# Wood Technology 1 Revised UBD Curriculum Egg Harbor Township High School Industrial Arts Department



Created By: Industrial Arts Teachers

Coordinated By: Dr. Carmelita Graham

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#### DISTRICT MISSION STATEMENT

Our mission in the Egg Harbor Township School District is to partner with the student, family, school, and community to provide a safe learning environment that addresses rigorous and relevant 21st Century standards and best practices which will develop academic scholarship, integrity, leadership, citizenship, and the unique learning style of students, while encouraging them to develop a strong work ethic and to act responsibly in their school community and everyday society.

# **CAREER AND TECHNICAL EDUCATION**

#### Mission:

New Jersey's Office of Career and Technical Education seeks to prepare students for career opportunities of the 21st century, succeed as global citizens and support healthy economic growth for New Jersey. Career and Technical Education prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state.

#### INTRODUCTION

The most precious resource teachers have is time. Regardless of how much time a course is scheduled for, it is never enough to accomplish all that one would like. Therefore, it is imperative that teachers utilize the time they have wisely in order to maximize the potential for all students to achieve the desired learning.

High quality educational programs are characterized by clearly stated goals for student learning, teachers who are well-informed and skilled in enabling students to reach those goals, program designs that allow for continuous growth over the span of years of instruction, and ways of measuring whether students are achieving program goals.

# EGG HARBOR TOWNSHIP SCHOOL DISTRICT CURRICULUM TEMPLATE

The Egg Harbor Township School District has embraced the backward-design model as the foundation for all curriculum development for the educational program. When reviewing curriculum documents and the Egg Harbor Township curriculum template, aspects of the backward-design model will be found in the stated enduring *understandings/essential questions*, *unit assessments*, and *instructional activities*. Familiarization with backward-design is critical to working effectively with Egg Harbor Township's curriculum guides.

# GUIDING PRINCIPLES: WHAT IS BACKWARD DESIGN? WHAT IS UNDERSTANDING BY DESIGN?

"Backward design" is an increasingly common approach to planning curriculum and instruction. As its name implies, "backward design" is based on defining clear goals, providing acceptable evidence of having achieved those goals, and then working 'backward' to identify what actions

need to be taken that will ensure that the gap between the current status and the desired status is closed.

Building on the concept of backward design, Grant Wiggins and Jay McTighe (2005) have developed a structured approach to planning programs, curriculum, and instructional units. Their model asks educators to state goals; identify deep understandings, pose essential questions, and specify clear evidence that goals, understandings, and core learning have been achieved.

Program based on backward design use desired results to drive decisions. With this design, there are questions to consider, such as: What should students understand, know, and be able to do? What does it look like to meet those goals? What kind of program will result in the outcomes stated? How will we know students have achieved that result? What other kinds of evidence will tell us that we have a quality program? These questions apply regardless of whether they are goals in program planning or classroom instruction.

The backward design process involves three interrelated stages for developing an entire curriculum or a single unit of instruction. The relationship from planning to curriculum design, development, and implementation hinges upon the integration of the following three stages.

Stage I: Identifying Desired Results: Enduring understandings, essential questions, knowledge and skills need to be woven into curriculum publications, documents, standards, and scope and sequence materials. Enduring understandings identify the "big ideas" that students will grapple with during the course of the unit. Essential questions provide a unifying focus for the unit and students should be able to answer more deeply and fully these questions as they proceed through the unit. Knowledge and skills are the "stuff" upon which the understandings are built.

Stage II: Determining Acceptable Evidence: Varied types of evidence are specified to ensure that students demonstrate attainment of desired results. While discrete knowledge assessments (e.g.: multiple choice, fill-in-the-blank, short answer, etc...) will be utilized during an instructional unit, the overall unit assessment is performance-based and asks students to demonstrate that they have mastered the desired understandings. These culminating (summative) assessments are authentic tasks that students would likely encounter in the real-world after they leave school. They allow students to demonstrate all that they have learned and can do. To demonstrate their understandings students can explain, interpret, apply, provide critical and insightful points of view, show empathy and/or evidence self-knowledge. Models of student performance and clearly defined criteria (i.e.: rubrics) are provided to all students in advance of starting work on the unit task.

