Project 1: Production and Capacity Planning

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **3-4 weeks**
Status: **Published**

Standards

12.9.3.12.TD.1	Describe the nature and scope of the Transportation, Distribution & Logistics Career Cluster and the role of transportation, distribution and logistics in society and the economy.
12.9.3.12.TD.2	Describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution and logistics problems.
12.9.3.12.TD.3	Describe the key operational activities required of successful transportation, distribution and logistics facilities.
12.9.3.12.TD.4	Identify governmental policies and procedures for transportation, distribution and logistics facilities.
12.9.3.12.TD.5	Describe transportation, distribution and logistics employee rights and responsibilities and employers' obligations concerning occupational safety and health.
12.9.3.12.TD.6	Describe career opportunities and means to achieve those opportunities in each of the Transportation, Distribution & Logistics Career Pathways.
12.9.3.12.TD-LOG.1	Develop solutions to provide and manage logistics services for the company and customers.
12.9.3.12.TD-LOG.2	Analyze and improve performance of logistics systems to provide logistics planning and management services.
12.9.3.12.TD-OPS.1	Develop and evaluate transportation plans to move people and/or goods to meet customer requirements.
12.9.3.12.TD-OPS.2	Analyze performance of transportation operations in order to improve quality and service levels and increase efficiency.
12.9.3.12.TD-OPS.3	Comply with policies, laws and regulations in order to maintain safety, security and health and mitigate the economic and environmental risk of transportation operations.
12.9.3.12.TD-SYS.1	Develop plans to maintain and/or improve the transportation infrastructure.
12.9.3.12.TD-SYS.2	Assess, plan and manage the implementation of transportation services.
12.9.3.12.TD-SYS.3	Describe ways to improve the system utilization, flow, safety and environmental performance of transportation systems.
12.9.3.12.TD-WAR.1	Demonstrate efficient and effective warehouse and distribution center operations.
12.9.3.12.TD-WAR.2	Describe ways to improve the performance of warehouse and distribution operations.
12.9.3.12.TD-WAR.3	Analyze compliance with company policies and government laws and regulations in warehouse and distribution operations.
WRK.9.2.12.CAP.2	Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and

transition (e.g., 2.1.12.PGD.1).

TECH.9.4.12.IML.2	Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.

Business Standards

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
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CRP.K-12.CRP6.1	Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.
CRP.K-12.CRP7.1	Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.
CRP.K-12.CRP8.1	Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.
CRP.K-12.CRP11.1	Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.
CRP.K-12.CRP12.1	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.
TRAN.9-12.9.4.12.P.(3).2	Assess performance of warehousing and distribution operations to meet customer and business requirements.
TRAN.9-12.9.4.12.P.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
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TRAN.9-12.9.4.12.P.6	Locate, organize, and reference written information from various sources to communicate with others.
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TRAN.9-12.9.4.12.P.19	Formulate ideas, proposals, and solutions related to problems with this cluster to ensure effective and efficient delivery of products or services to consumers.
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TRAN.9-12.9.4.12.P.63	Employ teamwork skills to achieve collective goals and use team members' talents effectively.

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TRAN.9-12.9.4.12.P.67	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
TRAN.9-12.9.4.12.P.86	Employ planning and time management skills and tools to enhance results and complete work tasks.
TRAN.9-12.9.4.12.P.87	Analyze and assess the roles and functions of transportation-related technological systems used in this cluster in order to demonstrate awareness of necessary technical skills.

Transfer Goals and Career Ready Practices

Transfer Goals

Students will gain an understanding of logistics and supply chain management which will help them understand how products they use and purchase make their way from the manufacturer to the end user.

Students will gain an understanding of the wide range of jobs available in the logistics and supply chain management field.

Students will gain 21st Century skills and related experiences which will benefit them in this career cluster in the future

Concepts

Essential Questions

How will you schedule manufacturing table-and-chairs sets to meet company sales projections?

Understandings

Students will understand how to deliver results in the form of a Master Production Schedule with inventory projections. If the MPS determines that there is not enough capacity to meet demand or that there will be excess capacity, students will understand how to resolve this imbalance.

Critical Knowledge and Skills

Knowledge

Students will know:

- what a Material Production Schedule (MRP) is and how this tool is used to plan requirements for the materials that you will need to produce your product(s)

- how to create a MPS in Microsoft Excel

- how to analyze a MPS and use time, materials, capacity to create an MPS

Skills

Students will be able to:

 - Use sales forecasts and production information to create a MPS for a real-world situation

Assessment and Resources

School Formative Assessment Plan (Other Evidence)

- Professional Notebook - summarizing notes and articles

- Classwork activities - project management plans, optimization matrix, SWOT Analysis worksheets

School Summative Assessment Plan

- Formal Presentation of Completed Project to stakeholders

- End of Project Assessment - test

Primary Resources

<u>Fundamentals of Supply Chain Management: A Practitioner's Perspective</u> by William McLaury and Eugene Spiegle

