Take Charge Be Healthy[®]: Supplementing the MS/HS Health Curriculum with Web-based Instruction

Eloise Elliott, Ph.D.

West Virginia University Morgantown, WV

Derek Belcher and Kevin Fetty

Concord University/ eLearning for Kids, Inc Athens, WV

Presentation Outline

- Take Charge Be Healthy (TCBH) web-based module content and delivery
- Module development process and implementation to date
- Process and product evaluation outcomes
- Student learning outcomes
- Availability of TCBH and other resources in development

Take Charge Be Healthy®

- Mission: Take Charge seeks to empower youth to take responsibility for their own health behaviors through healthy lifestyle choices and education.
- Goal: improving teens' health through impacting knowledge, attitudes, and behaviors
- Focus Areas: Physical Activity, Nutrition, Related Health (diabetes, weight management, CVH risk factors)
- Targeted Audience: 12-18 year olds (Middle and High School students); teachers

Development of Take Charge Be Healthy®

- In 2001, Healthy Hearts for Kids (HH), a web-based module for 5th grade students was made available to all WV 5th grade teachers.
- Results from HH showed significant changes in students knowledge and attitudes related to physical activity, nutrition, and tobacco use.
- With the success of HH, Take Charge Be Healthy® was conceptualized as a supplement to the middle and high school health curriculum in WV
- Funding was made available through the WV BPH (CVH Program), the Claude W. Benedum Foundation, WV Governor's office, and the WV CARDIAC Project
- Take Charge Be Healthy® (TC) was developed in 2007 and first piloted in 2008.

Take Charge Be Healthy®

- The module was designed with a "teen feel" including more interactive areas, the latest in flash animation and graphics depicting real teens in real "everyday" situations.
- The program was initially piloted in three middle schools and two high schools in WV during the 2006-2007 school year. It was released to all interested schools for the 2007-2008 school year.
- Initial data analysis indicates significant changes in attitudes and behaviors of all users toward a healthier lifestyle.

Core Content Focus

Take Charge Be Healthy® focuses on three main content areas:

Nutrition Physical Activity Related Health



Program Content encourages:

- Health literacy
- Positive decision making
- Health advocacy
- Recognition of influences (i.e. home, community, environment, media)
- Self-discovery and goal setting

Desired Outcomes

- Increased knowledge
- Positive attitudes
- Improved behavior

Web-based program that focuses on improving teen's health through impacting knowledge, attitudes, and behaviors as they relate to physical activity, nutrition, and health.



arents want to get involved with your teens health? Click ere to find out how!

with your teens health? Click

here to find out how!

Read More C

today!

ne of the experts adayl

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don't like their answers, submit your

Website can be accessed from outside of school providing teens with an opportunity to continue using the module at home.



Read More @

questions? You

want answers? Ask

one of the experts

today!

Parents want to get involved

with your teens health? Click

integrate it in your

Parents Info

here to find out how!

Read More

F.V., Magazines, Billboards? It's

Mania! Don't be pushed around by the media. Check out Media Mania and tell us what you think about today's advertising tactics?

Read More 🔘



Title: Philly school effort

Intro: NEW YORK - Five Philadelphia elementary schools replaced sodas

What is the average number of times

Recipe of the Week

Sensational Almond Joy Pudding Submitted by: Cheryl B, WV

Physical Activity of the Week

TV Commercial Exercise

In a recent survey, we asked teens just like you about your physical activity habits. We got a lot of

Read More



Check out real teens tackling today's health issues head to head. Read their entries, and decide who is cut out for the Apprenticeship. And if you don't like their answers, submit your

Read More 🕲

Read More

Read More

How is Take Charge Be Healthy® Different for the teacher?

 Web-based learning gives teachers the opportunity to engage students in an environment that is comfortable to them.

"We are teaching students of the "@" generation and they expect to learn in their language. Interactive web-based programs are written in a language they can relate to and understand."

> Ann Wells, Health Teacher Princeton, WV

How is Take Charge Be Healthy® Different for the student?

- This type of instruction create opportunities for dynamic learning with interactive and multimedia components.
- Students can interact with the material and learn valuable study skills as they are in control of what they take in and remember.

TC: 411



Reality Check.

TC: 411

- The 411 is the primary content delivery section
- This section covers the various components of each topic and concludes with a summary page that empowers students to *Take Charge!* of the health decisions that shape their life.



Your Physical Activity (PA)

The PA 411 teacher students...

- What is physical activity?
- How does fitness "fit" into my life?
- Alternatives to traditional organized sports
- The importance of setting goals.



