WELCOME TO GPS TRAINING

NUTRITION & FOOD SCIENCE

GPS TRAINING SIGN IN

FORT DISCOVERY
AUGUSTA

PATRICIA FLEMING, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

PIONEER RESA
CLEVELAND

ARE YOU THERE?

BARBARA PLETSCH, FACILITATOR

GPS TRAINING SIGN IN

UGA
ATHENS
YVONNE HARDY, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

UGA
GWINNETT
SUE BORTON, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

VALDOSTA STATE

JUDY BEASLEY, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN HEART OF GA RESA

ALICE MULLIS, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

KENNESAW STATE

ELLEN REAGIN, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

ALBANY STATE

ELIZABETH HERNDON, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

ARMSTRONG UNIVERSITY

MELODY SINCLAIR, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

COLUMBUS STATE

CONNIE APLIN, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

DALTON STATE

KINDRA WATTERS, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

1ST DISTRICT RESA

JACKIE MERRILL, FACILITATOR

ARE YOU THERE?

GPS TRAINING SIGN IN

GA DOE

ARE YOU HERE?

VIDEO CONFERENCE ETIQUETTE

1. Please keep your monitor on MUTE – every little noise in EACH conference room may be picked up, and will create static.

2. We will address questions as we go along – if you have a question, raise your hand, your facilitator at the session will turn off the mute and advise you have a question – then ask the question, we will answer it, then mute back.

3. We will not be using the computers – but if you have access to them, there may be times you can pull up a website and follow along with me, as it is hard to see the fine print on the monitors.

BUT PLEASE,

If you decide to follow along on the websites – please only utilize the computers when advised. Please do not sit there and answer emails, surf the net, etc. – this is a training class.

ANY QUESTIONS BEFORE WE BEGIN?

Phase 2

GPS Training

NUTRITION & FOOD SCIENCE

Laura Ergle
FACS Program Specialist
lergle@doe.k12.ga.us

CURRICULUM WRITING TEAM

- Facilitator David Ross, North Gwinnett High School
- Members:

Ruth Ann Swanson, UGA
Helen Hawver, Schley County High School
Judy Beasley, Lowndes County High School
Nathan Greven, Carrollton Technical Center
Wes Goodman, Rockdale Career Academy
Kerri Crean, Gwinnett Technical College
Kully Crean, Grayson High School
Dee Smith, Marietta High School

INDUSTRY VALIDATIION

HIGH DEMAND

Or

HIGH WAGE

Or

HIGH SKILL

NUTRITIONIST & DIETICIAN

An example of a high wage, high demand AND high skill career.

www.occsupplydemand.org

FOOD SCIENCE TECHNICIAN

An example of a high wage, high demand AND high skill career.

www.occsupplydemand.org

ADDITIONAL RESOURCES FOR INDUSTRY VALIDATION IN NUTRITION & FOOD SCIENCE CAREERS

- http://www.bls.gov/oco/
- www.salary.com

ECONOMIC DEVELOPMENT & NUTRITION

- Better health is associated with improved labor market outcomes.
- Good nutrition is related to the health and well being of individuals. Poor health affects the economy with an increase in health related diseases: heart disease, diabetes, high cholesterol, and obesity.
- Good Nutrition is the key to lifelong health.

ECONOMIC DEVELOPMENT & FOOD SCIENCE

Food Science enables research to bring about new products in the market place, those that might:

- be more convenient,
- be more economical,
- be more nutritious,
- be fat-free and low calorie,
- lower your cholesterol
- prevent disease
- add longevity to your life

PATHWAY COURSES

- Food, Nutrition & Wellness

20.41610

- Food & Nutrition Through the Lifespan

20.41710

- Food Science

20.41810

SCIENCE CREDITS – THESE TWO COURSES WILL COUNT AS A SCIENCE CREDIT FOR ALL STUDENTS ENTERING AS FRESHMAN 08-09 AND LATER

Food & Nutrition Through the Lifespan
20.41710
Food Science
20.41810

CREDITS – ALL COURSES ARE WRITTEN FOR ONE CREDIT, TO BE OFFERED IN ONE TRADITIONAL BLOCK FOR A SEMESTER OR ONE CLASS PERIOD FOR THE ENTIRE YEAR

COURSES ARE NOT DESIGNED TO BE OFFERED FOR ONE CLASS PERIOD, ONE SEMESTER, AND BROKEN UP AS A/B SEGMENTS

This hampers students from being pathway and course completers, if they have the option to leave in the middle of the course. The courses are not written for students to enter in the middle of the course either for example, second semester in the B half.

