no structured forum or process for them to do this. Foundations and other funders who may be interested in an effort like the Health Literacy Project might want to ensure that a structure and process is in place for this capacity (e.g., weekly "tips" from the health educator, site visits from the health educator). It also might be useful to set up a virtual library in the beginning of such an initiative to enable teachers to post materials that they develop (e.g., lessons) or find to prevent duplication and promote peer sharing.

Last, but not least, more research needs to be conducted to refine the SEA to simplify the phrasing of statements and to develop a way to make the Likert-scale response option acceptable to more cultures.

Appendix A

Methodology

Evaluation Instruments

SEA and S-TOFHLA. Two assessment instruments were used as part of the evaluation. The S-TOFHLA was designed to gauge the pre-learning and post-learning health literacy skills among participants in the Health Literacy Project. The instrument incorporates items from the Test of Functional Health Literacy Assessment—Brief Version (TOFHLA) (Nurse, Parker & Baker, 1995) and was adapted for group administration to the adult students in ABE and ESOL classes at the six different adult education centers participating in the project.

Because no comparable standardized instrument is currently available in the field, ASDC designed the SEA to assess students' self-efficacy in using health literacy skills. The SEA was developed based upon existing literature on self-efficacy and health literacy and included items that matched the content taught in the study circles. The SEA was pilot-tested with teachers and adult learners in the state of Maryland. The SEA also was sent to teachers participating in the Health Literacy Project for feedback, some of which was incorporated into the final version of the instrument, as appropriate.

Teacher survey. The evaluation team developed a survey instrument to be administered to teachers participating in the Health Literacy Project. The purpose of the teacher survey was to learn about:

- The amount of time teachers spent preparing for and teaching sample lessons;
- The usefulness of the study circles training; and
- The support teachers received from their centers, as well as from the study circle facilitator, the health educator, and the project evaluator.

In spring 2008, the teacher survey was distributed to teachers in New Haven, Connecticut, during the final study circle, along with self-addressed stamped envelopes to be used for returning the survey to the evaluation team. Teachers were asked to complete a survey for each separate class they taught. In fall 2008, the same protocol was followed, except that this time, the teacher survey was mailed to them instead of handed out at a meeting. Questions relevant to the initial learning process about health literacy (i.e., specific components about the study circle and modification of sample lessons or creation of new ones) were excluded from the questionnaire distributed at the end of the fall semester.

Interviews with center directors. The evaluation team held short phone interviews with the director of each of the six adult education centers at the beginning and end of the Health Literacy Project. In one instance, a second center representative also was interviewed at the request of the director. The purpose of the interviews at the beginning of the initiative was to learn about:

- Current institutional supports (e.g., policies and procedures) with the potential to facilitate the teaching of health literacy skills,

- Professional development opportunities available to staff to learn about teaching health literacy skills,
- Current center partnerships with healthcare organizations,
- Plans for developing new partnerships, and
- Plans for infusing health literacy into other parts of the center.

At the end of the initiative, the evaluation team was most interested in learning about:

- Whether the center was better able to teach health literacy,
- How has health literacy been infused into other parts of the center,
- What were the challenges and lessons learned in implementing health literacy,
- What facilitated or hindered the implementation of health literacy, and
- How health literacy will be sustained after the grant period.

Student Story Essays. The evaluation team developed a short form asking students to describe an experience in which they used skills learned in class related to talking to a doctor, nurse, or any health professional. Students completed this form during the post-test administration of the survey instruments during the fall 2008 semester. The evaluation team collected a total of 148 student story essays from five centers.⁹ Teachers at one center (Norwich Adult Education) indicated that student story essays were not completed by their students since they felt that students were experiencing fatigue from participating in the evaluation activities.

Procedures: Directions for Administration

A member of the evaluation team developed a PowerPoint presentation describing how to administer the S-TOFHLA and SEA to students, and presented the PowerPoint to train teachers during a conference call. For the S-TOFHLA, teachers were instructed to 1) hand out testing materials to students, 2) read the directions out loud, and 3) collect the materials after seven minutes. Next, teachers were instructed to score the S-TOFHLA according to directions. Finally, teachers were instructed to create a student log and calculate each student's total health literacy score. Teachers were provided mailing labels for overnight mail to send the completed questionnaires and score sheet to the evaluation team.