Take Charge INTERFICTIVE

Clickable "myth" facts helps students see through the un-truths related to physical activity





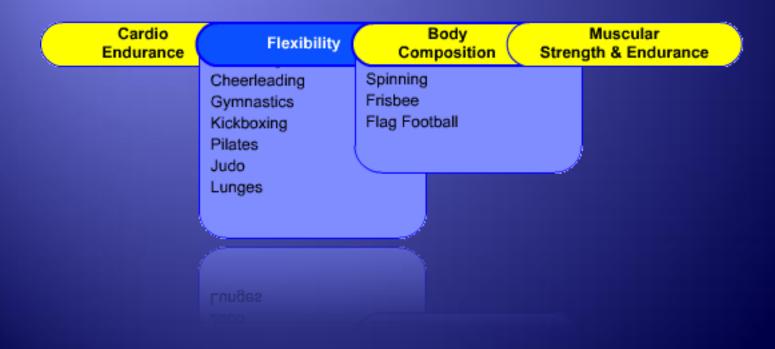
Sports Drinks are better for you than water while exer

Unless you are exercising more than 90 minutes or in really hot weather, the carbs and electrolytes in sports drinks do not really help your performance, so water is just as good for you.



Take Charge INTERFICTIVE

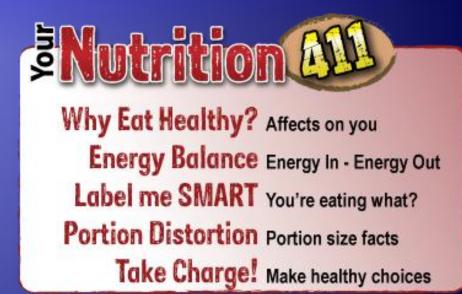
Interactive flash items make lists and chart come alive and captivate students.



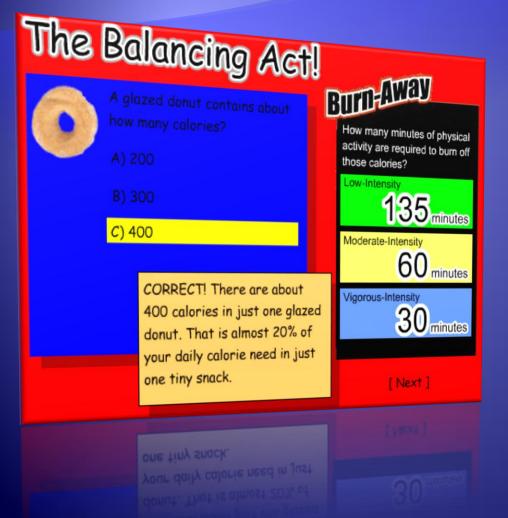
Your Nutrition

The Nutrition 411 teaches students...

- About healthy eating
- How energy balance affects weight gain
- The importance of reading food labels
- Why portion sizes are a key factor in nutrition



Take Charge INTERFICTIVE



Students learn how energy balance plays a significant role in weight management

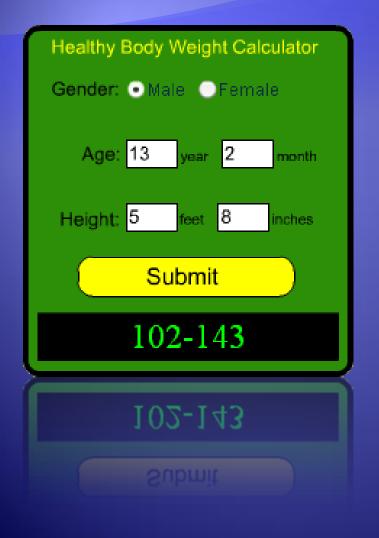
Your Health

The Health 411 teaches students...

- What a healthy body weight is for a changing teenager
- About the risks and management of diabetes
- How genetics can influence your health



Take Charge INTERFICTIVE



The Healthy Body
Weight Calculator
takes the students
information and gives
them their ideal body
weight range











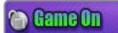
Do You Know

















Speak Out Loud

It's your opinion...



It is unlikely for a heart attack victim to feel pain or discomfort in other areas of the body besides the chest, such as the arms, neck, back, jaw, or stomach.

- () true
- O false
- NOT AN ANSWER CHOICE
- O NOT AN ANSWER CHOICE

1 of 10

TC: Media Mania

- View popular media (video clips, billboards, etc)
- encourages students to critically analyze and voice opinions about media
- Empower students to see beyond the magic of media.



TC: Log It

- Self reporting tool to help teens track their daily physical activity and diet
- 2-day recall
- Instant feedback based on user input
- Opportunity for students to set goals related to feedback







Main Activity Tracker Diet Diary Your Hike Log Out

Activity Tracker



Physical Activity Pedometer Screen Time Goal Met

Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum.

Diet Diary



Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum.