PowerPoint Presentation

Supplementary Resources

-Online research

-Professional articles

-Professional videos

Technology Integration and Differentiated Instruction

Technology Integration

● **Google Products**

  ○ Google Classroom - Used for daily interactions with the students covering a vast majority of different educational resources (Daily Notes, Exit Tickets, Classroom Polls, Quick Checks, Additional Resources/ Support, Homework, etc.)
  ○ GAFE (Google Apps For Education) - Using various programs connected with Google to collaborate within the district, co-teachers, grade level partner teacher, and with students to stay connected with the content that is covered within the topic. Used to collect data in real time and see results upon completion of the assignments to allow for 21st century learning.

● **One to One Student's laptop**

  ○ All students within the West Deptford School District are given a computer, allowing for 21st century learning to occur within every lesson/topic.

● **Additional Support Videos**

The videos below are just examples of videos that can be used to support each of the Lessons within this Topic. There are more additional videos provided for each and can be assigned from the Pearson enVisions 2.0 online textbook from the teachers' login.

Differentiated Instruction

Gifted Students (N.J.A.C.6A:8-3.1)

❏ Within each lesson, the Gifted Students are given choice on topic and subject matter allowing them to explore interests appropriate to their abilities, areas of interest and other courses.

English Language Learners (N.J.A.C.6A:15)

❏ Within each lesson, the English Language Learners are given choice of topic and resources so that their materials are within their ability to grasp the language.

❏ All assignments have been created in the student's native language.

❏ Work with ELL Teacher to allow for all assignments to be completed with extra time.

At-Risk Students (N.J.A.C.6A:8-4.3c)

❏ Within each lesson, the at-risk students are given choice of topic and resources so that their materials are within their ability level and high-interest.

Special Education Students (N.J.A.C.6A:8-3.1)

❏ Within each lesson, special education students are given choice of topic and resources so that their materials are within their ability level and high-interest.

❏ All content will be modeled with examples and all essays are built on a step-by-step basis so modifications for assignments in small chunks are met.

All other IEP modifications will be honored (ie. hard copies of notes, directions restated, etc.)

Interdisciplinary Connections

MATH – Students will apply algebra and statistical concepts learned in math courses to their projects.

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SOCIAL STUDIES – Students will apply social skills learned through psychology when interacting in group projects.

LANGUAGE ARTS – Students will using appropriate writing skills in taking notes, as well as the creation of a formal written document for their unit project.

APPLIED TECHNOLOGY – Students will use technology through online resources, class website, Microsoft and Google applications, and email applications.

GLOBAL AWARENESS – Students will learn about individuals from different cultures and backgrounds through their research.

Learning Plan / Pacing Guide

Week	Lesson	Teacher Prep	Student Activity
1	1	Read Introduction, Driving Question, Project Description and Problem Statement	Read Introduction, Driving Question, Project Description and Problem Statement
	2	Prepare props and review videos	Complete Engaging Activity
	3-5	Read relevant readings and fundamental concepts	Read relevant readings and watch assigned videos
			Discussion as needed
2-3	6-7	Prepare Math lesson if included, Review Essential Vocabulary Definitions	Find definitions for Essential Vocabulary
			Complete Math lesson when included
	8-15	Monitor student progress	Conduct authentic research relevant to topic
		Invite authentic audience and schedule presentations	Share research findings with team members
			Develop a solution
4	16		Present solution to an authentic audience
	17	Monitor student progress	Revise solution and create Final Deliverable
	18-19	Print End-of-Project Assessment	Take End-of-Project Assessment
	20		Project Reflection

Project 2: Ethical Sourcing and Sustainability

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Concepts

Essential Questions

How will you create a TED Talk on ethical sourcing and sustainability?

Understandings

Students will understand the ideas and concepts of ethical sourcing and sustainability and how they relate to a particluar industry.

Critical Knowledge and Skills

Knowledge

Students will know:

- what ethical sourcing means

-know what best practices are in business

-know what a Ted Talk is and how to organize and create one

Skills

Students will be able to:

- Analyze information about a real-world industry to understand the industry sourcing

- Develop a 15-18 minute presentation about ethical sourcing and best practices

- Describe the impact of sourcing decisions on all involved (company, consumers, employees, environment)

Assessment and Resources

School Formative Assessment Plan (Other Evidence)

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	3-5	Read relevant readings and fundamental concepts	Read relevant readings and watch assigned videos
			Discussion as needed
2-3	6-7	Prepare Math lesson if included, Review Essential Vocabulary Definitions	Find definitions for Essential Vocabulary
			Complete Math lesson when included
	8-15	Monitor student progress	Conduct authentic research relevant to topic
		Invite authentic audience and schedule presentations	Share research findings with team members
			Develop a solution
4	16		Present solution to an authentic audience
	17	Monitor student progress	Revise solution and create Final Deliverable
	18-19	Print End-of-Project Assessment	Take End-of-Project Assessment
	20		Project Reflection