Stage III: Designing Learning Activities: Instructional tasks, activities, and experiences are aligned with stages one and two so that the desired results are obtained based on the identified evidence or assessment tasks. Instructional activities and strategies are considered only once stages one and two have been clearly explicated. Therefore, congruence among all three stages can be ensured and teachers can make wise instructional choices.

At the curricular level, these three stages are best realized as a fusion of research, best practices, shared and sustained inquiry, consensus building, and initiative that involves all stakeholders. In this design, administrators are instructional leaders who enable the alignment between the curriculum and other key initiatives in their district or schools. These leaders demonstrate a clear purpose and direction for the curriculum within their school or district by providing support for implementation, opportunities for revision through sustained and consistent professional development, initiating action research activities, and collecting and evaluating materials to ensure alignment with the desired results. Intrinsic to the success of curriculum is to show how it aligns with the overarching goals of the district, how the document relates to district, state, or national standards, what a high quality educational program looks like, and what excellent teaching and learning looks like. Within education, success of the educational program is realized through this blend of commitment and organizational direction.

# INTENT OF THE GUIDE

This guide is intended to provide teachers with course objective and possible activities, as well as assist the teacher in planning and delivering instruction in accordance with the New Jersey Core Curriculum Content Standards. The guide is not intended to restrict or limit the teacher's resources or individual instruction techniques. It is expected that the teacher will reflectively adjust and modify instruction and units during the course of normal lessons depending on the varying needs of the class, provided such modified instruction attends to the objectives and essential questions outlined below.

# **Wood 1 - Power Standards**

Standard Number	Standard	
Marking Period 1		
8.1.12. A.CS1	Understand and use technology systems.	
9.3. MN-PRO.5	Demonstrate the safe use of manufacturing equipment.	
9.4.12. B.75	Use and maintain appropriate tools, machinery, equipment, and resources to accomplish project goals.	
9.4.12. O.44	Apply appropriate safety practices in environments in this cluster to ensure a safe workplace.	
Marking Period 2		
9.3. MN.6	Demonstrate workplace knowledge and skills common to manufacturing.	
9.4.12.A.(3).6	Assess and evaluate operational systems	
9.3. MN-QA.5 .	Perform safety inspections and training to ensure a safe and healthy workplace.	
Marking Period 3		
9.3.12. ED.2	Demonstrate effective oral, written and multimedia communication in multiple formats and contexts.	
9.3.12. ED.5 .	Demonstrate group collaboration skills to enhance professional education and training practice.	
9.4.12. B.42	Identify emergency procedures that are necessary to provide aid in workplace accidents.	
Marking Period 4		
9.2.12. C.3	Identify transferable career skills and design alternate career plans.	
9.4.12. M.53	Develop a Personalized Student Learning Plan to meet career goals and objectives.	
9.3. ST.1 .	Apply engineering skills in a project that requires project management, process control and quality assurance.	

Unit Name: Shop and Equipment Safety Time Frame: 9 weeks

# **Author: Industrial Arts Department**

# UNIT 2

Subject: Wood 1 Country: USA

Course/Grade: Wood 1 9-12 State/Group: NJ

School: Egg Harbor township High School

# **UNIT SUMMARY**

This unit will reinforce the shop and safety practices in the wood working lab.

#### **UNIT RESOURCES**

Shopware (Films Media Group) woodworking and shop safety DVD series

#### **Internet Resource Links:**

https://www.osha.gov/law-regs.html

http://www.njsafeschools.org/

http://www.cdc.gov/niosh/homepage.html

http://www.nj.gov/labor/lsse/safetyhealth\_index.html

http://www.acastronovo.com/ClassHtms/ClassDocs/WoodShopSafety.pdf

https://www.baylor.edu/ehs/doc.php/306130.pdf

https://arch.usc.edu/sites/default/files/safety manual workshop.pdf

# **STAGE ONE**

#### **GOALS AND STANDARDS:**

8.1.12. A.CS1	Understand and use technology systems.
9.3. MN-PRO.5	Demonstrate the safe use of manufacturing equipment.
9.4.12. B.75	Use and maintain appropriate tools, machinery, equipment, and resources to accomplish project goals.
9.4.12. 0.44	Apply appropriate safety practices in environments in this cluster to ensure a safe workplace.
9.3. MN.6	Demonstrate workplace knowledge and skills common to

	manuracturing.
9.4.12.A.(3).6	Assess and evaluate operational systems
9.3. MN-QA.5	Perform safety inspections and training to ensure a safe and healthy workplace.
9.3.MN.3 safety	Comply with federal, state and local regulations to ensure worker
•	and health and environmental work practices.

