Portfolio Planning Worksheet

Teacher Name: Mr. Rosales
Campus: Rosewood HS
Date: 11/03/2023
Course: Agricultural Mechanics and Metal Technologies

Part A: Curricular Content Focus

1. What are the most important skills I develop in students through this course? (In your own words)

    - Appropriate applications for hand tools
    - Appropriate applications for power tools
    - Electric wiring skills
    - Plumbing basics
    - Construction project planning

2. Where are my students *actually in* respect to these skills upon entering my class? (How will I know?)

    - Depending on previous exposure to the above skills students may have a range of understanding. I will know where they are by assessing them on each of these skills at the beginning of the school year.

3. Based on where my students actually are with these skills, where *should they be* at the end of the course if I provide effective instruction?
    - If I provide effective instruction my students should be able to have a working understanding of the above skills needed for the course.
    - Students should be able to choose appropriate hand and power tools based on the projects they are completing.
    - Students should have basic electrical wiring skills and be able to diagnose and rebuild electric motors.
    - Students should be able to identify plumbing fixtures.
    - Students should be able to estimate materials needs and costs.

Part B: TEKS Selection & Justification

1. **List the TEKS** to include in student portfolios to measure their growth. Include those that "persist throughout the course and that have transferability – the knowledge and skills that not only lead to success in the current course but that have lifelong application."
2. **Explain the importance of these TEKS.** How do these skills persist or transfer to other life experiences?

TEKS #	§130.26. Agricultural Mechanics and Metal Technologies, Adopted 2015.
(11)	The student plans and performs cost-effective construction techniques. The student is expected to: (A) analyze site, equipment, and permit requirements; (B) operate computer-aided drafting design software; (C) develop, read, and interpret designs and sketches; and (D) estimate material needs and costs.
(3)	The student follows operating instructions for tools and equipment to perform a given task. The student is expected to: (A) select, use, maintain, and store appropriate hand tools to perform a given task; and (B) select, use, maintain, and store appropriate power equipment such as tools powered by electric, pneumatic, and internal combustion engines.
(4)	The student identifies and performs electric wiring skills. The student is expected to: (A) identify principles of electricity and wiring terminology; (B) install electric wiring components and fixtures to comply with governmental regulations and applicable codes; and (C) maintain electric motors.

(5)	The student performs plumbing skills. The student is expected to: (A) identify and use plumbing tools; and (B) identify plumbing fixtures.
Justify or explain the importance of these TEKS:	**Example:** As part of the CTE cluster, this course specifically prepares students for careers in the agricultural mechanics industry. The TEKS selected will not only provide the technical knowledge on the use of hand tools, power tools, wiring, and plumbing, but also of planning, budgeting, and critical evaluation & reflection for lifelong skills in making informed judgments.

Part C: TEKS Breakdown & Planning for Rubric Assignments/Projects/Performances

In column 1, list the TEKS again, and for each one, describe in your own words the actions students are asked to perform. In column 2, list what assignments/projects/performances you will have students complete in order to demonstrate their skill level with these TEKS. Include examples of the artifacts or evidence that you will include in the portfolio to demonstrate the knowledge and skill.

EXAMPLE: **§130.26. Agricultural Mechanics and Metal Technologies, Adopted 2015.**

TEKS for Portfolio (and what students need to be able to do to demonstrate)	**Planned Projects/Assignments (and how you will use as evidence)**
(11) The student plans and performs cost-effective construction techniques. The student is expected to: (A) analyze site, equipment, and permit requirements;	Student Project: Create a proposal for building a barn using computer-aided drafting to develop sketches, and estimate materials cost within budget, equipment needed, and permits required.

(B) operate computer-aided drafting design software; (C) develop, read, and interpret designs and sketches; and (D) estimate material needs and costs. *Students need to perform clerical, financial, and technical duties related to construction.*	Evidence: Student-created capstone project plan for a barn. Artifacts for the capstone project include sketches, computer drafts, estimates, permits required, and equipment needed. There should be at least one page or PowerPoint slide for each of these artifacts. The project will be scored holistically against a rubric rather than based on one artifact.
(3) The student follows operating instructions for tools and equipment to perform a given task. The student is expected to: (A) select, use, maintain, and store appropriate hand tools to perform a given task; and (B) select, use, maintain, and store appropriate power equipment such as tools powered by electric, pneumatic, and internal combustion engines. *Students need to be able to identify, use, and maintain both hand and power tools.*	Student Project: Evaluate 40 commonly used hand and power tools in the agriculture industry for use cases/function, maintenance, and storage. Evidence: students will participate in a timed oral exam (1 on 1) to identify tools by physically selecting the tool and then explaining the use cases/functions, maintenance, and storage in a personal online glossary. The teacher will record when the student chooses the correct tool on a scoresheet to be used as evidence in the portfolio.
(4) The student identifies and performs electric wiring skills. The student is expected to: (A) identify principles of electricity and wiring terminology; (B) install electric wiring components and fixtures to comply with governmental regulations and applicable codes; and (C) maintain electric motors. *Given the importance of electricity in modern construction, students will be able to understand wiring terminology, install wiring fixtures, and maintain electric motors.*	Student Project: Rebuild an electric motor by using a wiring diagram and following government regulations. Evidence: The student's electric motor was built to specification using a wiring diagram and implementing best practices in compliance with OSHA standards. The scorer will examine the actual engine that was rebuilt by students.