THIS PATHWAY IS NOT A COOKING PATHWAY - THAT WOULD BE CULINARY.

THIS PATHWAY FOCUSES ON NUTRITION AND FOOD SCIENCE.

AS LABS WILL BE A STUDENT ACTIVITY, PLEASE ENSURE THEY REINFORCE A STANDARD AND/OR ELEMENTS YOU ARE TEACHING.

GEORGIA PERFORMANCE STANDARDS

Standard – Based Instruction

What are they?

Why are we moving to them?

How do we implement them?

STANDARDS - BASED EDUCATION

- Focus on student learning.
- Expectations are the same for all students.
- Standards expressed through essential questions and supporting skills and knowledge.
- Assessments used to guide and modify instruction.
- Effectiveness of instruction judged on whether students meet the standard.

STANDARDS - BASED EDUCATION

- Instructional strategies with opportunities for students to learn expectations outlined in the standards.
- Student interests, previous achievements and developmental levels considered in planning instructional methods.
- Teachers working on building enduring understanding.

SO WHAT DOES THIS LOOK LIKE?

THE GEORGIA DEPARTMENT OF EDUCATION WEBSITE

- www.gadoe.org

CHARACTERISTICS OF GPS - STANDARDS ARE POSTED:

- In appropriate language.
- For the purpose of connecting learning with goals.
- To focus expectations.
- To direct attention to what is being taught.

OTHER CHARACTERISTICS:

- Word walls are used.
- Rubrics are posted, used and understood by everyone.
- Instruction is differentiated based on assessment.

THE TEACHER….

- Will establish clear learning goals for the class and individual students.
- Understands how alignment of curriculum, instruction, and assessment affects student learning.
- Demonstrates, shares and guides students to independence.
- Uses the textbook as a resource, NOT THE CURRICULUM.

THE TEACHER ALSO……

- Knows and can demonstrate best practices.
- Models thinking strategies as a “guide on the side”, not the “sage on the stage.”
- Uses rubrics to assess learning and communicate expectations with students and parents.

THE STUDENT….

- Understands the learning goals for the class and the teacher's expectations for success.
- Sees the connections between his/her learning goals and the assessments used.
- Understands that the responsibility for learning has shifted to the individual.
- Is actively engaged in his/her own learning.

KEY COMPONENTS

- Every activity has a purpose that is aligned to the standards.
- Many instructional strategies are used to meet the needs of all standards.
- Parents are made aware of expectations.
- Conversations take place between all stakeholders.

OTHER KEY COMPONENTS….

- Evidence of enduring understandings and essential questions in unit plans.
- Evidence of moving from covering material (lots of QCC's) to mastering standards.
- Expectations are consistent across all content areas.

PROCESS OF INSTRUCTIONAL PLANNING

Traditional Practice

Select a topic from the curriculum.

↓

Design instructional activities.

↓

Design and give an assessment.

↓

Give grade or feedback.

↓

Move onto new topic.

Standards - Based Practices

Select standards from among those students need to know.

↓

Design an assessment through which students will have an opportunity to demonstrate those things.

↓

Decide what learning opportunities students will need to learn those things and plan appropriate instruction to assure that each student has adequate opportunities to learn.

↓

Use data from assessment to give feedback, reteach or move to the next level.

BACKWARD DESIGN - DEFINITION

- To begin with the end in mind means to start with a clear understanding of your destinations. It means to know where you're going so that you better understand where you are now so that the steps you take are always in the right direction.

BACKWARD DESIGN - WHAT IT IS:

- A framework which synthesizes research-based best practices in curriculum, assessment, and instructions.

  Understanding by Design is one example of a language (there are others) which educators can use to describe and analyze the best ways to promote student understanding rather than just knowledge and recall.

BACKWARD DESIGN - EXAMPLES

Big Ideas for Concept Attainment

1. Identified desired results first.
2. Determine acceptable evidence.
3. Plan learning experiences.

Enduring understandings.

Essential Questions.

Enabling knowledge objectives.

Constructing meaning.

BACKWARD DESIGN – WHAT IT ISN'T

What It Isn't.

A program.

One more thing to do.

"Covering" a list of topics.

Teaching little packets of information.

An isolated unit.

Knowing and doing without understanding.

A different way of teaching and assessing.

