



PORTFILO

ABSTRACT

This is a compilation of many of my work of my process of me becoming a future educator. Everything from my program philosophy, lesson plans, personal growth goals and much more.

Frank Martinez

Contents

<i>Personal introduction</i>	2
<i>Cover letter</i>	3
<i>Resume</i>	4
<i>Letter of recommendation</i>	6
<i>Letters of Appreciation</i>	7
<i>My Program Philosophy</i>	8
<i>Program Marketing</i>	10
<i>Professional growth plan</i>	14
<i>Program Rationale</i>	18
<i>Extended Contract table</i>	20
<i>STS Program Graphical representation</i>	21
<i>Scope and sequence</i>	22
<i>Example lesson plans</i>	23
<i>Example assessment</i>	26
<i>Teaching evaluation</i>	31

Personal introduction

Hello, my name is Frank Martinez. I was born and raised in Lincoln, NE. I am a Lincoln High School graduate, class of 2017. I have an associate degree in skilled technical science from Southeast Community College, which I obtained in the fall of 2022. I am currently a skilled technical science major at the University of Nebraska at Lincoln. I plan to graduate with my bachelor's in the fall of 2023. After I graduate, I plan to start teaching right away in Lincoln and the surrounding areas. I want to give my students the readiness skills they need to succeed in and out of the industry. Growing up in a family that has always worked in the trades, my education has given me a large range of knowledge in many topics like automotive, welding, wood/construction, engineering, and technology. This has also given me a passion for the industry. A passion that I hope will come across to my students and inspire them to pursue a career in the trades. My strong suits are CAD programs and robotics. However, I will always be making sure I'm kept up to date and trained in the other trades so I'm ready to teach them at any time. I also aim to expand the growth of Skills USA in Lincoln. I will show my students what a great opportunity it can be for them. This is just an overview but keep reading and take a closer look at my work to get a better understanding of me as a person and educator.

Cover letter

Resume

Frank Martinez

[REDACTED]

[REDACTED]

[REDACTED]

Objective

To be hired as a skilled technical science teacher to show students the importance and skills needed to succeed in today's growing industries. While growing my classroom management, curriculum, methods, and knowledge of a first-year teacher

Education

Southeast community college- associate degree in skilled technical science instructor. Graduated in fall of 2022

University of Nebraska Lincoln-bachelor in agriculture education with the skilled and technical science teaching option. The anticipated graduation date is December 2023

Teaching endorsement in skilled technical science for grades 6-12, and in work-based learning

Experience

Teaching experience

Working at the salvation army in the fall of 2022

- Had to supervise students in grades K-5
- Using my bilingual skills to communicate with parents that spoke Spanish.

Practicum, fall of 2022 at NorthStar high school in Lincoln Ne

- Spent 40 hours in a classroom/lab setting.
- Interacted and helped students with any questions they might have.
- Got to learn a bit more about how the LPS district works with STS teachers.

Skilled and technical science experience

Construction-Drywall and framing summer of 2017

- Worked in construction and got experience in drywall and metal framing.

- Got to learn some of the safety standards put in by OSHA for construction.
- Got the experience and knowledge of using multiple tools.

Vacant house remodel in the year 2018

- Demo of the house
- Part of the Framing, window installation, drywall, and flooring. painting, cabinets installation, and finishing process in the remodel.
- Communicating well with other contractors (plumbers, electrical, and HVAC)

Commercial painting in the summer of 2019,2020,2021

- Managed a crew of 4 or more at a time to finish our painting schedules.
- Maintaining our equipment in clean and functioning order for the next day
- Training workers that had little to no experience in commercial painting

Activities and honors

- SkillsUSA president for the technical team problem-solving event at the state in the year 2021
- Selected for The National Society of Leadership in the fall of 2022.
- Outstanding skilled and technical student for the class of 2017 for Lincoln high school
- Coaching a soccer team of highs school age players in the year of 2017