Your Hike



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Enter Your Hike ()

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Main | Log It | Message Center | Ask the Experts | Apprenticeship | Prizes | Log Out



Welcome to the Activity Tracker. Here you will choose all the physical activities you participated in on 3/22/2011, the level of intensity, and the amount of time you spent doing those activities. When you are done, click "Continue" at the bottom. Be sure to think about what you did before and after school, during P.E. class, or any other time you were physically active.

Record Activities for 3/22/2011

Remember...record only what you did yesterday.

Note: Click on the **Info** on to see a description of the activity.

	During School How Long? Level of Whe	ere? How Long?	After School evel of Where? ensity?	
Ball Playing Info o	-TimeRatePlace-	-Time- V -Ra	te- Place-	~
Baseball/Softball	-Time- 🔻 -Rate- 💌 -Place-	-Time- 💌 -Ra	te- 💌 -Place-	*
Basketball				~
Bicycling	Combatives			*
Bowling				~
Chasing and Tagging Games	Description: karate, judo, wrestling, boxing, etc.			~
Combatives Info o	-TimeRatePlace-	-Time- 💌 -Ra	te- 🕶 -Place-	~
Dancing Info o	-Time- 💌 -Rate- 💌 -Place-	-Time- 🔻 -Ra	te- Place-	v
Dancing Info o	-Time- V -Rate- V -Place-	-TimeRa	te- Place-	
Combatives (Info o	-Time- V -Rate- V -Place-	-Time- V -Ra	te- 🔽 -Place-	^



FRUITS

Berries - Blackberries

5

Total FRUITS: 5

Feedback



You ate 5 servings of fruits yesterday. GREAT! Keep it up! Ideally, strive for 3 servings (or about 2 cups) of fruits each day.

Set Fruit Goal



Are you eating enough fruits each day? Remember, the minimum daily recommendation according to most national organizations is between 2 - 3 servings of fruit a day. (or 2 cups). Based on your results above, set a goal for tomorrow for FRUIT intake.

View Goal Report

Fruit Goal: - selectione - V

he physical activities you amount of time you spent " at the bottom. Be sure to E. class, or any other time

2011 yesterday.

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-Place-

cing Mas o Place Place - Time Page Rate Rate Rate

-Time- v -Flate- v -Flace- v v

Combatives







Teen Main | Log It Home | Goal Report | Log Out

Return to Log It Home
Return to Diet Diary Calendar

Diet Diary

Thank You, Demo User, for setting Diet Diary goals!

Fruit Goal Set



For your next Logit entry, you have set a goal to eat at least 6 servings of fruit.

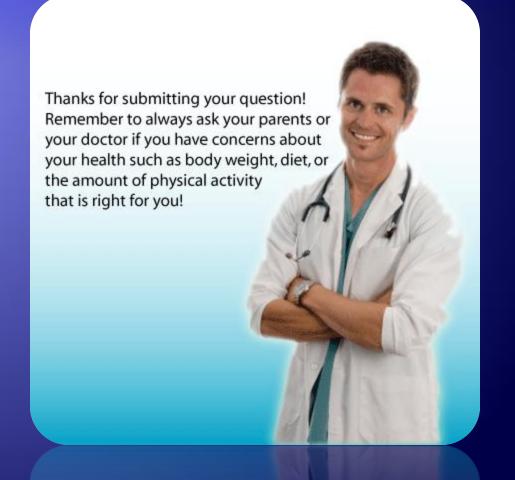
Back to Log It Home 🧿





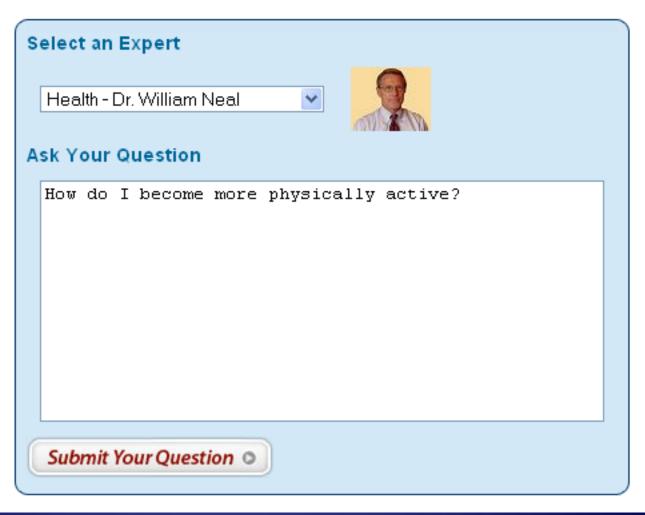
TC: Ask an Expert

 Getting real answers to real questions (from real experts!)



