

Transportation, Distribution, & Logistics



Career Cluster Teacher Guide

Resource Description

The economy of the United States relies on efficient transportation systems to move products and people from Point A to Point B. Whether by air, water, rail, or road the field of transportation, distribution, and logistics offers many diverse and interesting career fields.

Materials and Resources

- Teacher guide
- <http://mygpsforsuccess.com/transportation-distribution-logistics/>
- Cluster student viewing guide
- KWL Chart
- Display paper or individual sheets
- Pen/Pencil
- 1:1 computer or laptops; or group students if limited resources

Vocabulary & Definitions

Freighter: Ship or aircraft designed to carry goods in bulk. Or the person who loads, receives, or forwards goods for transport

Logistics: The efficient scheduling and moving of goods from a warehouse to a customer or of people from one place to another

Commercial Pilot: Pilot who operates an airplane for transportation of mail, passengers, or freight or for other commercial purposes. Commercial pilots can also fly aircraft for charter flights, rescue operations, firefighting, aerial photography, and crop dusting

CDL License: Driver's license required to operate large, heavy, or placarded hazardous material vehicles in commerce. CDL Licenses can be class A, B, or C depending on the vehicle being operated.

Mass Transit: Transportation of large numbers of people by means of buses, subway trains, etc., especially within urban areas

Public Works: Broad category of infrastructure projects, financed and constructed by the government, for recreational, employment, and health and safety uses in the greater community.

Global Supply Chain: Worldwide system that a business uses to produce products or services

Aeronautics: Study of the science of flight and method of designing an airplane or other flying machine following four areas of design process: aerodynamics, propulsion, materials and structures, and stability and control

Maritime: Connected with the sea, especially in relation to seafaring commercial or military activity

Cargo: Goods carried on a ship, aircraft, or motor vehicle

Bell Ringer

1. Have the following displayed on an easel, whiteboard, or individual sheets of paper for students to review and write down their responses:

You've ordered something you have really wanted for a long time off of Amazon. How does the product you ordered go from purchase to waiting on your doorstep?

2. Have some students share responses.
3. Make a class list of responses and then open the floor to additional responses after the list is constructed.
4. Facilitate student discussions about how careers in Transportation, Distribution, & Logistics are essential to everyday life.

Objectives

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The student will be able to:

- Identify the central aspects of the Transportation, Distribution, & Logistics Career Cluster including career paths, skills & interest, and education level
- Explore different careers within the Cluster
- Analyze what is known, wondered, and learned (KWL) about the career cluster to begin conceptualizing an individual career map

Anticipatory Set

1. Divide students into pairs – each student gets a KWL Cluster Chart.

Verbal instructions

- *Review the information from the bell ringer regarding Transportation, Distribution, & Logistics careers.*
- *With your partner, list at least 5 items you know about job details, necessary skills, etc. in the “Know” Section.*

2. Have two pairs of students join one-another to form a four-person group

Verbal instructions:

- *Compare and discuss each list.*
- *With your group, list at least 5 things you want to know about the Transportation, Distribution, & Logistics Cluster in the “Wonder” Section.*

3. Have groups share their new list with the class.

Introductory Questions

Introductory Questions:

Ask the following questions to the whole class for students to write down answers and/or discuss with a partner. Have 2-3 students or groups share their answers:

- What is the process of getting products, people, and cargo where they need to go?
- What types of transportation are regularly used in America and in our region?
- What is included under the term “transportation”? Does this include maintenance work?

Learning Task &
Exploration Activity

1. Introduce Transportation, Distribution, & Logistics Career Cluster Video.

Video Introduction:

The economy of the United States relies on efficient transportation systems to move products and people from Point A to Point B. Whether by air, water, rail, or road the field of transportation, distribution, and logistics offers many diverse and interesting career fields.

2. View the Transportation, Distribution, & Logistics Career Cluster videos. Have students complete the Student Viewing Guide as they learn about the Career Cluster.
3. Students will fill out the “Career Cluster Research” section of the viewing guide and explore the Transportation, Distribution, & Logistics webpage on <http://mygpsforsuccess.com/transportation-distribution-logistics/>

Closing

1. Have students complete the “Learned” Section of their KWL with at least 3 pieces of information they learned about the cluster. Students may share out in class as well as discuss with a partner once they have finished.
2. Engage students in a whole class or small group discussion using the Discussion Questions section of this instructional plan – students may use their KWL chart as reference.

Discussion Questions

1. How would you define this Career Cluster?
2. What surprised you about this Career Cluster?
3. What career pathways were represented in this video?
4. Why is the transportation of people and goods so important to our economy?
5. What are some examples of high-tech fields within this cluster?
6. What makes life as a transportation operator (ex: CDL truck driver) challenging? What are the rewards?
7. Work in transportation can often be demanding and difficult. What are some personality traits and skills that are necessary to enter this field?

Suggested activities to increase student learning and exposure to this Career Cluster.

- Watch and discuss the WPBS *More to the Story* episode "Life on a Freighter":
<https://watch.wpbstv.org/video/life-on-a-freighter-lw8d63/>
- Geography lesson: Students plan a distribution or travel route with specific locations to stop at and ultimately a destination. They can use air, road, rail, or waterways.
- If there are waterways nearby, take the class on a field trip to learn about freighters, cargo transportation, and cruises/touring boats
- Have students explore the inside of a semi-truck, train engine, and/or airplane cockpit
- Build and race battery operated cars with the class or specific students interested in automotive careers
- Have each student select a career from this Career Cluster. Students will research the career and present information to the class in the form of an oral presentation, poster, PowerPoint, video or Prezi presentation. Information to research and share might include salary, education required, typical day schedule, roles and responsibilities, positive aspects of the job and challenges associated with the job.
- Have each student make a list of the Career Readiness Skills that are his/her personal strengths, as well as a list of the skills and behaviors required for a career as an educator. Students compare the lists to determine what Career Readiness Skills need to be strengthened.
- Have students complete a job application and/or job interview with a local employer.
- Help students construct a resume for a specific career in this Career Cluster.
- Arrange for students to meet with the school counselor to discuss classes that would help prepare a student for careers in this Career Cluster and certifications that can be obtained during high school that would be of value.
- Have each student identify a postsecondary institution that is offering certifications or degrees that are required for working in this Career Cluster. He or she should obtain and complete admissions and scholarship applications for the school or program.

Notes to Educator

This packet includes suggested activities questions, and materials to enhance student understanding of this career cluster. Each component may be used individually or modified to fit the needs of your classroom.

More information on this Career Cluster can be found at:

<http://mygpsforsuccess.com/transportation-distribution-logistics/>

In addition, GPS For Success has an array of resources, including:

- Interest Profiler: *online quiz to assist students in categorizing their interests by possible careers those interests apply to.*
- Scholarship opportunities
- Information on internships
- Sample resumes and cover letters
- Interview preparation materials
- Opportunities for students with disabilities