References

Matthew drommond

Community center director, the salvation army

Work: (402)474-6263 Ext. 1508

Cell: (402)310-8757

Email: Matthew.Drommond@usc.salvationarmy.org

Brayan Fernando

employer at TCC ceiling

Cell: (402)480-2164

Email: Brayan.fer14@gmail.com

Danial Sosa

Private contractor

Cell: (402)610-2598

Email: Dsvallina@gmail.com

Letter of recommendation

Letters of Appreciation

My Program Philosophy

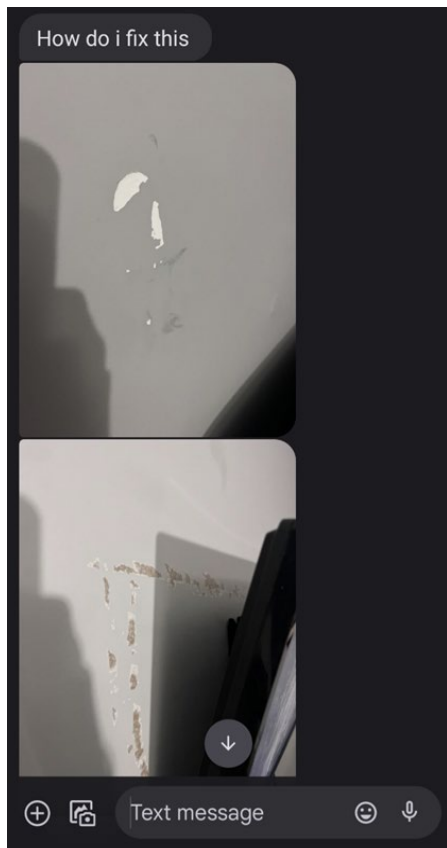
I plan to give students in my program the career readiness skills that will get them ready for the real world and our industry. I will treat all my students equally. I will make sure all their needs are met no matter what their career choice.

Goals

Goal 1: always Maintain the classroom and lab environment safe and productive.

Goal 2: Ensure students leave my classroom with a skill set that will still be useful for them outside of the industry.

Goal 3: Inform the students of the different various careers there are in the industry.



This is a screenshot of a friend of mine. He is always asking me how to do basic housework he doesn't know how to fix. I asked him if he took any shop classes in high school, and he said he took one and learned nothing because he did not care about it. He regrets it now when I tell him that those CTE classes could have prepared him with the life skills he now needs to live on his own.

The role of a CTE teacher is important. We are the individuals that are going to prepare students with the skills they need to succeed in life. Even if they decide not to go into the industry. What I mean is teaching them what it means to be hardworking, dependable, have an eye for detail, be trustworthy, and craftsmanship, just to name a few. These skills can be transferable to any career. We can't only cater to students going into the industry, but to all. That's the role of the CTE teacher.

The needs of each student are going to be different. However, they will leave with the similarity of having skills that many employers need. Skills that can be used in any career or the student's future. Skills that everyone should know. Some of these things students might already know. To make sure we reach each student's needs, we ask them what they want to learn and how to achieve that. Then it's up to us to do our best to make sure that the needs they want are met, then help them with what's next. No matter if they

are heading into the industry or not. To achieve this, I'm planning to use many different resources and frameworks that SkillUSA has to offer. These resources are perfect for my class because of how easily they can be catered to every student's needs. Another aspect to consider is students learn in different ways. Catering to this need is something I will try to do. For example, the needs of visual learners require showing them a video about the tools in the shop. The hands-on learner gets tools in their hand. The reader can read about the different tools. I plan to use resources like Kolb's learning styles. Letting the students take

the quiz, viewing the different styles of learning, and what style they fall under. I want the students to know we are doing this because I want to understand every student's needs and do my best to give the best teaching experience possible.