Project 3: Service Supply Chain

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **3-4 weeks**
Status: **Published**

Standards

12.9.3.12.TD.1	Describe the nature and scope of the Transportation, Distribution & Logistics Career Cluster and the role of transportation, distribution and logistics in society and the economy.
12.9.3.12.TD.2	Describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution and logistics problems.
12.9.3.12.TD.3	Describe the key operational activities required of successful transportation, distribution and logistics facilities.
12.9.3.12.TD.4	Identify governmental policies and procedures for transportation, distribution and logistics facilities.
12.9.3.12.TD.5	Describe transportation, distribution and logistics employee rights and responsibilities and employers' obligations concerning occupational safety and health.
12.9.3.12.TD.6	Describe career opportunities and means to achieve those opportunities in each of the Transportation, Distribution & Logistics Career Pathways.
12.9.3.12.TD-LOG.1	Develop solutions to provide and manage logistics services for the company and customers.
12.9.3.12.TD-LOG.2	Analyze and improve performance of logistics systems to provide logistics planning and management services.
12.9.3.12.TD-OPS.1	Develop and evaluate transportation plans to move people and/or goods to meet customer requirements.
12.9.3.12.TD-OPS.2	Analyze performance of transportation operations in order to improve quality and service levels and increase efficiency.
12.9.3.12.TD-OPS.3	Comply with policies, laws and regulations in order to maintain safety, security and health and mitigate the economic and environmental risk of transportation operations.
12.9.3.12.TD-SYS.1	Develop plans to maintain and/or improve the transportation infrastructure.
12.9.3.12.TD-SYS.2	Assess, plan and manage the implementation of transportation services.
12.9.3.12.TD-SYS.3	Describe ways to improve the system utilization, flow, safety and environmental performance of transportation systems.
12.9.3.12.TD-WAR.1	Demonstrate efficient and effective warehouse and distribution center operations.
12.9.3.12.TD-WAR.2	Describe ways to improve the performance of warehouse and distribution operations.
12.9.3.12.TD-WAR.3	Analyze compliance with company policies and government laws and regulations in warehouse and distribution operations.
WRK.9.2.12.CAP.2	Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and

transition (e.g., 2.1.12.PGD.1).

| TECH.9.4.12.IML.2 | Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources. |

Business Standards

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
CRP.K-12.CRP4.1	Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.
CRP.K-12.CRP6.1	Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.
CRP.K-12.CRP7.1	Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.
CRP.K-12.CRP8.1	Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.
CRP.K-12.CRP11.1	Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.
CRP.K-12.CRP12.1	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.
TRAN.9-12.9.4.12.P.(3).2	Assess performance of warehousing and distribution operations to meet customer and business requirements.
TRAN.9-12.9.4.12.P.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.2	Demonstrate mathematics knowledge and skills required to pursue the full range of

	postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
TRAN.9-12.9.4.12.P.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
TRAN.9-12.9.4.12.P.6	Locate, organize, and reference written information from various sources to communicate with others.
TRAN.9-12.9.4.12.P.7	Evaluate and use information resources to accomplish specific occupational tasks.
TRAN.9-12.9.4.12.P.8	Use correct grammar, punctuation, and terminology to write and edit documents.
TRAN.9-12.9.4.12.P.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
TRAN.9-12.9.4.12.P.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
TRAN.9-12.9.4.12.P.11	Apply active listening skills to obtain and clarify information.
TRAN.9-12.9.4.12.P.12	Develop and interpret tables, charts, and figures to support written and oral communications.
TRAN.9-12.9.4.12.P.13	Listen to and speak with diverse individuals to enhance communication skills.
TRAN.9-12.9.4.12.P.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
TRAN.9-12.9.4.12.P.15	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
TRAN.9-12.9.4.12.P.17	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
TRAN.9-12.9.4.12.P.18	Conduct technical research to gather information necessary for decision-making.
TRAN.9-12.9.4.12.P.19	Formulate ideas, proposals, and solutions related to problems with this cluster to ensure effective and efficient delivery of products or services to consumers.
TRAN.9-12.9.4.12.P.20	Analyze and evaluate ideas, proposals, and solutions related to problems in this cluster and select the best deliverable to meet business objectives.
TRAN.9-12.9.4.12.P.21	Develop, implement, and evaluate solutions related to problems in this cluster using a structured problem-solving process to improve business functioning.
TRAN.9-12.9.4.12.P.23	Operate electronic mail applications to communicate.
TRAN.9-12.9.4.12.P.24	Operate Internet applications to perform tasks.
TRAN.9-12.9.4.12.P.25	Operate writing and publishing applications to prepare communications.
TRAN.9-12.9.4.12.P.26	Operate presentation applications to prepare and deliver presentations.
TRAN.9-12.9.4.12.P.27	Employ spreadsheet applications to organize and manipulate data.
TRAN.9-12.9.4.12.P.28	Employ database applications to manage data.
TRAN.9-12.9.4.12.P.29	Employ collaborative/groupware applications to facilitate group work.
TRAN.9-12.9.4.12.P.30	Employ computer operations applications to manage tasks.
TRAN.9-12.9.4.12.P.61	Employ leadership skills to accomplish goals and objectives.
TRAN.9-12.9.4.12.P.62	Employ organizational skills to foster positive working relationships and accomplish organizational goals.
TRAN.9-12.9.4.12.P.63	Employ teamwork skills to achieve collective goals and use team members' talents effectively.