(5) The student performs plumbing skills. The student is expected to: (A) identify and use plumbing tools; and (B) identify plumbing fixtures. *Students need to identify common plumbing tools and plumbing fixtures.*	Student Project: Students will be given 5 common plumbing scenarios and will identify the proper tools and fixtures for the job. Evidence: Sketches and a student-created glossary of tools and fixtures. The student recommends the correct tools and fixtures to rectify the issue in their plumbing scenario assessment. Assessment will be placed into the portfolio as an artifact.

Part D: Portfolio Rubric Design

Standards and Project	Significantly Limited Proficiency	Limited Proficiency	Partial Proficiency	Proficient	Advanced
Place your **standards** and **project descriptions** in this box.	**Detailed** description of **identifiable** performance characteristics reflecting a **beginning** level of performance	**Detailed** description of **identifiable** performance characteristics reflecting a **developing** level of performance	**Detailed** description of **identifiable** performance characteristics reflecting a **somewhat proficient** level of performance	**Detailed** description of **identifiable** performance characteristics reflecting a **proficient** level of performance	**Detailed** description of **identifiable** performance characteristics reflecting an **advanced** level of performance
TEKS: 11 A-D Student Project: Create a proposal for building a barn using computer-aided drafting to develop sketches, and estimate materials cost within budget, equipment needed, and permits required.	The student proposal for building a barn does not make use of computer-aided drafting, cost estimates, materials needed, and permits required.	Student proposal makes use of computer-aided drafting but cannot accurately create cost estimates, materials needed and permits required.	Students make use of computer-aided drafting and accurately create cost estimates but it has inaccurate data on the materials needed and permits required.	Student makes use of computer-aided drafting, has accurate materials, and permits needed but is overbudget on their cost estimates.	The student makes use of computer-aided drafting and has accurate materials, permits, and cost estimates within budget.
TEKS: 3 A-B Student Project: Evaluate 40	The student is able to evaluate 15 or fewer tools, their	The student is able to evaluate 16-24 tools and describe their	The student is able to evaluate 25-30 tools and describe their	The student is able to evaluate 31-35 tools and describe their	The student is able to evaluate 36-40 or more tools and describe their

commonly used hand and power tools in the agriculture industry for use cases/function, maintenance, and storage.	cases/functions, maintenance, or storage.	cases/functions, maintenance, and storage.	cases/functions, maintenance, and storage.	cases/functions, maintenance, and storage.	cases/functions, maintenance, and storage.
TEKS: 3 A-B Student Project: Evaluate 40 commonly used hand and power tools in the agriculture industry.	The student has 15 or fewer tools in their personal glossary.	The student has 16-24 tools in their personal glossary.	The student has 25-30 tools in their personal glossary.	The student has 31-35 tools in their personal glossary.	The student has 36-40 or more tools in their personal glossary.
TEKS 4 A-C Student Project: Rebuild an electric motor by using a wiring diagram and following government regulations.	The student did not rebuild an electric motor.	The student rebuilt an electric motor but the motor did not work due to not following the wiring diagram. The student did not seek assistance from the teacher.	The student rebuilt a working electric motor by following government regulations and a wiring diagram with teacher assistance.	The student rebuilt a working electric motor by following government regulations and a wiring diagram without teacher assistance.	Students rebuilt and modified/improved a working electric motor by following government regulations and a wiring diagram without teacher assistance
TEKS: 5 A-B Student Project: Students will be given 5 common plumbing	The student did not identify the proper tools and fixtures for their given plumbing	The student was able to identify the proper tools and fixtures for 1-2/5 of their given	The student was able to identify the proper tools and fixtures for 3/5 of their given	The student was able to identify the proper tools and fixtures for 4/5 of their given	The student was able to identify the proper tools and fixtures for 5/5 of their given plumbing

scenarios and have to identify the proper tools and fixtures for the job.	scenarios.	plumbing scenarios.	plumbing scenarios.	plumbing scenarios.	scenarios.