One thing I have always lived by is treating everyone the way I would like to be treated. Therefore, I would treat all my students with the respect they deserve. I would also expect the same from my students. When it comes to the way I teach, I make my lesson as relevant as possible. Doing so will keep the students engaged in what I'm teaching. I don't want my students to be in my class just because they must count the minutes until the time is up.

These are all the skills I want to teach my students so they can succeed in life. Learning the skills required in the millions of different careers there are in this world as well as technical skills. This way they will not end up being the friends that are asking for help all the time, like mine, when it's something they have learned in my classroom. Letting them know that these skills are not just for welders and construction workers. These skills are things that you will need someday when you pop a tire, become a homeowner, or work in an office.

References

“SkillsUSA Framework.” SkillsUSA.org, 13 Feb. 2023,

Program Marketing

January	Samsung solve for tomorrow- the start	<p>do all the requirements need to be part of the competition? This compaction will allow my students to be creative and put all they have learned to the test to solve an issue they identify and then need to find a solution for it.</p>
February	Samsung solve for tomorrow	<ul style="list-style-type: none"> • State finalists get a reward of 2,500 worth of tech and must compete with other schools in the state to go into the state winners' part of the competition. • Doing this gives more exposure for our program at the school and gives any industry so good PR as well for backing our program
March	Samsung solves for tomorrow- state winners	<ul style="list-style-type: none"> • If we get this far our school was the state winner and is now in the bracket with all the state winners • If we get this far there is a prize of 12K of technology from Samsung or our program and some other perks from Samsung • Make the program look good to the community. that students are learning and pushing what they can do. • Might make the news to so that's good
April	Skills state competition Samsung solve for tomorrow	<ul style="list-style-type: none"> • State skills competition allows students to

		<p>compete with other skills in various computations.</p> <ul style="list-style-type: none"> • It allows students to represent what they learned to future industry partners and makes current industry partners look good for backing us. • Also, give students a chance to meet with various businesses to maybe pick a career. • for the Samsung computation. If they are one of the 10 schools, they get to go to new York.
May	Samsung solve for tomorrow. End of the schools	<ul style="list-style-type: none"> • If they are in the top three at the end of the competition, they get 100K in products from Samsung
June	National skills	<ul style="list-style-type: none"> • If we have any students that won state, they get a chance to go to nationals and compete there with other national winners. it even gives students an even wider range of other careers they might be interested with
July	Meeting	<p>Try to get with industry partners. Discuss any major changes in the industry that I should be aware of. Also, let them tell me some of the skills they are looking for in newer people going into the industry and find a way to tie those skills into my program</p>
August	Start of the school year	
September	Promoting my program	Some posters to show up my program and skills

October	Parents teacher conferences	Get me a chance to get to take to the parents about their kids and just give a bit more insight into what going on in class
November	Start getting a final count of Skills USA students	Having the final number of students that will do skills USA
December	1. District's robotics competition for Ips	The student will compete with other Ips robotic programs. This gives the student a taste of what to expect at Skills

Professional growth plan

Write your program vision statement. Remember, a vision statement is future oriented in present tense. It gives an image or picture of an outcome summarized in a powerful phrase.

STS Program Vision: my goal is to make a safe and productive learning environment for both the students and me, growing our knowledge of STS.

Educator development goals

Use the space below to write three goals for the term. Include specific skills (characteristic of effective teachers or principle of teaching and learning) you hope to attain and your goal toward acquiring that skill. Identify specific mechanisms (experiences, assignments, interviews, etc.) that will help you reach your goals.