TRAN.9-12.9.4.12.P.64	Establish and maintain effective relationships in order to accomplish objectives and tasks.
TRAN.9-12.9.4.12.P.67	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
TRAN.9-12.9.4.12.P.86	Employ planning and time management skills and tools to enhance results and complete work tasks.
TRAN.9-12.9.4.12.P.87	Analyze and assess the roles and functions of transportation-related technological systems used in this cluster in order to demonstrate awareness of necessary technical skills.

Transfer Goals and Career Ready Practices

Transfer Goals

Students will gain an understanding of logistics and supply chain management which will help them understand how products they use and purchase make their way from the manufacturer to the end user.

Students will gain an understanding of the wide range of jobs available in the logistics and supply chain management field.

Students will gain 21st Century skills and related experiences which will benefit them in this career cluster in the future

Concepts

Essential Questions

What service operation recommendations will you identify through your workflow audits that *Smart Money* can use to sell potential clients on their consulting services?

Understandings

Students will understand the ideas and concepts of the workflow of a service industry company and use that information to analyze a real-world situation.

Critical Knowledge and Skills

Knowledge

Students will know:

-what a consultant is and what value one brings to a company

-what a company workflow is

-know how to create a workflow map

Skills

Students will be able to:

-Identify a company service flow

-Create a Workflow Map/Service Blueprint of what happens step-by-step when someone uses the services of a real-world company

-identify points of customer interaction and any potential failure points for a company

-Evaluate the customer interaction points of a company to see if there are any ways in which the customer experience could be improved

-Evaluate the potential failure points to see if there are any ways in which the service of a company could be changed/enhanced to mitigate (i.e., reduce or eliminate) the risk of failure

-Develop solutions/recommendations based on the above and explain how they would improve the service operation

-Identify any potential downsides to implementing the solution/recommendation (e.g., additional cost, more labor needed, capital expenditure, etc.)

Assessment and Resources

School Formative Assessment Plan (Other Evidence)

- Professional Notebook - summarizing notes and articles

- Classwork activities - project management plans, optimization matrix, SWOT Analysis worksheets

School Summative Assessment Plan

- Formal Presentation of Completed Project to stakeholders

- End of Project Assessment - test

Primary Resources

Fundamentals of Supply Chain Management: A Practitioner's Perspective by William McLaury and Eugene Spiegle

PowerPoint Presentation

Supplementary Resources

-Online research

-Professional articles

-Professional videos

Technology Integration and Differentiated Instruction

Technology Integration

- **Google Products**

    o Google Classroom - Used for daily interactions with the students covering a vast majority of different educational resources (Daily Notes, Exit Tickets, Classroom Polls, Quick Checks, Additional Resources/ Support, Homework, etc.)
    o GAFE (Google Apps For Education) - Using various programs connected with Google to collaborate within the district, co-teachers, grade level partner teacher, and with students to stay connected with the content that is covered within the topic. Used to collect data in real time and

see results upon completion of the assignments to allow for 21st century learning.

● **One to One Student's laptop**

　　　o All students within the West Deptford School District are given a computer, allowing for 21st century learning to occur within every lesson/topic.

● **Additional Support Videos**

The videos below are just examples of videos that can be used to support each of the Lessons within this Topic. There are more additional videos provided for each and can be assigned from the Pearson enVisions 2.0 online textbook from the teachers' login.

Differentiated Instruction

Gifted Students (N.J.A.C.6A:8-3.1)

❏　　Within each lesson, the Gifted Students are given choice on topic and subject matter allowing them to explore interests appropriate to their abilities, areas of interest and other courses.

English Language Learners (N.J.A.C.6A:15)

❏　　Within each lesson, the English Language Learners are given choice of topic and resources so that their materials are within their ability to grasp the language.

❏　　All assignments have been created in the student's native language.

❏　　Work with ELL Teacher to allow for all assignments to be completed with extra time.

At-Risk Students (N.J.A.C.6A:8-4.3c)

❏　　Within each lesson, the at-risk students are given choice of topic and resources so that their materials are within their ability level and high-interest.

