

GEORGIA MIDDLE SCHOOL

CAREER, TECHNICAL, & AGRICULTURAL EDUCATION

CAREER DEVELOPMENT

COURSE: Career Discovery

Program Concentrations and Peach State Pathways UNIT 2:



MINTRODUCTION 1

Annotation:

In this unit students will learn Georgia's Program Concentrations and the Peach State Pathways. They will research about each of the programs and pathways. The students will pick a specific career to research and present their findings through PowerPoint. This research will include what mathematics skills are needed for their specific career.

Grade(s):

	6 th
Х	7 th
	8 th

Time:

Ten 50 minute periods

Author:

Randall Brown

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided appropriately. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation. Many students (both with and without disabilities) who struggle with reading may benefit from the use of text reading software or other technological aids to provide access to printed materials. Many of these are available at little or no cost on the internet.

FOCUS STANDARDS

GPS Focus Standards:

<u>MSCD7-2:</u> Students will investigate Georgia's Career Program Concentrations that align with their personal assessments and identify possible career pathways.

- a) Identify and analyze Georgia's career/program concentrations: (1)Agriculture; (2)
 Architecture, Construction, Communications & Transportation: (3) Arts & Humanities; (4)
 Business & Computer Science; (5) Engineering & Technology; (6) Family & Consumer
 Sciences; (7) Healthcare Science; (8) Government & Public Safety; (9) Marketing, Sales & Services, (10) Education & Teaching, and (11) Culinary Arts.
- b) Identify career pathways that align with program concentrations.

GPS Academic Standards:

The student participates in student-to-teacher, student-to-student, and group interactions.

ELA7LSV2 The student listens to and views various forms of text and media in order to gather and share information, persuade others, and express and understand ideas. The student will select and critically analyze messages using rubrics as assessment tools.

ELA7W3 The student uses research and technology to support writing.

M7D1 Students will pose questions, collect data, represent and analyze the data, and interpret results.

M7N1 Students will understand the meaning of positive and negative rational numbers and use them in computation.

M7G1 Students will construct plane figures that meet given conditions.

M7G2 Students will demonstrate understanding of transformations.

M7P1Students will solve problems (using appropriate technology)M7P4Student will make connections among mathematical ideas and to other disciplines.

Students will represent mathematics in multiple ways.

National / Local Standards / Industry / ISTE:

CM1.R4 Evaluate your career management skills and personal traits (e.g., resiliency, self-efficacy, ability to identify trends and changes, and flexibility).

CM3.R3 Judge the quality of the career information resources you plan to use in terms of accuracy, bias, and how up-to-date and complete it is.

ED1.K1 Recognize the importance of educational achievement and performance to the attainment of personal and career goals.

M7P5

UNDERSTANDING & GOALS

Enduring Understandings:

- Career satisfaction begins with identifying a wide variety of career options before making a decision.
- Using the steps in the decision-making process helps one make good career decisions.
- Academic achievement (especially Math) plays an important role in both increased career options and success in a chosen career.

Essential Questions:

- Why is it important to know all of Georgia's Career Program Concentrations and Peach State Pathways?
- What is the relationship between academic achievement and successful career decision-making?

Knowledge from this Unit:

Students will be able to:

- Classify various careers using Georgia's program concentrations.
- Identify Pathways in each of Georgia's career program concentrations.
- Specify academic skills needed to both increase career options and perform career-related tasks.

Skills from this Unit:

Students will be able to:

- Use math skills to perform authentic work-based tasks.
- Employ Word Processing skills to create a table to summarize Career Program and Pathway
 Information.
- Utilize multimedia presentation software to inform and educate others about career decision-making and the role academic achievement plays in career success.
- Create visual representations of factual and abstract concepts.



Assessment Method Type:

Χ	Pre-test
	Objective assessment - multiple-choice, true- false (MAKE IT TRUE), etc.
	Quizzes/Tests
	Unit test
Χ	Group project
Х	Individual project
X	Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
	x Self-check rubrics
	Self-check during writing/planning process
	Journal reflections on concepts, personal experiences and impact on one's life
	Reflect on evaluations of work from teachers, business partners, and competition judges
	x Academic prompts
	Practice quizzes/tests
	Subjective assessment/Informal observations
	Essay tests
	Observe students working with partners
	Observe students role playing
	Peer-assessment
	Peer editing and commentary of products/projects/presentations using rubrics
	Peer editing and/or critiquing
Χ	Dialogue and Discussion
	Student/teacher conferences
	Partner and small group discussions
	Whole group discussions
	\underline{x} Interaction with/feedback from community members/speakers and business partners
Χ	Constructed Responses
	Chart good reading/writing/listening/speaking habits
	x Application of skills to real-life situations/scenarios
Χ	Post-test