Personal Development Goal	Key Steps	Reflection
<p>Skill: time management/ not procrastinating</p> <p>Goal: even fewer distractions and setting up more homework time</p>	<ul style="list-style-type: none"> • Do the same I am now using the free time between class and work for homework. • Staying off my phone unless taking 5 min brakes between assignments being finished 	<p>Overall, I think I achieved this goal I had this semester. It was a little rough for me to keep up towards the end, but I got back on track. So, I would say my level of procrastinating has gone down this semester. Also, I did very good at taking care of the time I had on my hands. But there is still plenty of work to be done to mastering my time correctly</p>

Professional Development Goal	Key Steps	Reflection
<p>Skill: Communication</p> <p>Goal: doing better at keeping people in the loop/email in time</p>	<ul style="list-style-type: none"> • Find a time after my homework time to send and read emails. • Keeping eric in the loop once a week on how my progress is going in school general 	<p>I did very well with this goal. I was always looking at my emails everyday and reply if need to in a timely manner. I no longer had eric asking if I saw his email and him asking me to email him back. So I achieved this goal this semester I would say. Now I just got keep it up</p>

Community Development Goal	Key Steps	Reflection
<p>Skill:</p> <p>Praxis</p> <p>Goal: finish</p>	<ul style="list-style-type: none"> • Study for the praxis exam • Seek help! • Take it at least 2 times this semester. • If I fail keep going and try again 	<p>This is a rough one for me. I have not taken the Praxis this semester like I wanted to. But I was also informed to not to take it until august. So when august comes I got to make sure I take it and re write this goal and make sure I stick with it this time.</p>

Program Rationale

This program model aligns with my goals and vision very well. In my scope and sequence, you can see how in-depth about safety I go. I ensure that students are always safe in my classroom and shop. They can be confident that they are being taught exactly what the industry standards are. This is useful if they decide to go into the industry, letting them know these are important skills. No matter where they decide to work though, there will be safety procedures to follow. Therefore, they must learn to listen to and follow procedures and rules. This aligns with my second goal of ensuring they are learning transferable skills for any career. Learning the different careers in CAD is something you can see in my scope and sequence as well. You can see the detailed section in it where I teach students about the various careers available. This would hit my third goal in my program goals, ensuring that students are informed about the career options they have in the industry.

In my scope and sequence, I mentioned a few accommodations for students that would benefit them. Such as labeling tools in English and other languages for students in ELL, shorter reading, pairing students that are behind with students that are ahead, and different types of visuals. These are just to name a few of the ways I plan to support my students, but the most important key is communication. Sometimes having a conversation with a student privately that could use a bit of help is all that is needed. Having this conversation helps me do my best to help them succeed in my class. I inform the students at the start of class that they can approach me at any time regarding any concerns. I can approach students as well offering my help if I notice them struggling. I do not want to put the responsibility of asking for help solely on the student. There are cases where students are in ELL, or they might be too shy or nervous to ask. When it is something, we can't help them with, or know where to start, we can ask our admins, counselors, or fellow teachers for help as a resource. Doing this also might get the student into an IEP they need and start improving in their education. Not just in my class, but in others as well. Going back to communication, the parents can be an important involvement as well. I will let them know they can reach out anytime with questions or concerns. Or if their child reaches out to me, informing them of the help the student asked for. Getting a steady stream of emails or phone calls about the student's progress is so beneficial for both me and the parents. The parents get a

