Health Information Literacy Outreach: Improving Health Literacy and Access to Reliable Health Information in Rural Oxford County Maine

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Health Information Literacy Outreach: Improving Health Literacy and Access to Reliable Health Information in Rural Oxford County Maine

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The goal of this health information outreach project was to increase access to health information and improve health literacy in rural Maine. A health literacy curriculum was developed and piloted by teachers and librarians in local schools. Among students who completed the pre-survey (N=121), 18% said they were confident in their ability to evaluate Web-based health information before participating in the curriculum compared with 48% after their participation. Sixty-five percent said on the post-survey that they were confident in their ability to share what they learned with others in the community. These findings indicate that teachers and librarians have an important role to play in improving health information literacy.

KEYWORDS Adult literacy, consumer health information, health literacy, public libraries, rural health, school health education, young adults

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INTRODUCTION

Rural communities have limited access to health information, including information widely available on the Internet.\textsuperscript{1–3} Identified barriers to accessing the Internet include limited broadband, not having a computer at home or work, and lack of trust in the technology and the information and services provided.\textsuperscript{4} Many also lack the skills needed to use the Internet to find reliable health information.\textsuperscript{5} An additional barrier is that most health information on the Web is written at a reading grade level that exceeds the reading skills of most U.S. adults.\textsuperscript{6,7} According to the National Assessment of Adult Literacy (NAAL), nearly 50\% of the adult population in the United States has basic or below basic health literacy skills.\textsuperscript{8} Seniors and those with less than a high school education are disproportionately represented among those with below basic health literacy skills. Rural populations may be especially at risk for low health literacy because they tend to be older and have lower high school graduation rates than urban populations.\textsuperscript{9}

The River Valley Healthy Communities Coalition (RVHCC) is a nonprofit organization serving rural Oxford County, Maine. RVHCC works as a catalyst for health promotion by partnering with local schools, community organizations, and health care providers. The rural communities served by RVHCC have few services and are generally low income. According to the 2000 U.S. Census data, the per-capita income in Oxford County is 13.3\% below the state average, and median household income is 10.2\% below the state average. Up to 60\% of the students in the area schools participate in the free and reduced lunch program.

Residents often drive long distances for food, clothing, education, and supplies. The need to travel to fill basic needs is also a barrier to accessing health information and services. To increase community access to health information and improve health literacy skills, the RVHCC, in collaboration with the Gerrish-True Health Sciences Library at Central Maine Medical Center, applied for and received a consumer health information outreach grant from the National Network of Libraries of Medicine – New England Region. This article describes the community-wide, interdisciplinary approach involving medical and public librarians, K–12 teachers, adult literacy teachers, and health professionals to increase community access to health information and improve health literacy among rural residents in Oxford County, Maine.

OBJECTIVES

The goal of the RVHCC Health Information Literacy Outreach Project was to increase community access to reliable health information and improve health literacy skills. The project targeted middle and high school youth and young adults 18–25 years old. Teachers and librarians were a secondary audience.
Project-based learning that encouraged community outreach to seniors was a pedagogical approach. Over an 18-month period, February 2008 through August 2009, the project aimed to:

1. assess community health information needs and inventory resources and services,
2. increase the capacity of local teachers and librarians to use Web-based health information resources to improve health literacy,
3. pilot a health literacy curriculum that included intergenerational activities where youth help seniors in the community use the Internet to find health information, and
4. model consumer health information outreach and encourage similar efforts among community-based organizations throughout the state of Maine.

THE PROJECT

The RVHCC executive director hired a health literacy consultant who worked with a medical librarian from Central Maine Medical Center to implement the project. Potential partners were identified early in the process; they included Mountain Valley Middle School (MVMS) and Mountain Valley High School (MVHS) in school administration district (SAD) #43, serving 900 students from the towns of Andover, Byron, Hanover, Mexico, Roxbury, and Rumford; and TW Kelley Middle School (TWK) and Dirigo High Schools (DHS) in SAD #21, serving 660 students from the towns of Canton, Carthage, Dixfield, and Peru. The authors also worked with Region 9 School of Applied Technology, an adult education program serving Northern Oxford County and four public libraries serving the residents of Andover, Dixfield, Mexico, and Rumford.