#### **ENDURING UNDERSTANDING:**

Shop safety is mandatory and essential when operating heavy machinery. Safety protocols must be followed at all times in the Wood Technology shop.

# **ESSENTIAL QUESTIONS**

Why should correct safety protocols be followed in the Wood shop at all times? How do OSHEA regulations impact the Woodshop?

Is the shop kept clean and orderly?

Are you properly dressed for working in the shop?

What is a kill switch?

Why is proper ventilation needed in a lab

Why is it important to clamp material to table before operating drill press?

Why is it important to feed material through router table in relation to direction of cutter tool rotation? When using disc sander, why is it important to position material on side of downward rotation of disc?

#### **KNOWLEDGE AND SKILLS**

Students will be instructed on proper operation of router table with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of drill press with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of band saw with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of belt and disc sander with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be given study material for machine tests which they must pass with 100% in order to operate machinery safely on their own.

Students will be able to identify personal protective devices and what protective devices are needed in the shop at all times.

# STAGE TWO

# **PERFORMANCE TASKS**

Demonstrate safe and proper operation of measuring and layout tools

Identify and describe woodworking hand tools

Practice safe and proper operation of woodworking hand tools

Identify and describe woodworking machine tools

Demonstrate safe and proper operation of woodworking machine tools

A woodworking contractor is charged with the task of completing the job of creating a small shed on a school property. Identify all safety precautions and measurements the the contractor will need to take to comply with OSHEA and all school and shop safety regulations. Identify any protective devices that should be worn by the contractor on the job and safety checks that must be completed prior to beginning work.

#### **OTHER EVIDENCE**

Quizzes and Tests
Classroom discussion participation
Teacher observation of classroom assignments/activities
Benchmark/practical assessments
Machine and safety tests

Formative/Summative assessments

# STAGE THREE

#### **LEARNING PLAN**

Students will identify the OSHEA regulations that are relevant to the lab by creating a Tes Teach lesson including a written assignment, video, pictures, and slide presentation identifying general safety tips in the woodshop Lab.

Working in pairs the students will each take a large machinery, which they operate and create a tes teach lesson for their other peers in the class to complete and learn more about the safety specifications of the machine they are working with.

Safety videos for safe operation and handling of the equipment will be created and shared with the students in each of the classes after they are reviewed for accuracy by the classroom teacher.

Student will identify the

Students will operate router table under teacher supervision.

Students will operate drill press under teacher supervision.

Students will operate bandsaw under teacher supervision.

Students will operate belt and disc sander under teacher supervision.

Student will take and retake as necessary each machine test until a perfect score of 100% is achieved.

Students will take Marking Period 1 benchmark test.

21st Century Learning:

Communication - Participate in a class discussion about shop safety.

Collaboration - Create a shop safety public service announcement.

Critical Thinking - Analyze how one wrong decision can impact someone's life style when dealing with heavy machinery.

Creativity - Create a portfolio for Woodworking based upon projects completed in the class. Add a reflective component

Supports for ELL:

Google Translate Tool

Provide content in various modalities

Connect ELL students with general education students for extra support

Supports for Special Populations:

**Graphic Organizers** 

Modify Test

Extended time to complete test

Student choice for assignments and activities

Unit Name: The Science of Wood Time Frame: 9 weeks

**Author: Industrial Arts Department** 

UNIT 2

Subject: Wood 1 Country: **USA** 

Course/Grade: Wood 1 9-12 State/Group: NJ

School: **Egg Harbor township High School** 

# **UNIT SUMMARY**

This unit will give students the basic knowledge of science of wood. Students will learn where wood come from, the various types and species of wood and their uses. Students will learn about the environmental impacts of wood as a renewable and non-renewable resource. Students will learn how the wood is processed from forest to furniture. The students will be able to understand the various classifications of Wood and understand which types of wood are best for completing various types of projects.