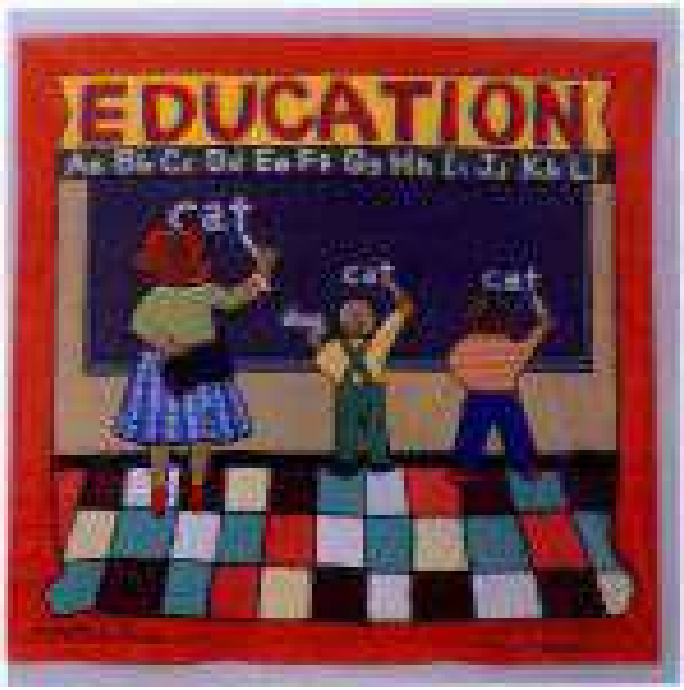
Portfolios.

STANDARDS INFORM ASSESSMENT

ASSESSMENT INFORMS INSTRUCTIONAL PRACTICE

STUDENTS ENGAGE IN *LEARNING* WHAT THEY NEED TO KNOW AND BE ABLE TO DO

STUDENTS *DEMONSTRATE* WHAT THEY KNOW AND CAN DO



STUDENTS EXPERIENCE *LEARNING* AND TRANSITION TO UNDERSTANDING AND APPLICATION

BASED ON ASSESSMENTS, TEACHERS RE-TEACH. MODIFY, & DIFFERENTIATE INSTRUCTION

THE OUTCOME

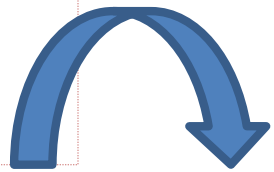
- A framework (unit) that synthesizes research based best practices in curriculum, assessment, and instruction that promote the learning process.

- A language that educators can use to describe and analyze the best ways to promote student understanding, rather than just knowledge / recall.

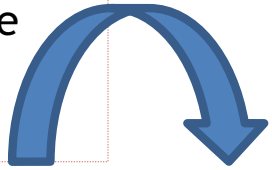
NOW – HOW DO YOU DO THIS?
WHAT WILL STUDENTS AND TEACHERS DIFFERENTLY?

WHAT DOES IT LOOK LIKE?

Stage 1
Identify desired results.
What do I want my students to know and be able to do?
Big Ideas → Enduring Understanding
Essential Questions



Stage 2
Determine Acceptable Evidence
(Design Balanced Assessments)
How will I know whether my students have acquired the requisite knowledge, skills, and understandings?



Stage 3
Planning Learning Experiences & Instruction
What will need to be done to provide my students with multiple opportunities to acquire knowledge, skills, and understandings?

TEXTBOOKS FOR NUTRITION COURSES:

Glencoe, McGraw Hill:
Food for Today
Discovering Food & Nutrition

Goodheart Wilcox:
Adventures in Food & Nutrition
Guide to Good Food
Nutrition, Food & Fitness

TEXTBOOKS FOR FOOD SCIENCE:

Glencoe, McGraw Hill:
Food Science: The Biochemistry of Food & Nutrition

Goodheart Wilcox:
Principles of Food Science
Exploring Science in the Foods Lab

Pearson – Prentice Hall
Food Science & Technology

FACILITIES

- The current all purpose FACS lab is appropriate for the Nutrition & Food Science Pathway.
- Here is the link:

  www.gadoe.org
- We do hope to have the new website up within the next 2 weeks.

EQUIPMENT

- The current equipment list is being updated for both courses – here is the current list.
- We will specify equipment lists by pathways in the future, not general FACS.
- www.gadoe.org

ADDITIONAL EQUIPMENT FOR FOOD SCIENCE

- These might be some items you will see on the updated list – keep in mind, you might not need all this, depending on what labs you do.