Special Education Students (N.J.A.C.6A:8-3.1)

❑ Within each lesson, special education students are given choice of topic and resources so that their materials are within their ability level and high-interest.

❑ All content will be modeled with examples and all essays are built on a step-by-step basis so modifications for assignments in small chunks are met.

All other IEP modifications will be honored (ie. hard copies of notes, directions restated, etc.)

Interdisciplinary Connections

MATH – Students will apply algebra and statistical concepts learned in math courses to their projects.

SCIENCE – Students use scientific information and processes as appropriate to complete the projects.

SOCIAL STUDIES – Students will apply social skills learned through psychology when interacting in group projects.

LANGUAGE ARTS – Students will using appropriate writing skills in taking notes, as well as the creation of a formal written document for their unit project.

APPLIED TECHNOLOGY – Students will use technology through online resources, class website, Microsoft and Google applications, and email applications.

GLOBAL AWARENESS – Students will learn about individuals from different cultures and backgrounds through their research.

Learning Plan / Pacing Guide

Week	Lesson	Teacher Prep	Student Activity
1	1	Read Introduction, Driving Question, Project Description and Problem Statement	Read Introduction, Driving Question, Project Description and Problem Statement
	2	Prepare props and review videos	Complete Engaging Activity
	3-5	Read relevant readings and fundamental concepts	Read relevant readings and watch assigned videos
			Discussion as needed
2-3	6-7	Prepare Math lesson if included, Review Essential Vocabulary Definitions	Find definitions for Essential Vocabulary
			Complete Math lesson when included
	8-15	Monitor student progress	Conduct authentic research relevant to topic
		Invite authentic audience and schedule presentations	Share research findings with team members
			Develop a solution

4	16		Present solution to an authentic audience
	17	Monitor student progress	Revise solution and create Final Deliverable
	18-19	Print End-of-Project Assessment	Take End-of-Project Assessment
	20		Project Reflection

Project 4: Logistics Service Provider Agreement

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **3-4 weeks**
Status: **Published**

Standards

12.9.3.12.TD.1	Describe the nature and scope of the Transportation, Distribution & Logistics Career Cluster and the role of transportation, distribution and logistics in society and the economy.
12.9.3.12.TD.2	Describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution and logistics problems.
12.9.3.12.TD.3	Describe the key operational activities required of successful transportation, distribution and logistics facilities.
12.9.3.12.TD.4	Identify governmental policies and procedures for transportation, distribution and logistics facilities.
12.9.3.12.TD.5	Describe transportation, distribution and logistics employee rights and responsibilities and employers' obligations concerning occupational safety and health.
12.9.3.12.TD.6	Describe career opportunities and means to achieve those opportunities in each of the Transportation, Distribution & Logistics Career Pathways.
12.9.3.12.TD-LOG.1	Develop solutions to provide and manage logistics services for the company and customers.
12.9.3.12.TD-LOG.2	Analyze and improve performance of logistics systems to provide logistics planning and management services.
12.9.3.12.TD-OPS.1	Develop and evaluate transportation plans to move people and/or goods to meet customer requirements.
12.9.3.12.TD-OPS.2	Analyze performance of transportation operations in order to improve quality and service levels and increase efficiency.
12.9.3.12.TD-OPS.3	Comply with policies, laws and regulations in order to maintain safety, security and health and mitigate the economic and environmental risk of transportation operations.
12.9.3.12.TD-SYS.1	Develop plans to maintain and/or improve the transportation infrastructure.
12.9.3.12.TD-SYS.2	Assess, plan and manage the implementation of transportation services.
12.9.3.12.TD-SYS.3	Describe ways to improve the system utilization, flow, safety and environmental performance of transportation systems.
12.9.3.12.TD-WAR.1	Demonstrate efficient and effective warehouse and distribution center operations.
12.9.3.12.TD-WAR.2	Describe ways to improve the performance of warehouse and distribution operations.
12.9.3.12.TD-WAR.3	Analyze compliance with company policies and government laws and regulations in warehouse and distribution operations.
WRK.9.2.12.CAP.1	Analyze unemployment rates for workers with different levels of education and how the economic, social, and political conditions of a time period are affected by a recession.
WRK.9.2.12.CAP.2	Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
WRK.9.2.12.CAP.3	Investigate how continuing education contributes to one's career and personal growth.
TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).

TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
TECH.9.4.12.IML.2	Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.

Business Standards

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
CRP.K-12.CRP4.1	Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.
CRP.K-12.CRP6.1	Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.
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CRP.K-12.CRP11.1	Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.
CRP.K-12.CRP12.1	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.
TRAN.9-12.9.4.12.P.(3).2	Assess performance of warehousing and distribution operations to meet customer and business requirements.