#### **UNIT RESOURCES**

Wood Technology & Processes Textbook

Shopware (Films Media Group) woodworking and shop safety DVD series

#### **Internet Resource Links:**

https://thescienceofwood.weebly.com/classifying-wood1.html

https://homesteady.com/classification-wood-8407052.html

http://www.hoovedesigns.com/woods.html

# STAGE ONE

# **GOALS AND STANDARDS:**

- 9.3.MN.6 Demonstrate workplace knowledge and skills common to manufacturing.
- 9.3.MN.2 Analyze and summarize how manufacturing businesses improve performance.

NJSLSA.W1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

#### **ENDURING UNDERSTANDING:**

The diversity of color of and physical properties of each species of wood offers both challenge and inspiration for woodworkers.

# **ESSENTIAL QUESTIONS**

What do I need to know about the Raw materials that I am working with?

What is the difference between hardwoods or softwoods?

How does the color and other characteristics of the wood impact the project which it is used to create?

#### **KNOWLEDGE AND SKILLS**

Students will be able to identify various types of wood

Students will be able to pick out which type of wood is best for various type of projects

# STAGE TWO

# **PERFORMANCE TASKS**

Students will be handed different sections of Wood species and be asked to compare and contrast the different types of wood through an authentic writing task.

# **OTHER EVIDENCE**

- Quizzes and Tests
- Classroom discussion participation
- Teacher observation of classroom assignments/activities
- Benchmark/practical assessments
- Type of Wood essay
- Formative/Summative assessments

# STAGE THREE

#### **LEARNING PLAN**

Students will look at images of projects completed using two different types of Wood and be asked to write a descriptive techniques of the two images.

Students will visit a local lumber yard and take pictures of the various types of Wood samples discussed in class. The students will share the images with the class and discuss how the various color stains impact product design and overall look.

Students will take a look at various completed projects to identify how variations of color and material type impact the overall product appearance. Each student will write a reflection of each of the products and their opinion of the product finish.

Students will uncover content through lessons about the science of wood.

Students will read and analyze articles about the global impacts of forestry.

Students will watch videos about the extraction of lumber from a forest.

Students will get to feel and see the different types of wood and the corresponding trees.

Students will take a branch segment of a tree and label the parts of the tree.

Students will make a poster showing the cycle of life of a tree and piece of wood.

21st Century Learning:

Communication - Participate in a class discussion about different types of wood and where they have seen the different types in use.

Collaboration - Work with classmates to classify wood and choose a type of wood for a project.

Critical Thinking - How can various types of wood be impacted in various settings? Research and make observations and compile collected results in a formal research paper.

Creativity - Create a portfolio based upon projects completed in the class. Add a reflective component

Supports for ELL:

Google Translate Tool

Provide content in various modalities

Connect ELL students with general education students for extra support

Supports for Special Populations:

**Graphic Organizers** 

Modify Test

Extended time to complete test

Student choice for assignments and activities

**Unit Name: Woodworking and Tools** Time Frame: 9 weeks

# **Author: Industrial Arts Department**

#### UNIT 1

Subject: Wood 1 Country: USA

Course/Grade: Wood 1 9-12 State/Group: NJ

School: Egg Harbor township High School

# **UNIT SUMMARY**

This unit will introduce the fundamentals of woodworking, power tools & machine operation and all safety practices that apply.

#### **UNIT RESOURCES**

Wood Technology & Processes Textbook

Wood Technology & Processes Workbook

Wood Technology & Processes Teacher Resource CD

Shopware (Films Media Group) woodworking and shop safety DVD series

#### **Internet Resource Links:**

www.shopware.usa.com

# **STAGE ONE**

#### **GOALS AND STANDARDS:**

8.1.12. A.CS1	Understand and use technology systems.

9.3. MN-PRO.5 Demonstrate the safe use of manufacturing equipment.

9.4.12. B.75 Use and maintain appropriate tools, machinery, equipment, and

resources to accomplish project goals.

9.4.12. 0.44 Apply appropriate safety practices in environments in this cluster to

ensure a safe workplace.

#### **ENDURING UNDERSTANDING:**

Safety and use of proper woodshop procedure is an attitude and primary focus when using power tools and machinery.

# **ESSENTIAL QUESTIONS**

What is the commercial importance of wood in industry?

How important is safety when working with this material?

What is a rabbet joint?

What is a dado joint?

What is the difference between ripping and crosscutting?

Why is it important to pull the saw toward you when crosscutting with the radial-arm saw?

Why is it important to push the saw away from you when crosscutting with the miter saw?

What is kickback and how can it be avoided?