⁹ Teachers at New Haven Adult Education submitted stories written by students about what health literacy means to them. These were part of a request for students to complete a "Story About You and Your Provider" solicited in preparation for an article written and submitted by a New Haven teacher to *The Change Agent*.

The significance of total health literacy score is as follows:

Total Health Literacy Score (Reading)	Functional Health Literacy Level	Functional Health Literacy Description
0-16	Inadequate	Student is unable to read and interpret health texts.
17-22	Marginal	Student has difficulty reading and interpreting health texts.
23-36	Adequate	Student can read and interpret most health texts.

For the SEA, teachers were instructed to 1) read the instructions and questions out loud to students, 2) explain the response options, and 3) explain any questions that students asked regarding the assessment.

Students were informed about the S-TOFHLA (for higher level classes) and SEA (for all classes) ahead of time and were encouraged to attend class that day to take the tests. As an incentive, the evaluation team provided each teacher with stipends to purchase food for the students on the day of the tests.

After the spring 2008 semester, the evaluation team modified the SEA assessment form and process based on feedback from the teachers. Specifically, we:

- Changed the response categories for education levels to be consistent with those used by the centers when they enroll students in classes;
- Provided teachers with lists of students who completed the pre-SEA, such that teachers could easily identify which students should take the post-test; and
- Worked with teachers to gather a story from their students about how they might have interacted differently with a provider based on what they learned in class, as described above.

Data analysis

To evaluate teacher implementation of the health literacy approach and adult education center capacity to teach health literacy skills, teacher survey data were analyzed using descriptive statistics (e.g., percentages, averages). Additionally, interview responses from center directors and center progress reports were reviewed and coded into themes to obtain further information about center capacity.

To determine changes in student health literacy skills and self-efficacy, the evaluation team compared pre- and post- learning scores for the S-TOFHLA and SEA. Only the scores of students who were not previously exposed to health literacy and who completed both the pre- and post-tests were examined. The data were analyzed across sites as well as by class type to identify differences among students. The relationship between health-related factors (e.g., self-rated health) and self-efficacy also was analyzed. Data were analyzed using SPSS 15.0, a quantitative analysis software.

Missing Data

Only students with complete data for each relevant variable were included in the statistical analyses. For example, only students who took both the pre- and post-SEA were included in the analysis of changes in self-efficacy in health literacy. Missing SEA data were minimized by using mean substitution. For each center and class type, the mean score for each of the ten items that assessed self-efficacy was calculated. The respective mean for each item then replaced missing responses. Missing demographic and health data were not replaced, as these are characteristics and descriptors of the students.

Appendix B

Self-Efficacy Assessment Form

Self-Efficacy Assessment

Name of teacher: _____

Student Name: _____

Class type (e.g., ESL, ABE): _____

Have you taken this class before at this Center? Yes No

Today's Date: _____

**For each sentence, tell me what you think right now. Please be as honest as possible!
Please CIRCLE your response.**

1. In general, I would say my health is:

★ Poor	★★ Fair	★★★ Good	★★★★ Very Good	★★★★★ Excellent
------------------	-------------------	--------------------	--------------------------	---------------------------

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
2. I feel it is important to work with the doctor or nurse to take care of my health.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
3. I believe I can ask the doctor or nurse for more information if I do not understand their instructions.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
4. I believe I can ask the doctor or nurse for more information about screening tests.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
5. I believe I can read the labels on medicine bottles.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
6. I believe I can describe how sick I feel to a doctor or a nurse.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
7. If I have a long-term illness, I believe I can work together with the doctor or nurse and we can make a plan to help me feel better.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
8. I believe I can follow medical instructions from a nurse or doctor.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
9. I believe I can complete the forms I need to help pay my medical bills.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
10. I believe I can give my okay for medical procedures because I understand the medical procedures.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉
11. I believe I can challenge the doctor or nurse when I disagree with them.	👉👉👉	👉👉	👉	👉	👉👉	👉👉👉

12. What is the highest grade of school that you have completed?

- No education or kindergarten only
- Some Elementary or Primary School (Grade 1 to 7)
- Elementary or Primary School diploma
- Less than high school or secondary school (Grade 11 or less)
- High school or secondary school diploma
- Some college
- Associates degree (2 years)
- Specialized technical training or vocational school
- Bachelor's or University degree (4 years)
- Some graduate training
- Graduate or professional degree