Assessment(s) Title:

Pre-Test
Observation of Introduction Activity

Programs and Pathways Overview Table
Observation of Vocabulary Scramble
PowerPoint Group Project Self-Assessment and Grading Rubric
Post-Test

Assessment(s) Description/Directions:

Instructions included in handouts

Attachments for Assessment(s):

Pre-test

Programs and Pathways Overview Table Rubric

PowerPoint Group Project Self-Assessment and Grading Rubric

Post-Test



INTRODUCTION

1. Identify the Standards. Standards should be posted in the classroom for each lesson.

<u>MSCD7-2:</u> Students will investigate Georgia's Career Program Concentrations that align with their personal assessments and identify possible career pathways.

- a) Identify and analyze Georgia's career/program concentrations.
- b) Identify career pathways that align with program concentrations.
- 2. Review Essential Questions.
 - a) Why is it important to know all of Georgia's Career Program Concentrations and Peach State Pathways?
 - b) What is the relationship between academic achievement and successful career decision-making?
- 3. Identify and review the unit vocabulary.

Career Program	Education & Teaching	Business &	Architecture, Construction,	Family &
Concentrations		Computer Science	Communications, &	Consumer
			Transportation	Sciences
Decision-Making	Peach State Pathways	Engineering &	Career Program	Government &
Process		Technology	Concentrations	Public Safety
Arts & Humanities	Agriculture	Academic	Culinary Arts	Healthcare
		Achievement		Science
Marketing, Sales, &				
Services				

- 4. Assessment Activity
 - a) Daily Observation through Summarization (ticket out the door or whole group discussion)
 - b) Observation of active learning activity (Vocabulary Scramble)
 - c) Table completed using guidelines from Rubric
 - d) Multimedia presentation completed using guidelines from Rubric

LESSON 1 | PRE-TEST AND IDENTIFYING THE 11 CAREER PATHWAYS

- 1. Before you start
 - a) Try to find people who work in various career areas (from your personal network or the yellow pages) and be prepared to invite them for the last day to watch student presentations.
 - b) Have a list of Program Concentrations ready to show after the pre-test (either on the board or overhead). It's better to start out with them not in ABC order. Just jumble them up. Also, have enough copies of the <u>Vocabulary Scramble</u> handout for each student.
- 2. Ask "If you could organize all the jobs there are into different categories, what would those categories be called?" Record student responses on the board or overhead.
- 3. Explain that, "Today, we are going to start learning about different career categories, and each one of those has from 1 to 10 sub-categories that contain many different career choices. It is important to know all of your choices before you make a career decision. And as we learned (or will learn) in the decision-making process, you must know all of your options to be able to compare them and make the best decision. But first, let's see how much you already know about Career Concentrations."
- 4. Give the <u>Pre-Test</u> and take it up (you may want to go ahead and record your scores in a grade book or spreadsheet for later).
- 5. After the **Pre-test**, reveal the concentrations.
- 6. Ask students, "What would be an easy way for us to organize these so that we could learn them faster?"
- 7. Guide students to putting them in order and remembering the first letter (unless you or they come up with something that you decide works better).
- 8. After getting them in order, mention that sometimes it helps to visualize the things we have to learn, so let's make a graphic organizer to help you study more efficiently to learn all of the concentrations.
- 9. Hand out **Introduction** handout and go over instructions.
- 10. Start Introduction handout if you have time.
- 11. Hand out a copy of the Vocabulary Scramble for them to begin studying a little each night
- 12. Summarization (Ticket out the door)—How will knowing all of the Career Concentrations help us in our decision-making? How many can you list from memory already?

LESSON 2 | IDENTIFYING THE 11 CAREER PATHWAYS --cont'd / PERCENTAGE CHANGE IN EMPLOYMENT

- 1. Summarize the lesson topic and remind students what they did in the previous class. Respond to how they did on their ticket out the door if you think it is motivational for them.
- 2. Complete the **Introduction** Handout.
- 3. Talk a little about employment trends and how some careers are growing while others are slowing
- 4. Explain or demonstrate that it's often hard to realize these changes by looking at the actual numbers, but percentages are easier to read and understand.
- 5. Begin <u>Percentage Change in Employment Growth</u> explaining that this will also help them remember the career concentrations as well as see which ones are the largest and fastest growing.
- 6. Guide students through instructions and help as needed, but try to get them to figure out how to calculate the percent changes.
- 7. Walk around the room looking for students who are lost or not on task and help as needed.
- 8. Summarization (WHOLE GROUP DISCUSSION): Which career concentration seems to have the largest number of employees? Why do you think that is so? Which ones seem to be growing the most?
- 9. Hand out <u>Programs and Pathways Overview Table Instructions</u> and <u>Programs and Pathways Overview</u> <u>Table Rubric</u> and go over it if you have time (it would be good for them to read over it for homework)
- 10. Tomorrow, we will get a little Peachy by going deeper into these career concentrations and looking at the "Peach State Pathways" sub-categories that are connected to each. (Use the Peach theme anyway you think would be motivational)