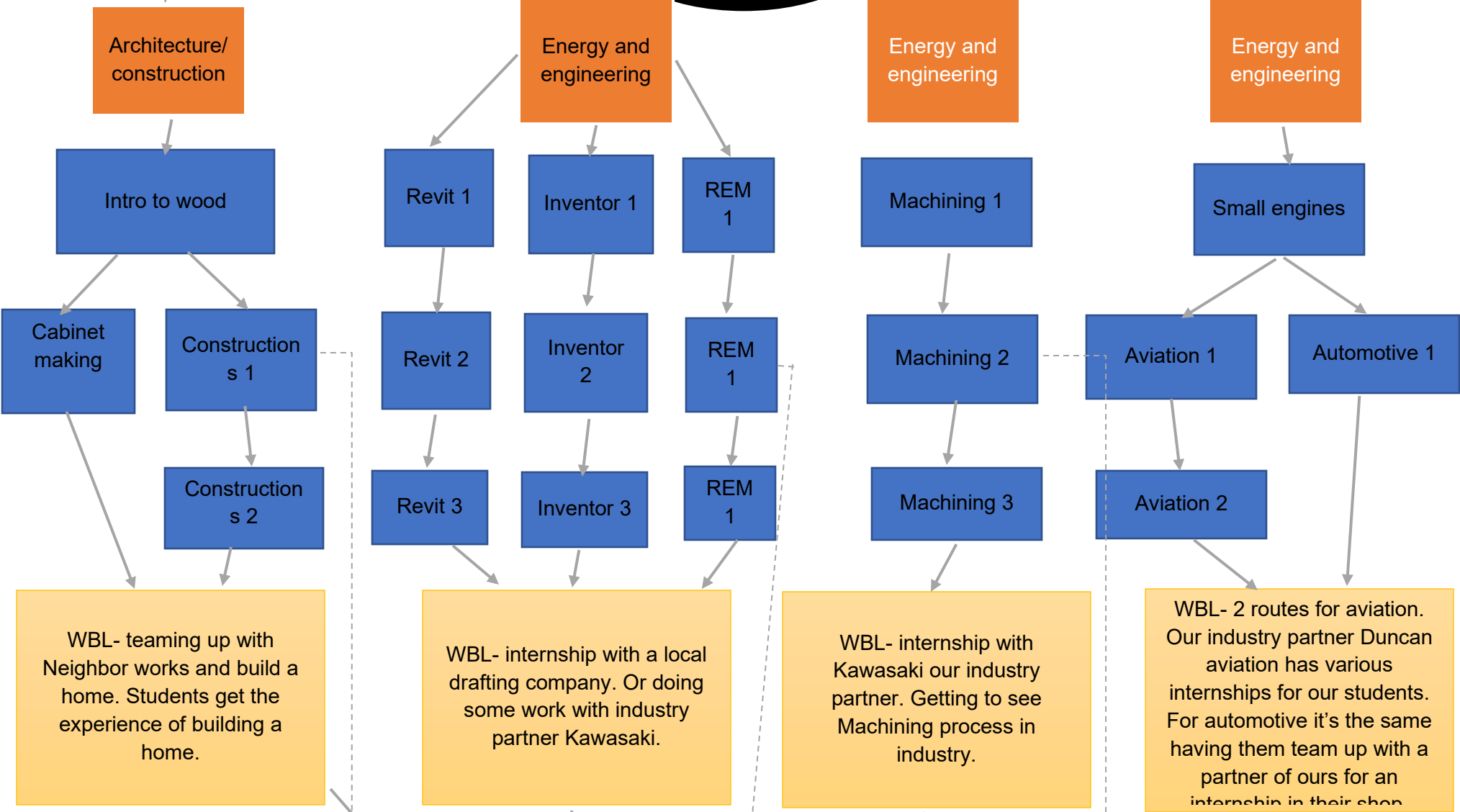
sense of security that I do care about their child and their education, and I get more insight into better ways to help.

Once again, communication is key when it comes to the different opportunity's students can have in my CTE program. After showing them my graphical representation and the different clusters and pathways of courses, my program has to offer, I will have them set a goal they want to achieve. Let's say, a student wants to become a carpenter and they are in my CAD class. Teaching them the material in CAD class could also help me become a carpenter by learning how to make and read different prints and plans. That could even be made a goal for the semester, learning how to read and make prints. Making all the students set goals in or out of my CTE program will show them how to proceed toward them. And I don't plan on forgetting about their set goals after the beginning, NO! It doesn't stop there! I will have monthly or quarterly updates on how they are doing. We can evaluate the progress made, what needs to change, and what is working. The opportunities are endless for these students. Maybe a first-time student taking my CAD class will be thinking that CAD isn't their thing. They can look at the graphics representation I have posted in google classroom or on my wall, and choose a different cluster they might be interested in. They might come back and decide to take automotive next semester. They would've had no idea we offered auto but exposing him to the different clusters got him hooked, and now they want to pursue a career in automotive.