Ask the Expert

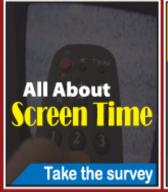
You've got questions? Hey they have answers! Pick an expert from the drop down list and send them your question. Check your message center often to see if your question was answered on Take Charge! Don't worry, you don't have to put your name, just your question.



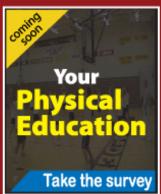
TC: Speak Out Loud



Speak Out Loud (SOL) is a place where you can express your opinions about various topics. You have a voice, let it be heard! You can take any of the three surveys below by clicking "Take the survey". To view past survey results, check out the archives to the right. Remember, if you complete two surveys you are eligible to win a Walmart Gift Card









Your PE Results

TC: Speak Out Loud

- Surveys about teen issues such as...
 - Screen Time
 - Nutrition
 - Physical Activity
 - Handheld Technology
 - and more...



It's your opinion...





What's happening in your school cafeteria?

Speak your Mind about lunch at school!

Lunch time is a time to unwind and take a break, and recharge for the rest of your school day. We want to

- 1. Your gender*
 - O I am a male O I am a female
- 2. Your age*

Please Select –

3. Your school grade*

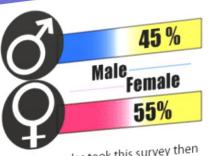
- Please Select -

4. Rate your feelings about the quality of your school lunch program as it relates to nutritional quality (meeting the food groups, limiting fat, and unhealthy quantities of sugar, salt, starches, etc.). (1 being the lowest and 5 being the highest)

(1 being the lowest and 5 being the highest) food groups, limiting fat, and unhealthy quantities of sugar, salt, starches, etc.).

4. Rate your feelings about the quality of your school lunch program as it relates to nutritional quality (meeting the





More males took this survey then females.

Participants age & grade

Age 12 13 14 15 16 17 18+

Grade 6 7 8 9 10 11 12

This survey was completed by mostly 13-15 year olds in the 7th-9th grade.

When do you spend more time watching TV or playing Video Games?



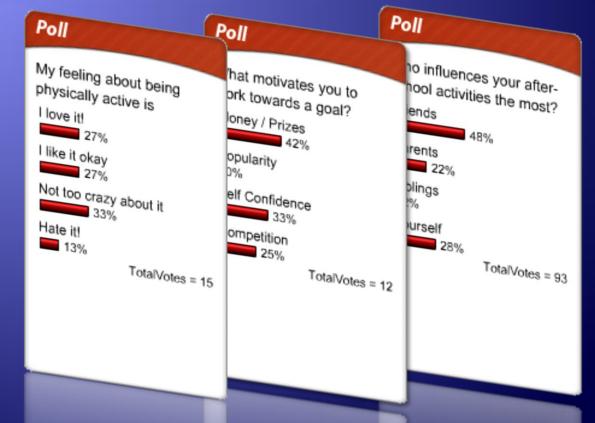
How much time do you spend matchine I)(or How much time do you

Less than 1 hour



TC: Daily Polls

Daily opportunities for students to voice their opinion on health related topics



TC: Teacher Tools

- Generate student unique IDs and Passwords
- Select topics and timelines
- Student content, quizzes, etc
- Track student completion and progress
- Communicate with students through TC



Class Management In this area you can:

Add

View

- classes
- student
- topics
- view
- class information
- individual student activity
- student ID cards
- pre/post knowledge scores
- current topic
- topic progression

Edit

- class profiles
- student profiles
- topic progression

Just click the button below to get started.

Enter Class Management O

Teacher Tools Menu

was click the button below to get started

TC Development Process

- "Lessons learned" from Healthy Hearts 4 Kids (healthyhearts4kids.org)
- Focus groups with 8th graders
- Experts in content areas, educational technology, and curriculum development
- Expert reviewers
- Pilot: two middle schools and one high school (2 years later)
- Modifications and expansion