Community Assessment

A community assessment was conducted to identify community health concerns and inventory health information resources and services. The survey was developed using Survey Monkey and sent via e-mail to RVHCC individual and organizational members who were asked to participate in the community assessment. The survey asked about health topics of most concern, where people look for answers to their health questions, how often the Internet was used to search for health information, and where community members found public access to the Internet.

Learning Objectives

The health literacy consultant developed the curriculum to be piloted by teachers and librarians in two middle schools and two high schools, and
by adult literacy instructors in an adult education program. Teachers and librarians were given the discretion to make adjustments to meet the needs of their students and asked to report these adjustments to inform development of the curriculum. The curriculum was designed to achieve the following learning objectives.

Upon completing the curriculum students would be able to:

- use the Internet to search for health information,
- evaluate the reliability of the health information they found on the Internet,
- answer health questions relevant to themselves and their families using the Internet, and
- share what they learn about finding reliable health information with others in their family and community and demonstrate health information literacy skills.

Instructor Training

The project kick-off training for teachers and librarians introduced them to Web-based health information resources and the health information literacy curriculum. The three-hour training was held in the Region 9 School of Applied Technology computer lab, which enabled the medical librarian to demonstrate reliable consumer health information resources such as MedlinePlus.gov and NIHSeniorHealth.gov. The health literacy consultant reviewed expectations about how participants would pilot the curriculum with their students. Participants in the training included the health coordinators for SAD #21 and SAD #43; five health teachers and six school-based librarians from the two middle schools and two high schools; two adult literacy instructors from the adult education program; and four public librarians. Training evaluation was distributed to participants just prior and immediately after the training event. The purpose of the evaluation was to assess participant’s awareness of consumer health information resources and readiness to pilot the health literacy curriculum.

Curriculum Pilot

The health literacy curriculum was piloted in five schools: MVMS, MVHS, TWK, DHS, and Region 9 School of Applied Technology. Teachers and librarians who participated in the training were asked to use the curriculum with their students and to suggest changes based on their experience using the materials with students. The public library partners were provided with National Library of Medicine (NLM) materials to promote the use of reliable Web-based health information resources to the broader community. The health literacy consultant provided technical assistance and support to
the teachers and librarians throughout the pilot period. The curriculum was piloted January through March 2009.

The curriculum developed by the health literacy consultant originally contained five one-hour lessons with activities. In the first lesson, students learned that health information is often organized by population (women, teens, seniors) and illness (diabetes, cancer, HIV). They also learned synonyms for these categories, such as adolescents/teens/youth or healthy living/prevention/wellness. Students then engaged in a “treasure hunt” activity where they searched for specified items such as an interactive game about nutrition and factsheet on second-hand smoke on two highly relevant and reliable Web sites—KidsHealth.org and MedlinePlus.gov. In subsequent lessons, students defined the words accurate (correct) and reliable (trustworthy) and applied a quality health information checklist adapted from the QUICK.org Web site. The QUICK.org site was integrated into the curriculum to support skills development to evaluate the reliability of Web sites. This site was selected because of its content and highly engaging animation to which youth and young adults could relate. Students learned to identify the source of the information, recognize the purpose of the Web site, consider if and how the information was biased, find out when the information was last undated, and determine how easy or hard the Web site was to understand and use. The final lesson included project-based learning, a community outreach activity where students shared what was learned about using the Internet to find reliable health information with an older family member or senior in the community.

