



HealthyU: A Health Science Learning Journey

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Abstract

To address the health threat posed by childhood obesity and lack of health education in underserved schools, we propose an educational intervention that focuses on four science areas: Nutrition, Exercise, Healthy Weight, and Sleep.

This pilot study will evaluate the design and implementation of an innovative science-based health education program that could be integrated into the regular school curriculum, and which could be used by children, parents, and educators.

In partnership with the **Kennedy Middle School in Redwood City** we will test a service learning model and a web-based model among 7th grade students.

Education Challenge

This project considers the reality of the school environments and constraints under which teachers and other educational practitioners work, as well as the dynamics of the learning situation.

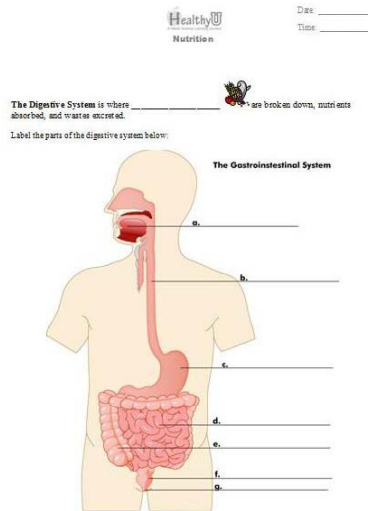
Although there is evidence that health education increases knowledge levels, specific curriculum models tested here have not been evaluated in an underserved community setting.

Project Goals

Purpose: to assess two different methods of teaching in changing knowledge of basic health science and/or healthy behavior.

Curriculum Development of health and science education through web and classroom teaching formats with **Key Teaching Messages** that flow through and connect the modules together.

Design of take-home, interactive **HealthyU Science Journal:**



The innovative curricula will attempt to engage students with minimal preparation for teachers, thus motivating them to teach and learn: **portable, accessible, reusable, and sustainable.**

Lessons and activities are tailored to the study's particular age group.

Project Design

Phase I: Curriculum Development

Four Health Science Modules:

- Healthy Weight
- Physical Activity
- Nutrition
- Sleep

Each module contains:

- Short 50-min. lessons
- Key teaching messages
- Helpful Tips
- Interactive classroom activities
- Transparencies, images
- Video clips – DVD format
- HealthyU Science Journal Section

Phase II: Implementation and evaluation of science-based health education program.

Three groups:

- Web-based learning (see sample →)
- Classroom-based learning
- Control group

Stanford student volunteers will teach the modules, 1 hour per module per week.

Participants: ~300 7th grade students of both genders and diverse ethnicities from Kennedy Middle School under supervision of Principal William Sedar.

Students will complete pre and post questionnaires on knowledge and healthy behavior.

Statistical analysis of pre-post questionnaires to evaluate change in knowledge and/or healthy behavior.

Results and/or Plans for 2009

Implementation of Phase II of Pilot Project: Teaching and Evaluation.

Analysis of results and planning expanded intervention, including:

- Web based curriculum demonstration at San Jose Unified School District (SJUSD)
- Curricular additions
- Exploring innovative ways to engage the learners as agents of change by adding a service learning component to the curriculum.

*This could include an intergenerational teaching module—to adults or younger children.

Impact and Future Directions

The model developed could be easily implemented and be of benefit to all schools and students, particularly to underserved students.

This project goes beyond curriculum as knowledge content and takes on additional demands created by increasing obesity among adults and adolescents.

By taking this perspective, the material is more personally relevant to students and is a key component needed to address obesity, physical inactivity, and suboptimal dietary practices.

By inducing learning and teaching engagement, the projected expansion of the pilot project could strengthen impact of the curriculum and increase sustainability of HealthyU.

The project is attracting interest from other school districts, and results will be made available to founders, the research community, and policy makers.