www.healthyhearts4kids.org

→ 2001 - 2010

States	49
Schools	1040
Teachers	1777
Students	34521

WWW.HEALTHYHEARTS4KIDS.ORG

YEARS: 2001-02, 2002-03, 2003-04, 2004-05, 2005-06, 2006-07, 2007-08 to date

USER: West Virginia students

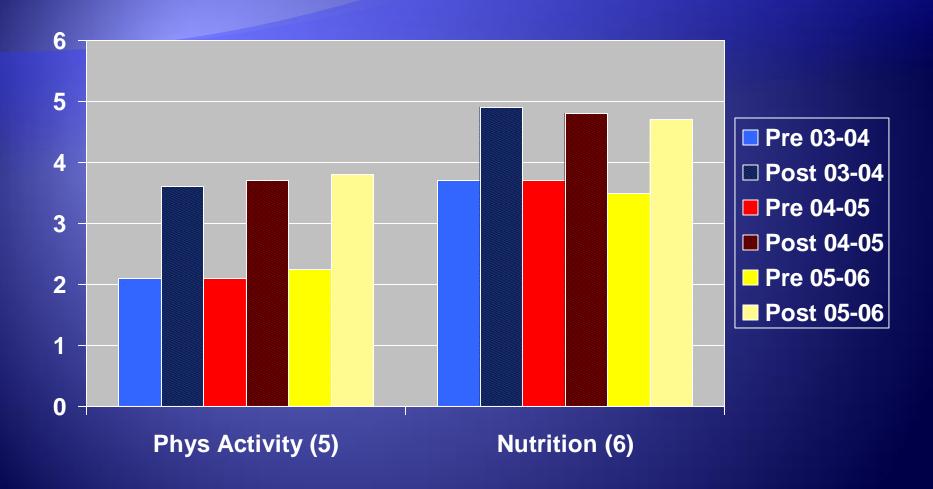
State:	# of	# of	# of	# of	# of	# of
	Counties	Districts	Schools	Teachers	Classes	Students
WV	54	0	391	882	1155	18059

YEARS: 2001-02, 2002-03, 2003-04, 2004-05, 2005-06, 2006-07, 2007-08 to date

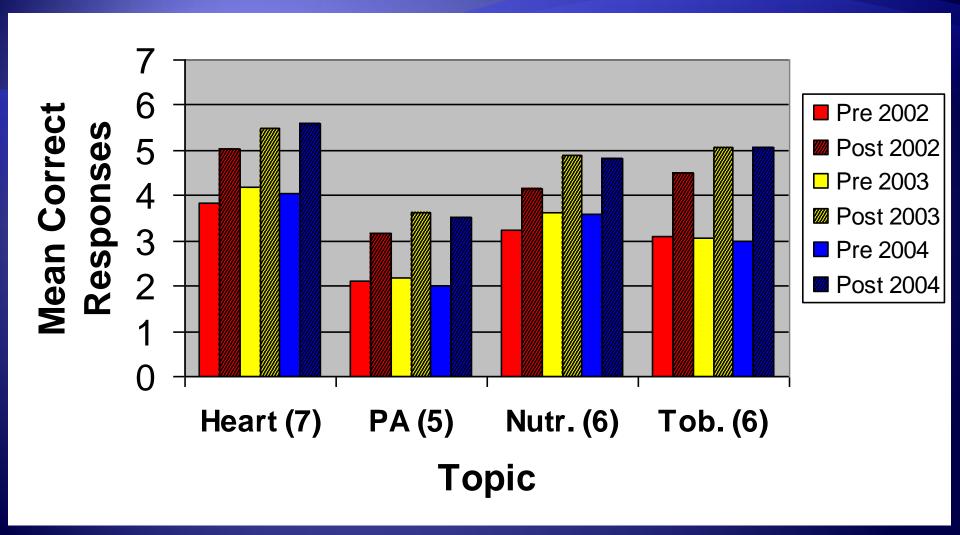
USER: All States

# of	# of	# of	# of	# of	# of	# of
States	Counties	Districts	Schools	Teachers	Classes	Students
45	298	138	900	1422	1884	27791

Knowledge Results 2004 – 2006*



Knowledge Results 2002 – 2004*



Sample Knowledge Question: Physical Activity

What is the MINIMUM number of **minutes each day** experts recommend you should be physically active?

(15, 30, 45, <mark>60</mark>, 90)

	Pre	Post
2003-04 Correct Response	39.05%	70.23%
2004-05 Correct Response	42.1%	86.6%
2005-06 Correct Response	26.4%	85.0%

Sample Attitude Question: Nutrition

Percent of Students reporting the likeliness they will eat 5 fruits and vegetables tomorrow

	2003-	-2004	2004	-2005	2005	-2006	2006-	-2007
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Probably or definitely will	34.2 %	55.1%	37.4%	52.2%	35.4%	50.9%	38.4%	47.5%
Probably or definitely WILL NOT	29.4%	14.4%	26.0%	11.5 %	30.0%	14.9%	23.1%	13.9%

Significant pre/post change at p<0.01

Sample Attitude Question: Nutrition

Percent of Students reporting the likeliness they will drink 2 or more soft drinks tomorrow

	2003-	-2004	2004	-2005	2005	-2006	2006-	-2007
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Probably or definitely will	54.0%	31.5%	43.4%	24.9%	42.3%	26.9%	32.0%	27.1%
Probably or definitely WILL NOT	25.4%	46.2%	35.7%	52.7%	34.9%	47.9%	27.1%	51.3%

Significant pre/post change at p<0.01

Teacher Perceptions

HH Teacher Survey (end of school year)