TRAN.9-12.9.4.12.P.1	Demonstrate language arts knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
TRAN.9-12.9.4.12.P.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
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TRAN.9-12.9.4.12.P.7	Evaluate and use information resources to accomplish specific occupational tasks.
TRAN.9-12.9.4.12.P.8	Use correct grammar, punctuation, and terminology to write and edit documents.
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TRAN.9-12.9.4.12.P.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
TRAN.9-12.9.4.12.P.11	Apply active listening skills to obtain and clarify information.
TRAN.9-12.9.4.12.P.12	Develop and interpret tables, charts, and figures to support written and oral communications.
TRAN.9-12.9.4.12.P.13	Listen to and speak with diverse individuals to enhance communication skills.
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TRAN.9-12.9.4.12.P.15	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
TRAN.9-12.9.4.12.P.17	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
TRAN.9-12.9.4.12.P.18	Conduct technical research to gather information necessary for decision-making.
TRAN.9-12.9.4.12.P.19	Formulate ideas, proposals, and solutions related to problems with this cluster to ensure effective and efficient delivery of products or services to consumers.
TRAN.9-12.9.4.12.P.20	Analyze and evaluate ideas, proposals, and solutions related to problems in this cluster and select the best deliverable to meet business objectives.
TRAN.9-12.9.4.12.P.21	Develop, implement, and evaluate solutions related to problems in this cluster using a structured problem-solving process to improve business functioning.
TRAN.9-12.9.4.12.P.23	Operate electronic mail applications to communicate.
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Transfer Goals and Career Ready Practices

Transfer Goals

Students will gain an understanding of logistics and supply chain management which will help them understand how products they use and purchase make their way from the manufacturer to the end user.

Students will gain an understanding of the wide range of jobs available in the logistics and supply chain management field.

Students will gain 21st Century skills and related experiences which will benefit them in this career cluster in the future

Concepts

Essential Questions

How will you negotiate the best logistics services deal for your company?

Understandings

Students will understand what 3rd party logistics providers are and what value and services they bring to a company.

Critical Knowledge and Skills

Knowledge

Students will know:

-what a third party logistics provider is

-what services third party logistics providers offer

-know the basics of warehousing

-know the basics of negotiating

Skills

Students will be able to:

- Analyze information about a real-world industry to understand the industry sourcing

- Develop a 15-18 minute presentation about ethical sourcing and best practices

- Describe the impact of sourcing decisions on all involved (company, consumers, employees, environment)

Assessment and Resources

School Formative Assessment Plan (Other Evidence)

- Professional Notebook - summarizing notes and articles

- Classwork activities - project management plans, optimization matrix, SWOT Analysis worksheets

School Summative Assessment Plan

- Formal Presentation of Completed Project to stakeholders

- End of Project Assessment - test

Primary Resources

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PowerPoint Presentation

Supplementary Resources

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-Professional articles

-Professional videos

Technology Integration and Differentiated Instruction

Technology Integration

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❑   Within each lesson, the Gifted Students are given choice on topic and subject matter allowing them to explore interests appropriate to their abilities, areas of interest and other courses.

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❑   Within each lesson, the English Language Learners are given choice of topic and resources so that their materials are within their ability to grasp the language.

❑   All assignments have been created in the student's native language.

❑   Work with ELL Teacher to allow for all assignments to be completed with extra time.

At-Risk Students (N.J.A.C.6A:8-4.3c)

❑   Within each lesson, the at-risk students are given choice of topic and resources so that their materials are within their ability level and high-interest.

Special Education Students (N.J.A.C.6A:8-3.1)

❑   Within each lesson, special education students are given choice of topic and resources so that their materials are within their ability level and high-interest.

❑   All content will be modeled with examples and all essays are built on a step-by-step basis so modifications for assignments in small chunks are met.

All other IEP modifications will be honored (ie. hard copies of notes, directions restated, etc.)

Interdisciplinary Connections

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LANGUAGE ARTS – Students will using appropriate writing skills in taking notes, as well as the creation of a formal written document for their unit project.

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GLOBAL AWARENESS – Students will learn about individuals from different cultures and backgrounds through their research.

Learning Plan / Pacing Guide

Week	Lesson	Teacher Prep	Student Activity
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	2	Prepare props and review videos	Complete Engaging Activity
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			Discussion as needed
2-3	6-7	Prepare Math lesson if included, Review Essential Vocabulary Definitions	Find definitions for Essential Vocabulary
			Complete Math lesson when included
	8-15	Monitor student progress	Conduct authentic research relevant to topic
		Invite authentic audience and schedule presentations	Share research findings with team members
			Develop a solution
4	16		Present solution to an authentic audience
	17	Monitor student progress	Revise solution and create Final Deliverable
	18-19	Print End-of-Project Assessment	Take End-of-Project Assessment
	20		Project Reflection

Project 6: Collaborative Planning, Forecasting and Replenishment

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **3-4 weeks**
Status: **Published**