13. What is your age?

- 18-25
- 26-34
- 35-41
- 42-49
- 50-58
- 59-64
- 65+

14. What is your race or ethnic group?

- White
- Black or African American
- African
- Caribbean
- American Indian and Alaska Native
- Asian
- Native Hawaiian and Other Pacific Islander
- Latino/Hispanic
- Other _____

15. What kind of health insurance do you have?

- None
- Private
- CT Medicaid
- CT Medicare
- Other _____

16. What is your Gender?

- Male
- Female

Appendix C

S-TOFHLA Student Question/ Answer Booklet

S-TOFHLA

Student Question/ Answer Booklet

Student Name: _____

Date: _____

Class type (e.g., ESL, ABE): _____

Have you taken this class before? _____ YES _____ NO

SAMPLE QUESTION

The place to go in a medical emergency is a _____.

- a. police station
- b. hospital**
- c. post office
- d. school

PASSAGE A

A1. Your doctor has sent you to have a _____ X-ray.

- a. stomach
- b. diabetes
- c. stitches
- d. germs

A2., A3. You must have an_____ stomach when you come for _____.

- | | |
|-----------|-------|
| a. asthma | a. is |
| b. empty | b. am |
| c. incest | c. if |
| d. anemia | d. it |

A4., A5. The X-ray will _____ from 1 to 3 _____ to do.

- | | |
|---------|-----------|
| a. take | a. beds |
| b. view | b. brains |
| c. talk | c. hours |
| d. look | d. diets |

THE DAY BEFORE THE X-RAY

A6., A7. For supper, have only a _____ snack of fruit, _____ and jelly, with coffee or tea.

- | | |
|-----------|-----------|
| a. little | a. toes |
| b. broth | b. throat |
| c. attack | c. toast |
| d. nausea | d. thigh |

A8.,A9. After_____ you must not _____or drink

- | | |
|-------------|----------|
| a. minute | a. easy |
| b. midnight | b. ate |
| c. during | c. drank |
| d. before | d. eat |

- A10., A11. anything at _____ until after you have _____ the X-ray.
- | | |
|---------|--------|
| a. ill | a. are |
| b. all | b. has |
| c. each | c. had |
| d. any | d. was |

THE DAY OF THE X-RAY

- A12. Do not eat _____.
- | |
|----------------|
| a. appointment |
| b. walk-in |
| c. breakfast |
| d. clinic |

- A13, A14 Do not _____, even _____.
- | | |
|----------|-----------|
| a. drive | a. heart |
| b. drink | b. breath |
| c. dress | c. water |
| d. dose | d. cancer |

- A15, A16 If you have any _____, call the X-ray _____ at 616-4500.
- | | |
|--------------|---------------|
| a. answers | a. department |
| b. exercises | b. sprain |
| c. tracts | c. pharmacy |
| d. questions | d. toothache |

PASSAGE B

B17. I agree to give correct information to _____ if I can receive Medicaid.

- a. hair
- b. salt
- c. see
- d. ache

B18., B19. I _____ to provide the county information to _____ any

- | | |
|----------|--------------|
| a. agree | a. hide |
| b. probe | b. risk |
| c. send | c. discharge |
| d. gain | d. prove |

B20. statements given in this _____ and hereby give permission to

- a. emphysema
- b. application
- c. gallbladder
- d. relationship

B21., B22. the _____ to get such proof. I _____ that for

- | | |
|-----------------|----------------|
| a. inflammation | a. investigate |
| b. religion | b. entertain |
| c. iron | c. understand |
| d. county | d. establish |

B23. Medicaid I must report any _____ in my circumstances

- a. changes
- b. hormones
- c. antacids
- d. charges

B24., B25. within _____ (10) days of becoming _____ of the change.

- | | |
|----------|----------|
| a. three | a. award |
| b. one | b. aware |
| c. five | c. away |
| d. ten | d. await |

B26., B27. I understand _____ if I DO NOT like the _____ made on my
a. thus a. marital
b. this b. occupation
c. that c. adult
d. than d. decision

B30. hearing by writing or _____ the county where I applied.

- a. counting
- b. reading
- c. calling
- d. smelling

B33, B34 _____ a different application form. _____, we will use

a. relax	a. Since
b. break	b. Whether
c. inhale	c. However
d. sign	d. Because

Appendix D

Sample Quotes from Students

"After I left the doctors office, I felt proud of myself, and more confident."

"In other visit, I needed a translator, but know I'm know how to communicate with other people. When I came from Puerto Rico, I don't understand the peoples, but now I understand better."

