Vocational Studies: Intro to Voc Studies

Stage 1 Desired Results

ESTABLISHED GOALS:

Competencies:

- ***Students will demonstrate the ability to safely and properly select, use and maintain equipment, materials, and processes in order to avoid injury and harm.***
- ***Students will demonstrate the ability to identify technological progressions and their applications in order to select appropriate processes for a given task.***
- ***Students will demonstrate the ability to recognize academic concepts and practice in technological settings in order to connect academic and vocational areas of study.***
- ***Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.***
- ***Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.***
- ***Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.***

Content Standards

New Hampshire Vocational Curriculum guide:

- Standard 1: Students will develop an understanding of the characteristics and scope of technology.
- Standard 2: Students will develop an understanding of the core concepts of technology.
- Standard 3: Students will develop an understanding of the relationships among technologies and the connections between technology and other fields of study.
- Standard 4: Students will develop an understanding of the cultural, social, economic, and political effects of technology.
- Standard 5: Students will develop an understanding of the effects of technology on the environment.
- Standard 6: Students will develop an understanding of the role of society in the development and use of technology.
- Standard 7: Students will develop an understanding of the influence of technology on history.
- Standard 12: Students will develop the abilities to use and maintain technological products and systems.

Transfer

Students will be able to independently use their learning ***to distinguish the appropriate technologies and processes needed to complete a given project.***

Meaning

ENDURING UNDERSTANDINGS

Students will understand that…

- accuracy will affect the outcome of a project.
- there are specific tools and techniques that vary depending on the course of study.
- creative, critical thinking, and problem solving skills are needed to function successfully as both global citizen and workers in diverse ethnic and organizational cultures.

ESSENTIAL QUESTIONS

- Is technological progress good for all trades?
- Does improved technology mean easier work?

Acquisition

Students will know…

- that each vocational path has its own specific skill set.
- that each tool has a specific purpose .
- that tools and technologies have changed over time.
- the environmental impacts of current manufacturing technologies.
- the importance of following plans and procedures.
- that safety practices may vary depending on the vocation.
- the building skills necessary for construction, masonry, metalwork and plumbing.
- the materials needed for the paths above and how they are used.
- the basic concepts of electrical theory, plumbing, masonry, power and energy,

Students will be skilled at…

- connecting academic and technical subjects.
- identifying the core concepts of technology.
- identifying changes in technology over time.
- identifying the impact of technology on the environment.
- using and maintaining technological products and systems.
- selecting and using manufacturing and construction technologies.
- identifying how job specific tools and processes affect a task or technique.
- demonstrating proper safety, form and function of hand tools, power tools, and machines.
- making educated decisions about their future in the vocational areas.
- Installing electrical equipment, framing

● Standards 13: Students will develop the abilities to assess the impact of products and systems. ● Standard 19: Students will develop an understanding of and be able to select and use manufacturing technologies ● Standard 20: Students will develop an understanding of and be able to select and use construction technologies.	cam/cad/metallurgy ● the career opportunities and requirements needed to make informed and meaningful choices in their education/employment in technical occupations. ● the relationship between academic concepts and practices to their applications in a technological setting. ● the effects of technology's development on society through time. and how they've developed to satisfy human needs and wants. *vocabulary:* Trade vocabulary Specific for each area.	construction, plumbing, hvac to code. ● problem solving.
Content Area Literacy Standards		***21st Century Skills***
RST.9-10.1 Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. RST.9-10.5 Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., *force, friction, reaction force, energy*). WHST.9-10.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. WHST.9-10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		● *Use and manage information* ● *Apply technology effectively* ● *Be self-directed learners* ● *Interact with others* ● *Reason effectively* ● *Use system thinking* ● *Solve problems* ● *Communicate clearly* ● *Collaborate with others*

Stage 2 - Evidence

Evaluative Criteria	***Assessment Evidence***
	OTHER EVIDENCE:

Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

- Teacher led discussions on safety and hand/power tool usage
- Practice new skillsets on hand and power tools
- Create a safety and operations worksheet outlining the function of given tools
- Demonstrate proper tool usage
- Student presentations and modeling of shop safety /hand/power tool usage

Language Arts Integration	***Mathematics Integration***
● 1.OA.1 Use	● 1.OA.1 Use
Technology Integration	***District Materials***
● 1.OA.1 Use	