% of survey respondents that agree or strongly agree with statements

	2003 – 2004 N=39	2004 – 2005 N=33	2005 – 2006 N=32	2006 – 2007 N=36
HH increases students' health knowledge.	N/A	N/A	97%	94%
HH improves students' attitudes about nutrition, PA, and / or tobacco use.	NA	N/A	87%	97%
HH improves students' behaviors related to nutrition, PA, and / or tobacco use.	NA	N/A	84%	89%
HH meets my state content standards in technology	98%	84%	90%	100%

Teacher Perceptions

HH Teacher Survey (end of school year)

% of survey respondents that agree or strongly agree with statements

	2003 – 2004 N=39	2004 – 2005 N=33	2005 – 2006 N=32	2006 – 2007 N=36
HH is a positive addition to my classroom curriculum	88%	94%	93%	97%
HH content is important for my students to learn	97%	100%	97%	97%
I would use HH again next year with my students	97%	100%	100%	97%

Student Perceptions

HH Student Survey (end of school year)

% of survey respondents that agree or strongly agree with statements

	2003 - 2004 N=322	2004 – 2005 N=116	2005 – 2006 N=255	2006 – 2007 N=268
When I use HH, it encourages me to be more physically active.	75%	93%	83%	80%
HH made me think about choosing healthier foods.	69%	77%	80%	77%
I enjoyed using HH to learn.	75%	84%	89%	83%
I would like to use a similar module next year in school.	66%	72%	78%	76%

Outcomes Summary

- Student knowledge responses (pre-post) in all content areas (heart, physical activity, nutrition, tobacco) improved for all cohorts participating in the program in all years.
- Children's behavioral intentions in physical activity and nutrition routinely improved all years
- Significant increases in intentions to be physically active tomorrow, a year from now, and as an adult
- Significant decreases in intentions to drink 2 or more soft drinks tomorrow, a year from now, and as an adult
- Significant increases in intentions to eat 5 fruits and vegetables tomorrow, and a year from now

Outcomes Summary

Freachers surveyed perceived the web-based Healthy Hearts positively and would continue to use such an instructional module in their curricula

Focus groups with 8th graders

• From that focus group we learned that teens desire interaction, "real life" graphics, and content that is relevant to the choices they face everyday.

Team of Experts

Development team

- Designed instructional strategies used
- Designed website functionality
- Wrote, reviewed, edited content

Expert Reviewers

 Reviewed specific content and make suggestions for changes/improvements throughout the development process

Development Process: Experts



Take Charge was evaluated by a panel of experts representing each content area found in the module as well as a group of current teachers in the fields of physical education and health.

Each expert reviewed their specific section, commenting on all areas of the module including: Design, Content, and Evaluation.

Their findings were collected and the website was updated to reflect their recommendations. Each reviewer spent a considerable amount of time and made numerous recommendations and comments on all areas of the module.

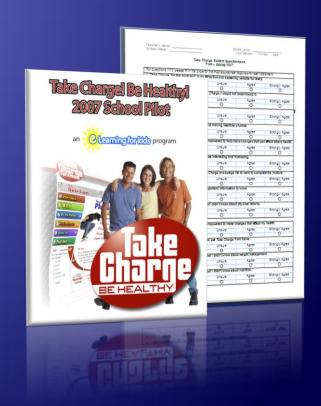
Each teacher reviewed any applicable sections according to their field of expertise as well as an overall evaluation of the site from a teaching standpoint.

Development Process: Pilot Test

Take Charge was piloted among two middle schools and one high school.

In all, 309 students used the module and completed all required sections. Each student also completed a survey about the module, and a select group from each school participated in a focus group interview session.

The teachers from all three schools completed a process evaluation as they directed their students in the use of the module and participated in focus group interviews at the completion of the pilot program.



Development Process: Pilot Teachers

Each pilot teacher was asked to complete a process evaluation during the use of Take Charge with their students. Some comments:

• "The registration process appeared complex, but was in fact very easy to complete in a short amount of time"

"This web-based learning module is a great alternative and supplement to the health curriculum. It also allowed me to cover many of the required technology standards."

- "The teacher tools section was laid out in a manner that made it easy to navigate and evaluate the students work."
- "The module reflected a good amount of content that I typically include in my health curriculum."