Project Implementation

Teachers and librarians piloted lessons at their own rate, depending on when and for how long their classes lasted. Some completed teaching the lessons over a three-week period; others spread it out over three months. For optimal instruction, teachers and librarians were encouraged to implement the curriculum in a computer lab with live access to the Internet for all students and to identify where students could go, such as the school library, school computer lab, public library, or community technology center, for free access to the Internet. Involvement in the project by the local public librarians helped serve this purpose.

The project utilized both quantitative and qualitative methods. A student pre- and post-evaluation was distributed by teachers and librarians to all students to capture changes in knowledge, attitudes, and behaviors as a result of participating in the curriculum. All teachers were asked to complete a feedback form to document how they used the curriculum and any changes they made to inform the development of the final product. In addition, a story-based evaluation form adapted from Olney was developed to help students, teachers, and librarians capture how people in the
community benefited from the project. Student pre- and post-evaluations were returned to the project team and entered into Survey Monkey for data management and analysis. Teacher feedback forms were returned and reviewed to identify needed changes to the curriculum.

RESULTS

Of the 150 RVHCC members who received e-mails inviting them to participate in the community assessment, 73 completed the survey, a response rate of 58%. The sample was predominately female, between the ages of 31 and 60, and all lived in Oxford County. These respondents identified cancer, nutrition, women’s health, stress, diabetes, and heart disease as health issues of concern. Eighty-six percent (n = 63) said they work in organizations that serve the community, and 63% (n = 38) said they provide community residents with health information as part of their work. Only 24% (n = 13) said they had ever used MedlinePlus.gov to search for health information, and fewer than 10% (n = 5) said they had ever used NIHSeniorPlus.gov. Forty-two percent (n = 25) said their organization provides community members with access to the Internet.

Of the 18 participants in the project kick-off/training, 13 returned the post-training evaluation form, a response rate of 72%. Of those who responded to the question, “How likely are you to use MedlinePlus.org as a result of participating in this training,” all said likely or very likely (see Table 1). All respondents said they agreed or strongly agree with the statement, “I feel more confident in my ability to use MedlinePlus,” and 80% agreed to the statement, “I feel more confident in my ability to teach health information literacy,” as a result of participating in the training (see Table 2).

Teachers administered a pre- and post-evaluation to students that participated in the curriculum (see Appendix 1: Student Pre-Evaluation and Appendix 2: Student Post-Evaluation). A total of 141 youth and young adults completed the pre-evaluation before participating in the curriculum. A total of 121 completed the post-evaluation. After participating in the curriculum,

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Intention to Use MedlinePlus Among Teachers and Librarians Who Participated in the Project Kick-off/Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very unlikely</td>
</tr>
<tr>
<td>How likely are you to use MedlinePlus as a result of participating in this training?</td>
<td>90% (n = 9)</td>
</tr>
</tbody>
</table>

_data source_ Teacher training survey N = 13

 skips question

answered question
81% (n = 96) of respondents said they agreed or strongly agreed with the statement, “I am more confident in my ability to answer health questions using the Internet.” Eighty percent (n = 90) of respondents said they agreed or strongly agreed with the statement, “I am more aware of reliable health information Web sites.” Only 18% of students (n = 25) said they were confident in their ability to evaluate health information they found on the Internet before participating in the curriculum, while 48% (n = 54) reported they were confident in their ability to evaluate health information they find on the Internet after participating in the curriculum. In addition, 64% (n = 76) said on the post-evaluation that they were confident in their ability to teach others in the

### Table 2
Confidence in Ability to Teach Health Information Literacy Among Teachers and Librarians Who Participated in the Project Kick-off/Training