Extended Contract table

Activity	# of Days	Reasoning
After School time	5	This time would be used for any students that would like some extra time. Time for them to finish any projects, or assignments, or make up a test or quiz.
Classroom prep	5	This time would be used to get shop prep done. Like cutting and prepping material for the student's projects and classroom activities. the things that students are not allowed to do. this time could also be used to order shop materials one or two days will be used to make sure my classroom is all set for the beginning of the year as well
CTSO competitions and events	15	This time would be used to attend different events that SkillsUSA organizes that our students can attend. Events like State and National competitions.
Work Based Learning (WBL)	5	Using this time to Communicate with our partners to find some WBL opportunities for our students. Things like job fairs, tours, internships, and jobs. Let students also know about these opportunities given to them.
Curriculum development	3	Attending workshops about curriculum development to ensure I'm giving my students a top-tier CTE program I can offer them.
Professional Development	3	Similar curriculum attending workshop focusing on professional development. To ensure I'm a top-quality CTE teacher. Traits that my student would appreciate and even pass on to them.
Total days	36	

STS Program Graphical representation



Orange- career clusters
 Blue- course in that cluster
 Yellow- work based learning opportunity.
 Green- dual credit opportunity
 Dash line is everything thing in the second tier that allows you to take dual credit

For dual credit class. students could go to the Career academy. Once they have taken the set amount of class of their desired cluster. At their home high school. They Then can attend the Career academy to gain dual credit class.