TC Expansion

Take Charge 2007-2011						
Countries Using TC	States Using TC	Teachers Using TC	Students using TC			
5	22	153	7021			

Student Outcomes Data

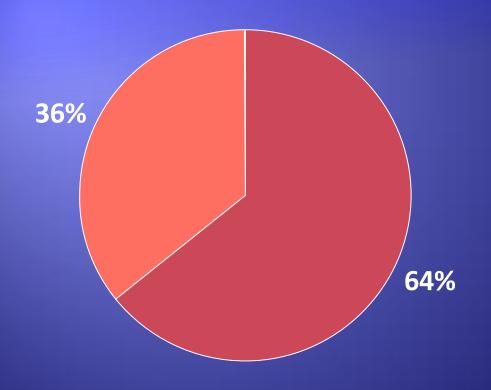
- Embedded assessment measures in module:
 - Pre/post knowledge tests
 - Pre/post attitude/behavior survey
 - PA and Diet 48 hr recall instrument
 - Demographics
 - State, county, school, teacher, class, student identifiers (age, gender)

Summary of Student Surveys

- 85.2% enjoyed participating in TC
- 85.8% said they think more about making healthy choices
- 71.9% said they learned something about PA they didn't know
 - 83.9% about weight management
 - 81.2% about nutrition
- 73.2% said they were more empowered to make changes that affect their health
- 66.7% said they were more empowered to make changes that affect others health

Teachers Using TC

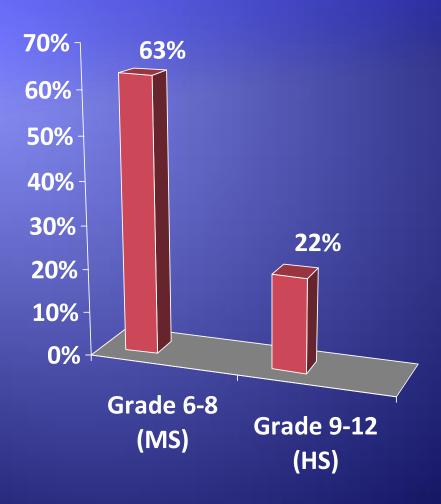
(n=70)



- Health / PE Teachers
- Media / Technology Teachers

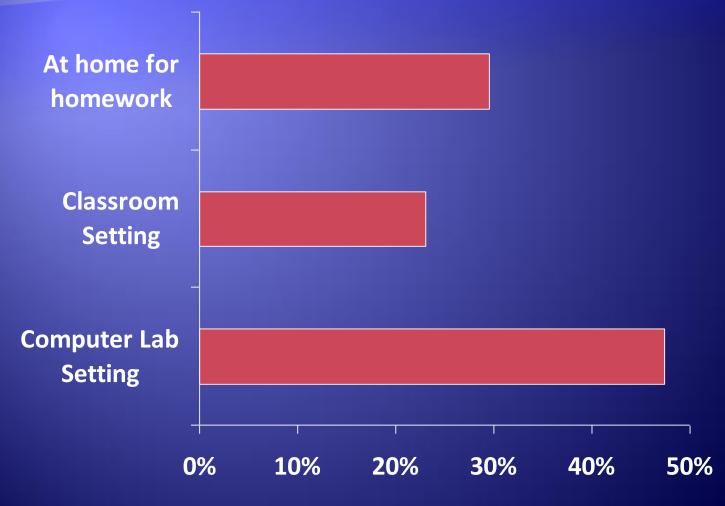
Student Grade Level

(n=111)



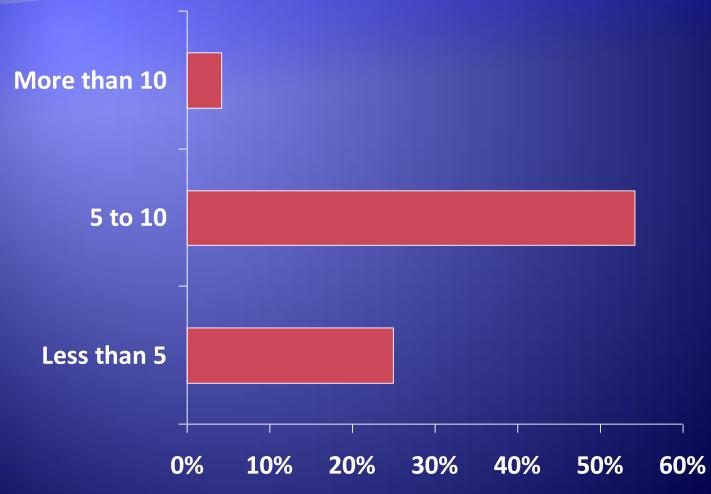
Implementation Environment

(n=78)