<table>
<thead>
<tr>
<th>Extent to which you agree or disagree with the following:</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a result of participating in this training, I feel more confident in my ability to use MedlinePlus.</td>
<td>50% (n = 5)</td>
<td>50% (n = 5)</td>
<td>0% (n = 0)</td>
<td>0% (n = 0)</td>
<td>0% (n = 0)</td>
</tr>
<tr>
<td>As a result of participating in this training, I feel more confident in my ability to teach health information literacy.</td>
<td>20% (n = 2)</td>
<td>60% (n = 6)</td>
<td>20% (n = 2)</td>
<td>0% (n = 0)</td>
<td>0% (n = 0)</td>
</tr>
<tr>
<td><strong>data source</strong></td>
<td><strong>Teacher training survey N = 13</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>skipped question</strong></td>
<td><strong>N = 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>answered question</strong></td>
<td><strong>N = 10</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 3
Confidence in Ability to Evaluate and Use Health Information on the Internet Among Students Who Participated in the Health Information Literacy Curriculum

<table>
<thead>
<tr>
<th>Extent to which you agree or disagree with the following:</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to evaluate the accuracy of the health information I find on the Internet. (n = 112)</td>
<td>48% (n = 54)</td>
<td>40% (n = 45)</td>
<td>9% (n = 10)</td>
<td>3% (n = 3)</td>
<td>0% (n = 0)</td>
</tr>
<tr>
<td>I am more aware of reliable health information Web sites. (N = 115)</td>
<td>30% (n = 34)</td>
<td>49% (n = 56)</td>
<td>16% (n = 18)</td>
<td>3% (n = 3)</td>
<td>2% (n = 2)</td>
</tr>
<tr>
<td>I am more confident in my ability to answer health questions using the Internet. (N = 118)</td>
<td>32% (n = 38)</td>
<td>49% (n = 58)</td>
<td>16% (n = 19)</td>
<td>2% (n = 2)</td>
<td>1% (n = 1)</td>
</tr>
<tr>
<td>I am more confident in my ability to teach others how to use the Internet to find reliable health information. (N = 118)</td>
<td>20% (n = 24)</td>
<td>44% (n = 52)</td>
<td>29% (n = 34)</td>
<td>3% (n = 4)</td>
<td>3% (n = 4)</td>
</tr>
<tr>
<td><strong>data source</strong></td>
<td><strong>Student post-evaluation N = 121</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>skipped question</strong></td>
<td><strong>N = 3 to 9</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>answered question</strong></td>
<td><strong>N = 112 to 118</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
community how to use the Internet to find accurate and reliable health information (see Table 3).

Based on the data from the teacher feedback forms (see Appendix 3: Teacher Feedback Form), a number of changes were made to the curriculum. Teachers noted that the amount of time they have with students in the classroom is limited, and for this reason they would prefer a shorter curriculum. In addition, teachers commented that they were unable to engage in the project-based learning component with its community outreach focus because it required additional time beyond the actual classroom lessons. The high school teachers wanted a stronger focus on research skills but did not want to require homework. In response, the curriculum was condensed into three lessons, and more classroom time was dedicated to searching the Internet for health information. Teachers also suggested including questions to assess performance indicators related to health information, products, and services as described in the Maine Department of Education Content standard for health education in public schools, as part of the student self-assessment in the final lesson, and this, too, was done. Students are still encouraged to share what they have learned about reliable health information Web sites with family members or local seniors, but the community outreach projects, while they remain part of the curriculum, are now optional.

After making the revisions, a group of youth and young adults participated in a curriculum feedback session using the revised curriculum. Based on this student feedback, additional revisions were made, namely the number of student handouts was reduced and two of the student activities were combined. This formative process resulted in the final *Health Information and the Internet: Who Can You Trust? Curriculum Sourcebook*, available at <http://www.rvhcc.org/pdf/HIL_Sourcebook.pdf>.

**DISCUSSION**

Limitations to the study are many and include the fact that a convenience sample was used for the community assessment, so respondents were not necessarily representative of the larger community. The sample did include a number of community service providers (86%, n = 63) and was therefore able to confirm the availability of community resources that support public access to the Internet.

The sample also did not include youth or young adults and was not relied on to inform the development of the curriculum. It was the formative evaluation process and the data collected during the pilot—teacher and student feedback—that informed the development of the curriculum.