"I feel confident when I want to ask something about my illness because some times they try to answerd to other way. When they gave me a medication I have a idea how to read the labels before I take it."

"Now I can ask a question to the doctor better than when I had my first pregnancy."

"I know that I learned more vocabulary and I speak a little fluente. I can explain to my doctor how I feel."

"I'm very happy because I'm comprehend more English now, and speak too. I was think is imposivo but in this moment I can do. When I go to the supermarket, I don't feel nerve, I think any is possible, when yo have a opportunity in your life. I can talk whit my friends, and I can take my own decision."

"I didn't know about all the help we can get with the information that they provide. For example, you have to keep in shape through exercise and eating healthy. I try to do that with my children."

"I feel proud with my self and blessed with the teachers because they are helping me to learn English and to feel confident with health professionals."

"... I have a woman doctor so I feel more comfortable to talk to her about the problem I am having. Any time she speaks fast I say to her please slow down for me. Now I love to go see my doctor."

"Because I undestand more words in English. I can fill my papers with more security. When the Doctor into to see. He asks always what's wrong with your or what happen with you? After I can explain my problem or my illness and I feel the Doctor undestands me."

"I now no what to ask when I go to the doctor, if I have question. What to ask if I don't understand."

"Allways is better to have knowledge that way we can help everyone when need help even every place."

"I like to say today was a good day for practice everything I learned in a health literacy class. It was a great experience for me."

"When I used to go to the doctor I did not know that I could ask questions. I thought that they knew what they were doing. But after the class I know that I can ask about what they doing and it is. I could say what I feel and not go home confused about what they said to me. I feel more confident."

"To tell you the truth I have always been capable to question doctors and take good care of myself. But through this school program it has offered me the opportunity to get a few shot, HIV test, and a dentist came to explain why teeth care is so important and how to go about getting it if needed. Thank you for your time and concern."

"According to me it's very nice to know how [to] protect yourself if you have the opportunity to go to the doctor as soon as possible."

"We learned the Commuint [Community] Health Center on Atlantic St. We know more about the medicine and the Flu Shots and what we can do if we sick and where to go for professional help. The life skills that will help us as we go on that is good."

"I learn so much thing about health I feel so good when you know and care your live is better for you take care your self be cause no body do it for you and thank's for everything."

"And I'm so happy to come at this program because we learn a lot off thing even the language and also we talk each other where and how to go or get help about healthy."

About the Authors

Kien Lee, Ph.D., Principal Associate, has directed, managed, and provided research and capacity building support to several national and local community change initiatives. While these initiatives have focused on a wide range of issues (including immigrant integration, diversity and inclusiveness, intergroup relations, health disparities, community collaboration, and violence prevention), they all share the common theme of promoting social equity. Kien also is engaged in several professional and national associations to affect the practice of evaluation and community building. She has presented and published on topics related to community capacity building in multi- racial and ethnic cultural settings.

Cara Chervin, B.A., Associate, has significant experience in research, evaluation, and health promotion in community settings. Cara's research has focused on improving cervical cancer knowledge and behavior of Spanish-speaking women. She currently provides technical and logistical support to research and evaluation projects health disparities, immigration integration, healthcare quality, and health literacy.

LaKeesha N. Woods, Ph.D., Managing Associate, has extensive experience providing program development, evaluation, consultation, and treatment services in clinical and community psychology. Her research has focused on culturally congruent preventive interventions; cultural influences on the delinquency, academic achievement, and health risk behavior of youth of color; and family structures and interactions in African American families. She has facilitated trainings for state agencies, community initiatives, and non-profit organizations related to program development and using evaluation to inform program implementation and improvement. LaKeesha serves as an evaluator for a number of initiatives aiming to reduce physical and mental health disparities through more culturally and linguistically competent services.

Joseph Clift, Ed.D., Project Manager/Managing Associate, supports the mission and vision of Community Science by ensuring that client deliverables are on time, within budget, and are of high quality. He also provides technical support to projects related to health, immigrant integration, as well as those in response to the needs of gay, lesbian, bisexual, and transgender (GLBT) communities. Joseph has evaluated the implementation of an intervention by a community health clinic to reduce sexually transmitted diseases. He also wrote a curriculum for use by health educators to reach out to individuals by targeting on-line chat rooms frequented by people looking for sexual partners. Prior to joining Community Science, Joseph worked on studies and projects aimed at improving our environment.