Standards

12.9.3.12.TD.1	Describe the nature and scope of the Transportation, Distribution & Logistics Career Cluster and the role of transportation, distribution and logistics in society and the economy.
12.9.3.12.TD.2	Describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution and logistics problems.
12.9.3.12.TD.3	Describe the key operational activities required of successful transportation, distribution and logistics facilities.
12.9.3.12.TD.4	Identify governmental policies and procedures for transportation, distribution and logistics facilities.
12.9.3.12.TD.5	Describe transportation, distribution and logistics employee rights and responsibilities and employers' obligations concerning occupational safety and health.
12.9.3.12.TD.6	Describe career opportunities and means to achieve those opportunities in each of the Transportation, Distribution & Logistics Career Pathways.
12.9.3.12.TD-LOG.1	Develop solutions to provide and manage logistics services for the company and customers.
12.9.3.12.TD-LOG.2	Analyze and improve performance of logistics systems to provide logistics planning and management services.
12.9.3.12.TD-OPS.1	Develop and evaluate transportation plans to move people and/or goods to meet customer requirements.
12.9.3.12.TD-OPS.2	Analyze performance of transportation operations in order to improve quality and service levels and increase efficiency.
12.9.3.12.TD-OPS.3	Comply with policies, laws and regulations in order to maintain safety, security and health and mitigate the economic and environmental risk of transportation operations.
12.9.3.12.TD-SYS.1	Develop plans to maintain and/or improve the transportation infrastructure.
12.9.3.12.TD-SYS.2	Assess, plan and manage the implementation of transportation services.
12.9.3.12.TD-SYS.3	Describe ways to improve the system utilization, flow, safety and environmental performance of transportation systems.
12.9.3.12.TD-WAR.1	Demonstrate efficient and effective warehouse and distribution center operations.
12.9.3.12.TD-WAR.2	Describe ways to improve the performance of warehouse and distribution operations.
12.9.3.12.TD-WAR.3	Analyze compliance with company policies and government laws and regulations in warehouse and distribution operations.
WRK.9.2.12.CAP.2	Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g.,

TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
TECH.9.4.12.IML.2	Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.

Business Standards

CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
CRP.K-12.CRP4.1	Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.
CRP.K-12.CRP6.1	Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.
CRP.K-12.CRP7.1	Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.
CRP.K-12.CRP8.1	Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.
CRP.K-12.CRP11.1	Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.
CRP.K-12.CRP12.1	Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.
TRAN.9-12.9.4.12.P.(3).2	Assess performance of warehousing and distribution operations to meet customer and business requirements.
TRAN.9-12.9.4.12.P.1	Demonstrate language arts knowledge and skills required to pursue the full range of

	postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.2	Demonstrate mathematics knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.3	Demonstrate science knowledge and skills required to pursue the full range of postsecondary education and career opportunities.
TRAN.9-12.9.4.12.P.4	Select and employ appropriate reading and communication strategies to learn and use technical concepts and vocabulary in practice.
TRAN.9-12.9.4.12.P.5	Demonstrate use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication.
TRAN.9-12.9.4.12.P.6	Locate, organize, and reference written information from various sources to communicate with others.
TRAN.9-12.9.4.12.P.7	Evaluate and use information resources to accomplish specific occupational tasks.
TRAN.9-12.9.4.12.P.8	Use correct grammar, punctuation, and terminology to write and edit documents.
TRAN.9-12.9.4.12.P.9	Develop and deliver formal and informal presentations using appropriate media to engage and inform audiences.
TRAN.9-12.9.4.12.P.10	Interpret verbal and nonverbal cues/behaviors to enhance communication.
TRAN.9-12.9.4.12.P.11	Apply active listening skills to obtain and clarify information.
TRAN.9-12.9.4.12.P.12	Develop and interpret tables, charts, and figures to support written and oral communications.
TRAN.9-12.9.4.12.P.13	Listen to and speak with diverse individuals to enhance communication skills.
TRAN.9-12.9.4.12.P.14	Exhibit public relations skills in order to increase internal and external customer satisfaction.
TRAN.9-12.9.4.12.P.15	Employ critical thinking skills (e.g., analyze, synthesize, and evaluate) independently and in teams to solve problems and make decisions.
TRAN.9-12.9.4.12.P.17	Identify, write, and monitor performance goals to guide progress in assigned areas of responsibility and accountability.
TRAN.9-12.9.4.12.P.18	Conduct technical research to gather information necessary for decision-making.
TRAN.9-12.9.4.12.P.19	Formulate ideas, proposals, and solutions related to problems with this cluster to ensure effective and efficient delivery of products or services to consumers.
TRAN.9-12.9.4.12.P.20	Analyze and evaluate ideas, proposals, and solutions related to problems in this cluster and select the best deliverable to meet business objectives.
TRAN.9-12.9.4.12.P.21	Develop, implement, and evaluate solutions related to problems in this cluster using a structured problem-solving process to improve business functioning.
TRAN.9-12.9.4.12.P.23	Operate electronic mail applications to communicate.
TRAN.9-12.9.4.12.P.24	Operate Internet applications to perform tasks.
TRAN.9-12.9.4.12.P.25	Operate writing and publishing applications to prepare communications.
TRAN.9-12.9.4.12.P.26	Operate presentation applications to prepare and deliver presentations.
TRAN.9-12.9.4.12.P.27	Employ spreadsheet applications to organize and manipulate data.
TRAN.9-12.9.4.12.P.28	Employ database applications to manage data.
TRAN.9-12.9.4.12.P.29	Employ collaborative/groupware applications to facilitate group work.
TRAN.9-12.9.4.12.P.30	Employ computer operations applications to manage tasks.
TRAN.9-12.9.4.12.P.61	Employ leadership skills to accomplish goals and objectives.
TRAN.9-12.9.4.12.P.62	Employ organizational skills to foster positive working relationships and accomplish organizational goals.