Why should you never allow your hand to pass directly over the cutterhead of the jointer?

Why is it important to stand to one side of a board and never directly behind it when planing?

#### **KNOWLEDGE AND SKILLS**

Students will be briefed on woodshop rules and safety procedures.

Students will be given assigned lab seats as well as an overview of the course.

Students will be instructed on proper operation of radial-arm saw with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of surface planer with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of jointer with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of large table saw (used primarily for ripping stock to finished width) with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of sliding compound miter saw (used for crosscutting stock to finished length) with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of small table saw (used primarily for cutting dadoes and rabbet joints) with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper procedure for gluing and clamping materials together with the aid of a professional video and teacher demonstration.

Students will be given study material for machine tests which they must pass with 100% in order to operate machinery safely on their own.

# STAGE TWO

#### **PERFORMANCE TASKS**

Identify and describe measuring and layout tools

Demonstrate safe and proper operation of measuring and layout tools

Identify and describe woodworking hand tools

Practice safe and proper operation of woodworking hand tools

Identify and describe woodworking machine tools

Demonstrate safe and proper operation of woodworking machine tools

Do an accurate estimate drawing

Do an accurate working drawing

Create an appropriate layout for the project

Create the cut list

Phase 1 of Bracket Clock project

#### **OTHER EVIDENCE**

- Quizzes and Tests
- Classroom discussion participation
- Teacher observation of classroom assignments/activities
- Benchmark/practical assessments
- Machine tests
- Formative/Summative assessments

# STAGE THREE

# **LEARNING PLAN**

With teacher supervision, students will operate surface planer and jointer.

Students will take pre-assessment test..

Students will operate large table saw under teacher supervision.

Students will use small table saw to cut dado grooves under teacher supervision.

Students will operate small radial arm saw under teacher supervision to cut rabbet joints.

Students will operate large radial arm saw under teacher supervision for crosscutting material.

Students will cut material to exact finished length using miter box saw under teacher supervision.

Students will assemble, clamp and glue bracket clock housing.

Student will take and retake as necessary each machine test until a perfect score of 100% is achieved.

Students will take Marking Period 3 benchmark test.

Unit Name: Fundamentals of Woodworking Time Frame: 9

weeks

# **Author: Industrial Arts Department**

# UNIT 2

Subject: Wood 1 Country: USA

Course/Grade: Wood 1 9-12 State/Group: NJ

School: Egg Harbor township High School

# **UNIT SUMMARY**

This unit will reinforce the fundamentals of woodworking, power tools & machine operation and all safety practices that apply, as well as introduce project assembly and finishing techniques.

#### **UNIT RESOURCES**

Wood Technology & Processes Textbook

Wood Technology & Processes Workbook

Wood Technology & Processes Teacher Resource CD

Shopware (Films Media Group) woodworking and shop safety DVD series

#### **Internet Resource Links:**

www.shopware.usa.com

www.pennstateind.com

www.woodmagazine.com

www.finewoodworking.com

# STAGE ONE

#### **GOALS AND STANDARDS:**

8.1.12. A.CS1 Understand and use technology systems.

9.3. MN-PRO.5 Demonstrate the safe use of manufacturing equipment.

9.4.12. B.75 Use and maintain appropriate tools, machinery, equipment, and

resources to accomplish project goals.

9.4.12. 0.44	Apply appropriate safety practices in environments in this cluster to ensure a safe workplace.
9.3. MN.6	Demonstrate workplace knowledge and skills common to manufacturing.
9.4.12.A.(3).6	Assess and evaluate operational systems
9.3. MN-QA.5 workplace.	Perform safety inspections and training to ensure a safe and healthy

#### **ENDURING UNDERSTANDING:**

Safety and use of proper woodshop procedure is an attitude and primary focus when using power tools and machinery.

# **ESSENTIAL QUESTIONS**

Why is it important to clamp material to table before operating drill press?

Why is it important to feed material through router table in relation to direction of cutter tool rotation?

When using disc sander, why is it important to position material on side of downward rotation of disc?

What are the main differences between wood stain and polyurethane?

#### **KNOWLEDGE AND SKILLS**

Students will be instructed on proper operation of router table with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of drill press with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of band saw with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper operation of belt and disc sander with the aid of a professional video and teacher demonstration. All safety precautions specific to this machine will be strongly emphasized.