LESSON 3 | PEACH STATE PATHWAYS (Overview Table Activity)

- 1. Before this class period, you may need to schedule time in a computer lab if you don't have computers with Internet available in your room.
- Summarize the lesson topic and remind students what they did in the previous class. Have them get out
 the <u>Programs and Pathways Overview Table Instructions</u> and <u>Programs and Pathways Overview Table Rubric</u> you handed out previously.
- 3. Ask if they have questions and, if you feel it is necessary or helpful, go over the rubric with them before beginning. For the math portion, explain that they are to find examples of what type of math each Career Pathway uses and specific tasks they use those types of math for.
 - a. Ex. For Culinary Arts "Fractions to measure ingredients", "Algebra to alter amounts of ingredients for larger or smaller bake ware"

- 4. Today's goal: List (or copy and paste) all career concentrations, 3 pathways (except for Culinary & Education which have 1 and 2 respectively), career examples and get started on finding photos using Google Images.
- 5. Monitor students to make sure no one is wasting time as a result of confusion or distraction.
- 6. Summarization (WHOLE GROUP DISCUSSION)—Name a career concentration and a specific career title that fits in that category.

NOTE FOR SPECIAL NEEDS (Let them choose a smaller number of the 11 concentrations—example, pick the 3 they like the sound of the most)

LESSON 4 | PEACH STATE PATHWAYS (Overview Table Activity) --Cont'd

- 1. Briefly review where students should be (from Step 4 of Lesson 3) and define what they should be finished with today (all pictures completed and list Math uses for at least 4 of the concentrations.
- 2. Continue working on Overview Table
- 3. Summarization—(ticket out the door) --list and describe 1 of the ways you learned Math is used in 2 of the career concentrations.

LESSON 5 | PEACH STATE PATHWAYS (Overview Table Activity) --Cont'd

- 1. Briefly review where students should be (from Step 1 of Lesson 4) and Explain that they should be finished today.
- 2. Have the students double check their work with the Rubric and then self-evaluate.
- 3. Allow them to fix any problems before printing the assignment.
- 4. If available, print in color, but if not, print in black & white and display student work.
- 5. Summarization: Write a paragraph that includes an explanation of the following:
 - a. Why we should know all 11 career concentrations
 - b. Description of one Career Concentration, its pathways, and its career examples.
 - c. Why it's important to do your best in math with regard to your career future.

LESSON 6 | PROGRAMS & PATHWAYS VOCABULARY SCRAMBLE

- Before class
 - a. copy enough of the handout so that you have groups of 3 or 4 (also copy the **PowerPoint Group Project Rubric**)
 - b. Use a paper cutter to separate the terms and definitions
 - c. Place the slips into a bag or box to mix them up.
 - d. Also helps if you can go ahead and separate the slips into roughly even stacks and paperclip them together for easy distribution
 - e. Get one sheet of construction paper for each group
 - f. Get one glue stick for each group
 - g. Have a time-keeping device if you want to see how long it takes or to compete with other classes who will do this activity.
- 2. Distribute supplies to each group according to your classroom management plan.
- 3. Instruct students to put all group member names and the period on the back of the construction paper.

- 4. Explain that the slips with the terms are not to be unclipped until you say to begin.
- 5. The goal is not to be first, but to see how fast the whole class can finish (you may decide to have competition be between classes by timing how long it takes them to get the finished scramble to you completed & correct and in ABC order)—If a group brings one that is not correct, send them back to fix it.
- 6. Use an uncut handout for your key.
- 7. Monitor students staying on task and "hording" slips or dropping them on the floor to avoid slowing down the activity. Also make sure each student has a job (trading slips with other groups, organizing into ABC order, or gluing.) You could say, "You're either gathering, grouping, or a gluing"
- 8. Tell them how long it took their class to complete the activity and that you will let them know what the other class(es) did tomorrow. ESTIMATED TIME FOR THIS IS 25 MINUTES INCLUDING MATERIAL DISTRIBUTION AND INSTRUCTIONS.
- 9. Summarization: Get out clean paper and list as many of the career concentrations as you can remember in 2 minutes.
- 10. With students in same groups, hand out **PowerPoint Group Project Rubric** and review with students.
- 11. Tell them a different person has to be at the computer each day while those not at the computer will act as consultants to discuss the creation of the presentation. (You may want to note who will be at the computer for the next 3 days to make sure one person isn't doing all the work).

