The Science Behind Personal Care Products: A Hands-On Approach to Engage K-12 Students

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Science - Relevant & Hands-On!

Making science relevant and hands-on is critical to the K-12 education landscape. The curriculum, “Consumer Awareness: Personal Care Products Safety and Labeling” engages students in hands-on experiments, promoting critical thinking and problem-solving skills.

Curriculum Overview

Lesson 1: Beyond First Impressions
- Labels – Claims – Regulations

Lesson 2: What’s In It?
- Emulsion chemistry – Lotion preparation – Inquiry labs

Lesson 3: Is It Safe?
- Basic toxicology, Safety testing: MSDSs & animal studies – Designing a human study

Lesson 4: The Informed Consumer
- Am I dangerous? Risk management
- What, and who, should you believe?
-Evaluating advertisements & information sources
- Speak up! Consumer advocacy
- Difficult decisions and ethical dilemmas

Impact and Dissemination

Teacher Professional Development and Informal Outreach Workshops

Teacher evaluations of curriculum and its use:

"Really liked the lessons, very well done, with so many ways to extend the lesson into other areas, sub-topics."

"This is a very well thought out curriculum! Very user friendly!"

"The students were most interested in the animal testing claims... Most of them had no idea what ‘animal research’ was..."

"The kids loved making the lotion and trouble shooting when it didn’t go as planned."

Program Highlights

► Freely available curriculum focusing on the science and regulations behind personal care products
► Workshop ideas & support for presentations to audiences of multiple ages and education backgrounds
► Lotion-making lab useable in non-lab venues
► Background and resources: Cosmetic vs. drug regulations, Labeling requirements, Safety testing and toxicology, Emulsion chemistry and skin biology

Resources

Curriculum available online:
http://www.nwabr.org/teacher-center/consumer-awareness/overview

SOT Education resources:
http://www.toxicology.org/teachers/teachers.asp

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