The fact that the project evaluation plan emphasized formative feedback over fidelity in terms of how the curriculum was implemented was a limitation to the study. While the basic learning objectives remained the same
across pilot sites, teachers were encouraged to use and adapt the curriculum in ways that worked best for them and their students and to report those details back to the project team. This formative feedback was then used to revise and improve the curriculum. Future study of the curriculum should include closer attention to fidelity across implementation sites, attempts to control for differences in the amount of time teachers and librarians use the curriculum with their students, and inclusion of a comparison group to control for potential external threats to validity.

Among the evaluation tools, the story-based evaluation form was the least successful. While the story-based evaluation methodology provides a unique mechanism for collecting data related to hard-to-document distal outcomes (see Appendix 4: Story-based Evaluation Form), this project did not have the resources in terms of time and staff to engage in the follow-up required to collect these data. Only one story-based form was completed and returned.

One of the project’s major challenges was the QUICK.org site selected to support student skills development to evaluate Web sites for reliability. This resource was selected because it was animated, interactive, and relevant to youth and young adults. A number of the pilot site teachers were familiar with this site before they began the pilot and were supportive of using it. However, just as the pilot period started, the site became inaccessible in HTML format via the Internet. Because the site was not maintained by RVHCC, the project had no control over the availability and usability of the site. A lesson learned from this experience was that there is a need to develop and maintain such a Web site for youth and young adults. For this reason, the RVHCC is pursuing funding to create such a site to support future engagement with the curriculum.

Another disappointment was the limited enthusiasm for the community outreach projects. Because there are so many demands made on the time teachers have with their students, this was not surprising. However, project-based learning is a pedagogy that may actually help relieve the time pressures on teachers when one project is able to meet multiple learning objectives. To encourage more teachers to engage in the project-based community outreach activities described in the curriculum, additional training and professional development around the use and benefits of project-based learning should be incorporated into the project kick-off/training.

The project was unable to support the public library partners to their full potential. In rural communities, public librarians play an important role in providing access to information, including health information. Public libraries also provide free access to the Internet. Participating librarians were happy to promote NLM resources including MedlinePlus.org and NIHSeniorHealth.org, but project staff had little time after the training to support their health information outreach efforts. A mini curriculum or tutorial specifically designed for librarians to use one-on-one with patrons would be an added support.
Finally, the role of the River Valley Healthy Communities Coalition (RVHCC) in health information outreach should not be underestimated. The success of the project is to a large degree due to the RVHCC as a community-based organization with a strong and well-established working relationship with the public schools, school health coordinators, adult education programs, hospitals, health centers, and librarians throughout the community. RVHCC played a vital role in engaging partners and ensuring the success of the project. To encourage similar efforts in other communities, the RVHCC continues to distribute copies of *Health Information and the Internet: Who Can You Trust? Curriculum Sourcebook* [http://www.rvhcc.org/pdf/HIL_Sourcebook.pdf](http://www.rvhcc.org/pdf/HIL_Sourcebook.pdf) free of charge to school health coordinators and other community-based organizations throughout the county and the state.

**CONCLUSION**

The results of this health information outreach project indicate that an interdisciplinary partnership involving medical and public librarians, K–12 teachers, adult literacy instructors, and health professionals can help address the problem of low health literacy in rural communities. The involvement of community-based organizations such as a community health coalition is critical to increasing access to health information in rural communities and ensuring community engagement, commitment, and on-going collaboration. Limited skills among consumers to identify reliable sources and evaluate the quality of the information are especially worrisome when it comes to consumer health information and the Internet. The involvement of teachers and librarians is vital to improving health literacy, increasing community access to reliable health information, and helping consumers make informed decisions about their health. More needs to be done in terms of resources and training to support the professional development of teachers and librarians to improve health literacy and greater access to health information in rural communities.