- Electronic Balance
- 100, 250, 400 mL beakers
- Graduated cylinders
- Thermometers and thermometer holder
- Magnifying glass, and/or microscope, slides
- Test tubes, test tube tongs, test tube rack
- Buret and buret stand, titration stand
- pH indicator paper or pH meter
- Glass stirring rods, Eyedropper
- Evaporating dishes, Petri dishes
- Viscosity ring
- Safety glasses
- Erlenmeyer flasks

RESOURCES

CEV MULTIMEDIA - WWW.CEVMULTIMEDIA.COM

Item Title

CAM65017W What's Eating You? Guide to Sensible Dieting
CEV00585W Nutrition in the Fast Lane
CEV00586W Grocery Shopping Survival
CEV00587W Fundamental Table Etiquette
CEV00588W Fundamental Restaurant Etiquette
CEV00671W Meat Cooking Techniques
CEV00673W Understanding Nutritional Labeling
CEV00676W Understanding Food-Borne Pathogens

- CEV00678W Food Safety & Sanitation
- CEV00679W Food Guide Pyramid
- CEV00680W Field Trip: Blue Bell Ice Cream
- CEV00682W Field Trip: Power Plant
- CEV00696W Fundamental Human Nutrition
- CEV00698W Eating & Exercise: Fact or Fiction?
- CEV00699W Food Additives: Fact or Fiction?
- CEV00721W Nutrition for Teens
- CEV00740W Human Body: Digestive System
- CEV00762W Food Technology: Irradiation
- CEV00770W Would Your Kitchen Pass Inspection?

- CEV30016W Nutrition DVD Series
- CEV70018W Nutrition & Personal Health
- CEV70019W Food Choices, Customs & Habits
- CEV70021W Meal Planning & Management
- CEV70022W Food Processes & Operations
- CEV70065W Nutrients & Your Body
- CEV70093W Cheese Production
- CEV70207W Let's Say Healthy
- CEV70231W MyPyramid: A Look at the New Food Guide

- CEV80119W Nutrition Through the Life Cycle - DVD
- CEV80120W Diets & Nutrition - DVD
- CEV80121W A Scientific Look at Nutrition - DVD
- CEV80771W Food Safety
- CEV90761W Fundamental Human Nutrition CD-ROM
- LEA22040W Fast Food Survival Guide
- LEA22041W Fast Food Survival Guide - DVD
- LEA22042W How Much Should I Eat? Understanding Food Portions
- LEA22043W How Much Should I Eat? Understanding Food Portions -DVD
- SHW40002W Human Health CD-ROM (MAC)
- SHW40003W Human Health CD-ROM (WIN

AAFCS RESOURCES

- Nutrition:

http://www.aafcs.org/fcs/pages/nw.html

- Food Science:

http://www.aafcs.org/fcs/pages/fs.html

FOOD SCIENCE LABS -

- http://www.math.unl.edu/~jump/Center1/FoodScience.html

THIS FREEWARE PROGRAM CALCULATES YOUR BODY MASS INDEX IN AN AMUSING WAY. YOU DON'T EVEN HAVE TO INSTALL BMI SCALE--JUST RUN IT. ENTER YOUR HEIGHT IN INCHES AND WEIGHT IN POUNDS, THEN PRESS THE CALCULATE BUTTON

- http://www.download.com/BMI-NewFatChart/3000-2129_4-10227300.html?tag=lst-0-16

UTAH WEBSITE WITH MANY NUTRITION AND FOOD SCIENCE LESSON PLANS AND LINKS

- www.uen.org/utahlink/lp_res/nutri375.html

TEACHER RESOURCE

- http://members.ift.org/IFT/Education/TeacherResources/
- http://school.discoveryeducation.com/foodscience/science_resources.html
- http://www.thefutureschannel.com/search.php?search_string=cooking&search=Search

ARTICULATIONS

We have no articulated courses for this pathway.

But this pathway is valuable to many post secondary opportunities in the following career areas:

Food /Culinary

Health Related

ASSESSMENTS

- Assessment teams will convene next Fall to work on an end of pathway assessment.
- For many pathways – this will be tied into articulation.
- This assessment will also identify any credentials, skills and standards a student has completed.

INDUSTRY CERTIFICATION

- There is not a national industry certification available for this pathway. We are looking into a state certification whereas industry will endorse we have a pathway that prepares students for the nutrition and food science industry.

QUESTIONS