TRAN.9-12.9.4.12.P.63	Employ teamwork skills to achieve collective goals and use team members' talents effectively.
TRAN.9-12.9.4.12.P.64	Establish and maintain effective relationships in order to accomplish objectives and tasks.
TRAN.9-12.9.4.12.P.67	Apply ethical reasoning to a variety of situations in order to make ethical decisions.
TRAN.9-12.9.4.12.P.86	Employ planning and time management skills and tools to enhance results and complete work tasks.
TRAN.9-12.9.4.12.P.87	Analyze and assess the roles and functions of transportation-related technological systems used in this cluster in order to demonstrate awareness of necessary technical skills.

Transfer Goals and Career Ready Practices

Transfer Goals

Students will gain an understanding of logistics and supply chain management which will help them understand how products they use and purchase make their way from the manufacturer to the end user.

Students will gain an understanding of the wide range of jobs available in the logistics and supply chain management field.

Students will gain 21st Century skills and related experiences which will benefit them in this career cluster in the future

Concepts

Essential Questions

How can you describe the importance and value of Collaborative Planning, Forecasting and Replenishment to an interested audience of your peers, using examples from your own company?

Understandings

Students will understand the ideas and concepts of a Collaborative Planning, Forecasting and Replenishment (CPFR) process and be able to convey information about the CPFR process to an audience.

Critical Knowledge and Skills

Knowledge
Students will know:

- what a Collaborative Planning, Forecasting and Replenishment (CPFR) process is

-Five Major Benefit Categories of CPFR

-the concept of Bullwhip Effect

-how to convey information in a presentation to an audience

Skills
Students will be able to:

-Define and descibe bullwhip effect

-Develop a 15-18 minute presentation about Collaborative Planning, Forecasting and Replenishment

-Describe the impact of the Collaborative Planning, Forecasting and Replenishment process for a company

-Explain how CPFR can help to reduce costs and increase the competitiveness of the buyer

-Explain how CPFR provides value for the buyer and supplier

Assessment and Resources

School Formative Assessment Plan (Other Evidence)
- Professional Notebook - summarizing notes and articles

- Classwork activities - project management plans, optimization matrix, SWOT Analysis worksheets

School Summative Assessment Plan

- Formal Presentation of Completed Project to stakeholders

- End of Project Assessment - test

Primary Resources

Fundamentals of Supply Chain Management: A Practitioner's Perspective by William McLaury and Eugene Spiegle

PowerPoint Presentation

Supplementary Resources

-Online research

-Professional articles

-Professional videos

Technology Integration and Differentiated Instruction

Technology Integration

● **Google Products**

  ○ Google Classroom - Used for daily interactions with the students covering a vast majority of different educational resources (Daily Notes, Exit Tickets, Classroom Polls, Quick Checks, Additional Resources/ Support, Homework, etc.)
  ○ GAFE (Google Apps For Education) - Using various programs connected with Google to collaborate within the district, co-teachers, grade level partner teacher, and with students to stay connected with the content that is covered within the topic. Used to collect data in real time and see results upon completion of the assignments to allow for 21st century learning.

● **One to One Student's laptop**

  ○ All students within the West Deptford School District are given a computer, allowing for 21st century learning to occur within every lesson/topic.

● **Additional Support Videos**

The videos below are just examples of videos that can be used to support each of the Lessons within this Topic. There are more additional videos provided for each and can be assigned from the Pearson enVisions 2.0 online textbook from the teachers' login.

Differentiated Instruction

Gifted Students (N.J.A.C.6A:8-3.1)

❏   Within each lesson, the Gifted Students are given choice on topic and subject matter allowing them to explore interests appropriate to their abilities, areas of interest and other courses.

English Language Learners (N.J.A.C.6A:15)

❏   Within each lesson, the English Language Learners are given choice of topic and resources so that their materials are within their ability to grasp the language.

❏   All assignments have been created in the student's native language.

❏   Work with ELL Teacher to allow for all assignments to be completed with extra time.

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