

# Positively Aging® Curriculum for Middle School Students and High School Students



at the University of Texas Health Science Center at San Antonio

## SUMMARY

### Target Audience

Middle school and high school students (some curriculum materials are also available for younger grades)

### Purpose

To provide the knowledge, skills, and attitudes needed for today's adolescents to age successfully, and to interest students in careers in aging and health

### Program

A six-week summer seminar to develop material for an interdisciplinary health science curriculum designed by teachers and scientists

### History

The program has been funded since 1997

### Operating Costs

Annual budget of approximately \$500,000 for staff and materials

### Outcomes

314 teachers and educators have participated since 1997; qualitative and quantitative measures of the curriculum's effectiveness have shown significant results

### Available Materials

Characteristics of participants; publications; teacher and student program reviews; website with free curricular materials

### For More Information

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## Program Overview

The Positively Aging® program was created to infuse aging concepts and information into the primary and secondary school curriculum. During adolescence, children are changing physically, socially, emotionally, and intellectually. These years offer an opportune time to help students develop positive lifestyle habits that will enhance the quality of their lives as they age.

The goals of this multidisciplinary health science curriculum are to:

- provide teachers with innovative, effective teaching materials that center on scientific discovery and math
- help students learn to make critical, life-determining decisions that will promote good health throughout their lives
- help students develop an enduring interest in scientific research and medical careers, particularly in aging-related fields
- help students develop sensitivity to the needs and concerns of the aging population.

## Program Operations

### Curriculum Development through Teacher-Scientist Collaboration

Primary and secondary school teachers from the San Antonio area and scientists from UT San Antonio collaborate to create engaging interdisciplinary lessons and learning activities based on the Gerontologic and Health Sciences, using current biomedical research. Lessons are continually updated.

The Positively Aging® materials are written by teachers for teachers. Teachers who develop these materials attend an interactive, six-week summer



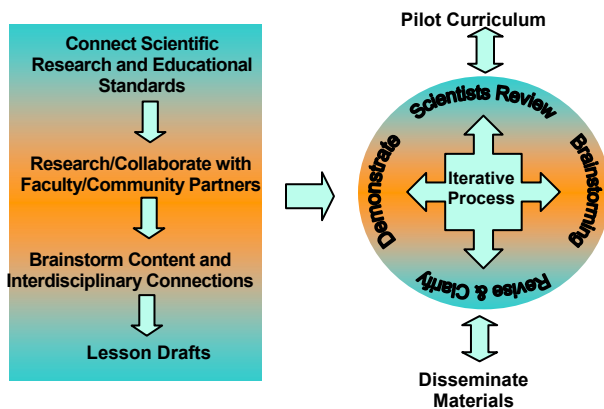
seminar where teachers have vital interactions with practicing scientists. As a team they become “translators” of health science information, bringing high-level research to students in a format that engages learners and meets different instructional needs.

### *Student Activities and Curriculum Dissemination*

The curriculum currently consists of 346 activities designed to gradually move students toward a more future-oriented and empathetic mind set toward aging. The curriculum encourages student involvement in cross-generational relationships and family research.

The student activities are available for free at <http://teachhealthk-12.uthscsa.edu>. The website also features teacher and student resources, slide presentations, conference and publication abstracts, teacher and student comments, pre- and post-test information, other evaluation strategies, and concept maps.

The program materials are also shared with educators through local, regional, state, national, and international conferences, workshops, and presentations. Over the years, other organizations have sought permission to use these materials in their work, including universities, museums, departments of education, health periodicals, councils on aging, and senior centers.



### **Staffing Requirements**

The project maintains a staff of nine at the University of Texas Health Science Center at San Antonio:

- the principal investigator
- a full-time project director
- two full-time educational specialists
- a full-time research associate
- a full-time graphic artist
- a full-time programmer analyst
- a full-time administrator
- a part-time statistician.

In addition, 20 teacher-affiliates research and write curriculum, implement activities, conduct pre- and post-tests of materials, network within their school districts, and present their work at local and state educational venues.

### **Program Costs and Funding Sources**

The project’s annual budget is \$500,000 (based on 2007). The National Institutes of Health is the primary funding source. The Science Education Partnership Award from the National Center for Research Resources and the National Institute on Aging provides over half of the funding. The Minority K-12 Initiative for Teachers and Students from the National Heart, Lung, and Blood Institute provides the remainder of the funding.

Periodic community and local family foundation supplemental funding has enhanced the project’s ability to include more teachers in the project, provide professional development opportunities for teachers, and provide workshop supplies.

### **Process and Outcomes Data**

As of 2007, 314 educators have participated in the program as curriculum writers or workshop participants. Most of these were teachers of science or language arts at the middle school level. Over 65 San Antonio NIH-funded researchers have volunteered their time to work with teachers in the development of curricular pieces.

Teacher feedback has been overwhelmingly positive. Teachers are excited to learn how to incorporate health and aging topics into their subjects.

Cooperating scientists have found elements from the curricular materials to be useful in educating medical, nursing, dental, and allied health students regarding patient education and interactions, as well as in delivering aspects of health science course content.

As of 2008, 14 articles about the program have been published or are in press in peer-reviewed journals. (See *Available Materials*). The papers include two controlled trials of the Positively Aging® project in public schools.

### **Implementation Lessons**

- It takes persistence and face-to-face conversations to build the necessary relationships to maintain a project of this scope. The cooperation of teachers, principals, and school district personnel is necessary to meet goals.
- It is crucial to involve campus Institutional Review Board (IRB) personnel in decisions regarding study design and data collection in order to evaluate the curriculum's effectiveness.
- All of the project personnel need to share leadership and assume multiple roles. Regularly scheduled meetings of the core project team are essential.
- Collaborative and reciprocal networking with local scientists is imperative in educating teachers, informing curriculum content, accessing research documents, and observing laboratory practices.
- Gaining complete acceptance by the state educational community is an ongoing task, as administrative personnel, educational goals, and political agendas change. Educational priorities may vary from school district to school district and over time. Aligning with state-mandated curricular expectations is necessary but cannot dictate the unique content of the teaching materials.

- Pre- and post-testing with cooperating teachers requires additional coaching, mentoring, and monitoring. As teachers become more experienced with this aspect of the project, they become more independent investigators.
- Website development and maintenance requires: a team with content, design, construction and maintenance expertise; consistent curriculum formatting; relevant teacher updates; access to additional project opportunities and teacher resources; and responsiveness to teacher/user insights. The project's flexibility in providing discussion boards and calendar information for various users provides an invaluable communication opportunity.

### **Available Materials**

#### Tools/Resources

- List of Publications from the Positively Aging® Program 1997-2007
- Characteristics of Participants in the Positively Aging® Program 1998-2007
- Anecdotal Comments from Teachers and Students Using the Positively Aging® Materials

#### Website

- <http://teachhealthk-12.uthscsa.edu/>

### **For More Information**

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This document is part of a compilation of approaches to geriatrics recruitment, career development, and programmatic expansion, based on the work of the John A. Hartford Foundation "Centers of Excellence in Geriatric Medicine and Training." For more information, visit [www.afar.org/recruitment](http://www.afar.org/recruitment) or [www.jhartfound.org](http://www.jhartfound.org).

