

Health Information Literacy Outreach Program for 6th Grade Students

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Background & Problem Statement

Health information literacy (HIL) is defined as “the ability to recognize a health information need; identify likely information sources and use them to retrieve relevant information; assess the quality of the information and its applicability to a specific situation; and analyze, understand, and use the information to make good health decisions.”

U.S. Medical Library Association

City of Worcester, MA

- Most elementary schools neither have a functioning library nor provide information literacy instruction.
- The city has been listed in the state’s annual report of “high risk community for childhood lead poisoning” since 2001.

The Project

TARGET AUDIENCE: 11-12 year old children enrolled in the sixth-grade of an inner city school.

PROJECT PERIOD: May 2012 – April 2013

OBJECTIVES:

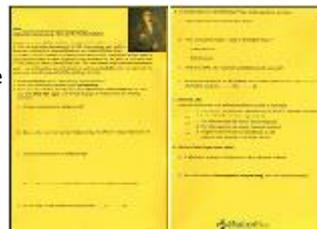
- Develop and deliver an HIL curriculum to:
- Improve HIL knowledge and skills of 6th grade students, that is, abilities to find quality health information web sites and to evaluate health information on the Internet
- Increase the knowledge of lead poisoning of 6th grade students, specifically the sources and symptoms of lead poisoning and actions to take to prevent lead poisoning.

COLLABORATORS:

- MCPHS University, Worcester campus
- Inner City Public School
- Worcester Art Museum (WAM)
- Worcester Public Library (WPL)
- Worcester City Department of Inspectional Services – Housing/health Inspections

Health Information Literacy Curriculum

- Designed around a community health care issue, **lead poisoning**
- **Teaching strategies:**
 - A series of highly interactive sessions to solve fictional lead poisoning “mystery cases”
 - Team work
 - Pharmacy students as mentors



Session 1: Elementary School (2 hours)

- Pre-program assessment quiz
- Lesson on health information literacy, including a 10-item checklist to evaluate the quality of health information websites (e.g., MedlinePlus)
- Lesson 1 on lead poisoning, including how to identify lead paint by sight; test school’s water for lead



Session 2: MCPHS Field Trip (2.5 hours)

- Lesson 2 on lead poisoning
- Science laboratory activity – compound non-toxic paint (for art project at WAM)
- Library activity – use MedlinePlus to begin solving team’s mystery case
- Tour of MCPHS by pharmacy students



Session 3: WAM Field Trip (2.5 hours)

- Docent-led tour with an emphasis on the chemistry of paints
- View lead-containing artwork of artists featured in the mystery cases
- Hands-on art project using paint prepared at MCPHS



Session 4: Elementary School (2 hours)

- Lesson 3 on lead poisoning – how lead is tested and detected in the community
- Team poster creation and presentation of mystery case (students vote for the best poster)
- Post-program assessment quiz
- Program evaluation
- Distribution of lead test kit



Results

ASSESSMENT ITEMS

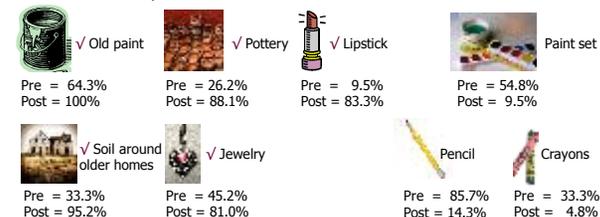
	Pre (n=42)	Post (n=42)
Knowledge and use of quality health information websites		
How good do you think you are at finding health information on the Internet? (Scale: 1=Not very good, 5=OK, 10=Very good)	4.86 (±2.03)	5.61 (±1.88)
If you have a question about a disease or medicine, where on the Internet would you look? Wrote “MedlinePlus”	2.4%	50.0%
Circle the qualities of a reliable health website: (✓ = correct answer)		
✓Information is current	23.8%	71.4%
✓Information is free	52.4%	64.3%
✓Information is accurate (true)	66.7%	83.3%
✓Has contact address	38.1%	92.9%
✓Has author of the information	40.5%	73.8%
Promises easy weight loss	31.0%	2.4%
Sells miracle cures	31.0%	9.5%
Asks for credit card number	4.8%	7.1%
Provides opinions	26.2%	11.9%

Knowledge of lead poisoning (Notation: ✓ = correct answer)

Which picture shows peeling paint that looks like it may contain lead?



Circle the items that may contain lead.



Program Evaluation, average (±SD)

Overall, how would rate the entire program? Scale: 1=Very poor, 10=Excellent	8.14 (±1.96)
How would you rate your entire experience in the program? Scale: 1=Extremely dissatisfied, 10=Extremely satisfied	8.05 (±1.80)
How useful was the program in your learning about lead poisoning? Scale: 1=Completely useless, 10=Very useful	8.86 (±1.87)
How useful was the program in your learning about how to find websites that provide reliable health information? Scale: 1=Completely useless, 10=Very useful	8.57 (±1.92)

Conclusion

This project illustrates the feasibility of developing and delivering a health information literacy program to children through collaboration of public and private entities that share a common interest.