**REFERENCES**


ABOUT THE AUTHORS

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APPENDIX 1: SAMPLE QUESTIONS FROM THE HEALTH INFORMATION LITERACY CURRICULUM

STUDENT PRE-EVALUATION

1. What health topics are of most interest to you? (check top three)
   - □ Asthma
   - □ Cancer
   - □ Children’s health
   - □ Diabetes
2. Where do you find health information? (check top three)
   □ Family and friends
   □ Health care provider (doctor, nurse, etc)
   □ Hospital library
   □ Internet
   □ Local health organization
   □ National health organization
   □ Public library
   □ State or federal health agency
   □ School
   □ Other (please name):

3. How many times have you used the Internet to search for health information? (check only one)
   □ 1–5 times
   □ 6–10 times
   □ 11–20 times
   □ More than 20 times
   □ I have never used the Internet to search for health information

4. Have you used any of these Web sites to search for health information?

<table>
<thead>
<tr>
<th>Web site</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familydoctor.org</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KidsHealth.org</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MedlinePlus.gov</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIHSeniorHealth.gov</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WebMD.com</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Other (please name): ________________________________
5. How much do you agree or disagree with the following statements regarding your ability to search the Internet for health information.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to search for health information on the Internet.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I am able to find health information on the Internet.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I am able to evaluate the accuracy of the health information I find on the Internet.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

APPENDIX 2: SAMPLE QUESTIONS FROM THE HEALTH INFORMATION LITERACY CURRICULUM STUDENT POST-EVALUATION

1. Within the past 3 months, how many times have you used the Internet to search for health information? (check only one)
   □ 1–5 times
   □ 6–10 times
   □ 11–20 times
   □ More than 20 times
   □ I have not used the Internet to search for health information

2. What health topic(s) have you searched using the Internet?
   Health topic: __________________________________________________________
   Health topic: __________________________________________________________
   Health topic: __________________________________________________________
   I have not searched for health information using the Internet (please describe why):
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
3. Have you used any of these Web sites to search for health information?

<table>
<thead>
<tr>
<th>Web Site</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familydoctor.org</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>KidsHealth.org</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>MedlinePlus.gov</td>
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<td>☐</td>
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</tr>
<tr>
<td>NIHSeniorHealth.gov</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>WebMD.com</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Other (please name):</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. How much do you agree or disagree with the following statements regarding your ability to search the Internet for health information.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to search for health information on the Internet.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am able to find health information on the Internet.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am able to evaluate the accuracy of the health information I find on the Internet.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

5. How much do you agree or disagree with the following statements as a result of the health information literacy curriculum.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree or Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am more aware of reliable health information Web sites.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am more confident in my ability to answer health questions using the Internet.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
I am more confident in my ability to teach others how to use the Internet to find reliable health information.

APPENDIX 3: TEACHER FEEDBACK FORM

Please describe your experience with each lesson. Use the following questions to guide your response. Please include as much detail as possible.

**Lesson:** How long did it take you to teach each lesson? Include number of classes, length of each class, and total hours.

**Preparation:** How did you prepare yourself to teach each lesson?

**Implementation:** What steps did you take to implement each lesson? What activities did you do in class? What activities did you assign for homework? Please describe in detail.

**Student Response:** How did students respond to each lesson? How did they respond to the in class activities? How did they respond to the out of class activities/homework?

**Teacher Suggestions:** What worked well? What would you do differently next time? What changes would you suggest?
APPENDIX 4: STORY-BASED EVALUATION FORM

School/Library: _________________________________ Date: ____________

Please describe how you helped others in your community use MedlinePlus or another health information Web site. Please write as much detail as you can. Use the questions below to guide you. If there is not enough space use another page. You may write more than one story if you like.

<table>
<thead>
<tr>
<th>Story</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who did you work with? What kind of help did you provide? What online resources did you use (e.g., MedlinePlus, NIHSeniorHealth, other)? What type of health information did the person find? What did the person do with the information? How did the information help the person?</td>
</tr>
</tbody>
</table>