• LESSON 7 | POWERPOINT GROUP PROJECT

- 1. Announce that we are near the end of the unit and now it's time to show what you know when it comes to really understanding the details of a career pathway.
- 2. Tell students they should completely finish the first two slides (Title & Career Overview) and should be nearly finished with slide 3 (Career Detail)

POWERPOINT TIPS (Simple strategies for adding Power to your Points!)

- <u>Just because you can</u>...doesn't mean you should—avoid unnecessary or distracting sounds, images and animations)
- **7X7 Rule**—no more than 7 bullets on a slide and no more than 7 words per bullet. A complete sentence should not be used unless it is a quote that is essential to enhancing the message.
- <u>Text</u>—Choose a font that's easy for the audience to read. As a general rule, the font should be no smaller than 32 pt.
- Media—Resize photographs from the corners, not the middle handles to avoid distorting the
 faces. Avoid annoying sounds—yes they can be funny and get audience attention, but before
 long, the sounds overshadow the message). Animated clipart can be a distraction, so choose
 wisely.
- <u>Animation</u>—Use animation to control what the audience sees when you want them to see it (helps avoid them reading later points while you're still on point 1).
- <u>Color</u>—Avoid using colors that clash with each other—stick with the color scheme of your design. Also make sure your background and text contrast so your message is easy to see.
- 3. Summarization (WHOLE GROUP DISCUSSION): Have each group tell the class the pathway they chose and examples of careers in that pathway.

NOTE: depending on how your students save drives, you may want to have them all save or copy their work to a shared drive or some media you can keep in the room in case a student is out and those present are unable to access the file.

• LESSON 8 | PROGRAMS POWERPOINT GROUP PROJECT -- Cont'd

- 1. Allow students to continue working (making sure a different student is doing the typing today)
- 2. Remind students they have one more class after today to complete the project
- 3. Monitor students to check for confusion or distraction from the task. Also watch for students taking too much time on the looks of their project (animation and multimedia)
- 4. By the end of the class, they should be finished with slide 3 (Career Detail) and Slide 4 (Math Used) and should be starting on Slide 5.
- 5. Mention that it's a good idea to do the Bibliography for Slide 6 as they go by copying and pasting links to sites used.

LESSON 9 | PROGRAMS POWERPOINT GROUP PROJECT --Cont'd

- 1. Continue PowerPoint Group Project
- 2. Make sure a different student is doing the typing today.
- 3. Monitor for confusion, distraction, software help and wasting time on finding the right animation or sounds.
- 4. Students should have project completed today.
- 5. Have them run the show and use the rubric on each slide to make sure they have everything and their animations & sounds work.
- 6. Show them how to print handouts, 6-per-page, pure black & white or guide them step-by-step to avoid wasting paper and ink on whole slides being printed
- 7. Have them print handouts and turn in
- 8. Tell them there may be visitors from their chosen career concentrations here to watch them present tomorrow.

LESSON 10 | PROGRAMS POWERPOINT GROUP PROJECT --Cont'd / POST-TEST

- 1. Announce, "We made it!" Now you know a lot more about your career options after studying the 11 Career Program Concentrations, the Peach State Pathways in each and examples of careers within the pathways.
- 2. After the quiz, groups who are finished may have a chance to present their project to the class while students who need more time may be allowed to work (at your discretion).
- 3. Give the **Post-Test**
- 4. Watch presentations of groups who are finished.
- 5. Summarization (Ticket out the door):
 - a) Besides the names of the Career Concentrations and pathways, what do you feel is the best thing you got out of this lesson as it relates to careers?

Attachments for Learning Experiences:.

Introduction

Percentage Change in Employment Growth

Vocabulary Scramble

NOTES & REFLECTIONS

PROGRAMS & PATHWAYS OVERVIEW TABLE

- If you have access to a shared drive on the school's network, copy the table file and let students open and save it to student network drive or removable media
- Arts & Humanities have pathways listed on the site you will be using, however, specific careers will have to be researched using a web-based search engine or other media resources.
- You may have to remind them to click the links for the pathway.



Web Resources:

Peach State Pathways: Programs of Concentration

Math in the workplace

Why Must I learn Math?

Attachment(s):

Materials & Equipment:

- Protractors
- Calculators (optional)
- Computers with Internet Access
- Paper Cutter
- Glue Sticks
- Construction Paper

What 21st Century Technology was used in this unit:

х	Slide Show Software	Graphing Software		Audio File(s)
	Interactive Whiteboard	Calculator	Х	Graphic Organizer
	Student Response System	Desktop Publishing	Х	Image File(s)
	Web Design Software	Blog		Video
	Animation Software	Wiki		Electronic Game or Puzzle Maker
	Email	Website	х	Word Processing Software