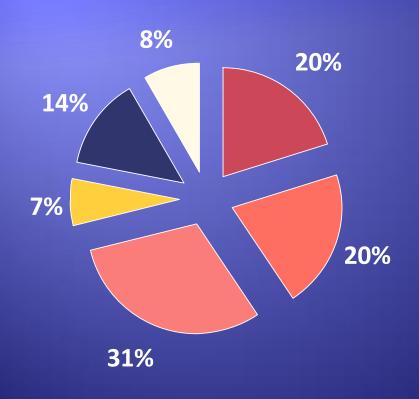
Number of Instructional Periods





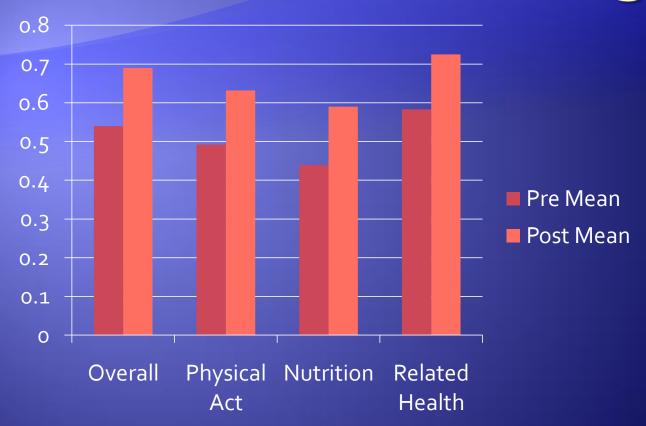
Needs to assist in teaching PA, nutrition, weight management

(n=48)



- More information / resources for the teacher
- More information / resources for the students
- More time to teach concepts
- Professional development opportunities
- More school commitment

Student Pre/Post Knowledge



N=2980

Paired t-test; t=-55.25; p<0.001 for overall and all three topics

Sample Knowledge Question: PA

Question: As a general rule, physical activities related to sports have more health benefits than individual physical activities such as jogging or skateboarding.

Answer: A. True **B. False**

	% correct
Pre Test	27.0
Post Test	49-9

Sample Knowledge Question: PA

Question: The ability to exercise over an extended period of time at a moderate to vigorous intensity level defines the fitness component of

Answer:

- A. Flexibility
- B. Muscular endurance
- C. Body composition
- D. Cardiorespiratory endurance

	% correct
Pre Test	58.0
Post Test	85.6

Sample Knowledge Question: Health

Question: BMI (body mass index) is:

Answer:

- A. A comparison of the amount of fat to lean body mass a person has
- B. A formula to estimate how much body fat a person has based on his age, height, and weight
- C. A true measure of an individual's obesity level that takes into consideration body type, weight, and muscular development
- D. None of the above

	% correct		
Pre Test	51.7		
Post Test	70-3		

Student Pre/Post Behavior

Significant increase in positive health behaviors

- Overall behaviors
- Increase in 60 minutes PA last 7 days
- Increase in setting personal goals
- Increase in using food labels
- Decrease in soft drink consumption last 7 days
- Increase in eating vegetables last 7 days
- Increase in eating fruit last 7 days
- Decrease in screen time per day

2

Related sample Wilcoxon signed rank test All p=0.000 N=1040

Student pre/post Behavioral Intentions

Answer choices: I definitely will not, I probably will not, I probably will, I definitely will

Behavioral Intention	Pre - % will	Post - % will	P value
Likeness will eat 5 fruits and vegetables tomorrow	51.3	60.7	0.000
Likeness will be PA 60 mins tomorrow	77.6	79.5	0.976
Likeness will drink two or more soft drinks tomorrow	46.1	42.5	0.000
Likeness of making health decisions tomorrow to help maintain or obtain a healthy weight	68.2	73.5	0.000
Likeness will set personal goals this month to improve eating habits and/or PA by recording and monitoring them	43.7	55.4	0.000

Student Pre/Post Attitudes

n=1040

Answer choices: Strongly agree, Somewhat agree, Not sure, Somewhat disagree, Strongly disagree

Significant improvements in responses to these statements (agree choices):

It is important to eat healthy. 86.3 post It is important to be physically active. 88.0 post My friends think that it is important that I eat healthy every day. 52.0 post

No significant improvements in responses to these statements but high pre score:

- •I could change the way I eat if I wanted to. 74.6 pre
- •I could participate in more physical activity if I wanted to. 85.5 pre
- •I could improve my body weight over the next 6 months if I wanted to. 81.3 pre
- •I could help change my environment (home, school, community) if I wanted to. 67.3 pre

Upcoming Enhancements

Physical Activity Log – stand-alone



Upcoming Enhancements

- iPhone App for PA LogIt
- Users can enter physical activity log info "on the go"
- Utilizes one database for seamless integration of data between the computer and the phone.



How to Implement Take Charge

- Go to: takechargebehealthy.org
- Register your school
- Register as a teacher
- Enter students' names
- Generate student UserIDs and Password cards and distribute
- Select topic progression
- You're ready to go!

For more information:

- Eloise Elliott, PhD
 - eloise.elliott@mail.wvu.edu
- Derek Belcher, Technology Specialist
 - belcherds@concord.edu

QUESTIONS??