Students will be instructed on proper procedure for preparing assembled project for finishing with the aid of a professional video and teacher demonstration.

Students will be instructed on proper procedure for finishing assembled project with wood stain and/or polyurethane with the aid of a professional video and teacher demonstration.

Students will be given study material for machine tests which they must pass with 100% in order to operate machinery safely on their own.

# STAGE TWO

#### **PERFORMANCE TASKS**

Identify and describe measuring and layout tools

Demonstrate safe and proper operation of measuring and layout tools

Identify and describe woodworking hand tools

Practice safe and proper operation of woodworking hand tools

Identify and describe woodworking machine tools

Demonstrate safe and proper operation of woodworking machine tools

Do an accurate estimate drawing

Do an accurate working drawing

Create an appropriate layout for the project

Create the cut list

Phase 2 of Bracket Clock project

#### **OTHER EVIDENCE**

- Quizzes and Tests
- Classroom discussion participation
- Teacher observation of classroom assignments/activities
- Benchmark/practical assessments
- Machine tests
- Formative/Summative assessments

# STAGE THREE

#### **LEARNING PLAN**

Students will operate router table under teacher supervision.

Students will operate drill press under teacher supervision.

Students will operate bandsaw under teacher supervision.

Students will operate belt and disc sander under teacher supervision.

Student will take and retake as necessary each machine test until a perfect score of 100% is achieved.

Students will take Marking Period 4 benchmark test.

Use the Woodworker's journal to read about various career paths.

Use NJCAN to search for jobs and associated salaries related to Woodworking

Create a digital poster board highlighting various career paths in the field that you can take and the steps it takes to get there.

Using Google Classroom and an assigned Google Doc, have the students complete the career research activity sheet and share out their answers in small groups.

21st Century Learning:

Communication - Participate in a class discussion about

Collaboration - Work with classmates to create a presentation on careers in Wood Technology. Identify job titles, salaries, and education and experience.

Critical Thinking - Compare and contrast various careers in Woodworking. Compare salary, credentials, and work hours across the country.

Creativity - Create a portfolio for a Woodworking career based upon projects completed in the class. Add a reflective component

Supports for ELL:

Google Translate Tool

Provide content in various modalities

Connect ELL students with general education students for extra support

Supports for Special Populations:

**Graphic Organizers** 

Modify Test

Extended time to complete test

Student choice for assignments and activities

# **Curriculum Resources - Differentiated Instruction**

# **Special Education Interventions in General Education**

Visual Supports

Extended time to complete tests and assignments

**Graphic Organizers** 

Mnemonic tricks to improve memory

Study guides

Use agenda book for assignments

Provide a posted daily schedule

Use of classroom behavior management system

Use prompts and model directions

Use task analysis to break down activities and lessons into each individual step needed to complete the task

Use concrete examples to teach concepts

Have student repeat/rephrase written directions

Heterogeneous grouping

#### Resources:

Do to Learn:

http://www.do2learn.com/

Sen Teacher:

http://www.senteacher.org/

Intervention Central:

http://www.interventioncentral.org/

Learning Ally:

https://www.learningally.org/

# **English Language Learners Interventions in Regular Education**

Resources:

FABRIC - Learning Paradigm for ELLs (NJDOE)

www.nj.gov/education/bilingual/pd/fabric/fabric.pdf

Guide to Teaching ELL Students

http://www.colorincolorado.org/new-teaching-ells

# Edutopia - Supporting English Language Learners

https://www.edutopia.org/blog/strategies-and-resources-supporting-ell-todd-finley

# Reading Rockets

http://www.readingrockets.org/reading-topics/english-language-learners

# **Gifted and Talented Interventions in Regular Education**

Resources:

Who are Gifted and Talented Students

 $\underline{\text{http://www.npr.org/sections/ed/2015/09/28/443193523/who-are-the-gifted-and-talented-and-wha}\\ \underline{\text{t-do-they-need}}$ 

Hoagies Gifted Education Page http://www.hoagiesgifted.org/programs.htm

# 21st Century Learning

Resources:

Partnership for 21st Century Learning <a href="http://www.p21.org/">http://www.p21.org/</a>

Career Ready Practices (NJDOE) <a href="http://www.nj.gov/education/cte/hl/CRP.pdf">http://www.nj.gov/education/cte/hl/CRP.pdf</a>