Scope and sequence

Scope & Sequence		
Course Title: drafting 101	Program: daws middle school	Description: students will be learning fundamentals of the engineering design process while learning to draw in 2d and 3d. learning the basics of autocad inventor. a leading computer-aided design software used in the industry. they will learn the fundamentals and be able to create their own designs in inventor
Course Goals: be able to identify and follow safety rules and procedures in a class/work environment. get an understanding of the environment of a CAD drafter. understand the vast amount of careers in CAD. learn the fundamentals of inventor. drawing and dimensioning drawing on paper and in inventor. using your creativity to go through the whole EDP using inventor		Career Readiness Standards Met: use of critical thinking, applied appropriate academic and technical skills utilize technology makes sense of problems and perseveres in solving them communicate effectively and appropriately
Unit Topic/Framing Question	Standards Met	Activities, Assessments & Accommodations
Unit 1: Guiding Question: what is PPE? what are our safety procedures? Course Learning Outcome: be able to identify and follow safety rules and procedures be able to treat the classroom like a real life work space	STS.HS.13.1.b Identify office safety hazards. STS.HS.13.1.c Employ appropriate Personal Protective Equipment (PPE) STS.HS.13.1.a Employ eye protection in compliance with Neb. Rev. Statute 79-715.	<p>Student Activities [What will students do to demonstrate their learning? What products and/or performances will students complete?]</p> <p>Assessment Tools [What assessment criteria or tools will you, the teacher,</p> <p>Accommodations [How will curriculum, instruction, and/or assessments</p> <p>Career Development Opportunities [How will CTSOs and industry partnerships support</p> <p>Work-Based Learning Opportunities [How can all students use work to practice learning in</p>
Unit 2: Guiding Question: what are the different careers in CAD Course Learning Outcome: get to know some of the typical worklife looks like in cad. learn some of the normal cad careers there are and some of the more unique ones you can find. what it take to be a cad drafter and the skill need to be one	STS.HS.13.2.a Identify the various careers, primary duties, and attributes of a drafting technician or a design engineer. STS.HS.13.2.b Identify the training, education, certification and licensing requirements for various careers of a drafting technician or design engineer. STS.HS.13.2.d Identify positive work behaviors and personal qualities needed to be employable.	<p>Student Activities [What will students do to demonstrate their learning? What products and/or performances will students complete?]</p> <p>Assessment Tools [What assessment criteria or tools will you, the teacher,</p> <p>Accommodations [How will curriculum, instruction, and/or assessments</p> <p>Career Development Opportunities [How will CTSOs and industry partnerships support students in developing their career readiness?]</p> <p>Work-Based Learning Opportunities [How can all students use work to practice learning in this unit?]</p>
Unit 3: Guiding Question: what are the different types of 2 and 3D drawing what are the different tools needed to make a 2d and 3d drawing? What are the features inventorsr? Course Learning Outcome: students will be able to learn how to draw shapes and objects in 2d, 3d, and on Inventor. understanding what the futures and tools cad drafters used in industry and how to implement them into their own projects.	STS.HS.13.3.d Explain scale using architect or engineer scales. STS.HS.13.4 Apply conventional drafting standards used in mechanical drafting. STS.HS.13.4.a Identify terms and definitions commonly used in the mechanical drafting profession. STS.HS.13.4.b Employ multiple sketching methods such as oblique, isometric and/or orthographic projection. STS.HS.13.4.c Apply dimensional information and general notes in mechanical plans.	<p>Student Activities [What will students do to demonstrate their learning? What products and/or performances will students complete?]</p> <p>Assessment Tools [What assessment criteria or tools will you, the teacher, use to measure student progress and achievement?]</p> <p>Accommodations [How will curriculum, instruction, and/or assessments be adapted to meet the needs of each student?]</p> <p>Career Development Opportunities [How will CTSOs and industry partnerships support</p> <p>Work-Based Learning Opportunities [How can all students use work to practice learning in</p>
Unit 4: Guiding Question: how do you dimension a drawing? how do we apply the terminology of an inventor to actually design it inventor? what unique design can we use in inventor to make our own table organizer? Course Learning Outcome: be able to make our own unique design of a table organizer. be able to dimension a drawing correctly. be able to recreate the whole engineering design process from start to finish	STS.HS.13.5 Utilize drafting and design technology. STS.HS.13.5.a Employ the appropriate technology tools (i.e., CAD, SolidWorks, Fusion 360, Inventor, etc.) for conveying information, solving problems, and expediting workplace processes. STS.HS.13.5.b Employ basic computer and information technology skills used in the drafting industry. STS.HS.13.5.c Employ ethical digital citizenship	<p>Student Activities [What will students do to demonstrate their learning?]</p> <p>Assessment Tools [What assessment criteria or tools will you, the teacher,</p> <p>Accommodations [How will curriculum, instruction, and/or assessments</p> <p>Career Development Opportunities [How will CTSOs and industry partnerships support students in developing their career readiness?]</p> <p>Work-Based Learning Opportunities [How can all students use work to practice learning in</p>

<https://docs.google.com/spreadsheets/d/1Qhl-jQWrUPnNuXOX8fIGYKZICn1P-tRXwM53wTw0xql/edit?usp=sharing>

Example lesson plans

Daily Plan	Instructor: Mr. Martinez
Course: woods 101	
Unit Title: Safety	
Lesson Plan Title: shop Safety review	

Contextual/Set	Where have you been?	Where are you going?
	Knowing safety	Mastering safety
Essential Question: (Law 2)	What are the safety procedures in our shop?	
Objective: (Law 1, 4)	<ul style="list-style-type: none"> • Be able to explain 5 different shop safety procedures. • Be able to explain 5 different tool safety procedures 	

Learning Activity 1 (law3,4,5)	Teaching Method(s):	Review quiz live/lecture	Estimated Time:	10mins
Instructor Directions / Materials	Brief Content Outline			
Use quiz live on the students to get an idea of what safety stuff we need to focus on	Students will do a teacher-paced quiz live. 10 questions on safety. The teacher needs to pay attention to the questions we missed the most. Make sure you touch the subject missed the most during the lecture.			

Summary (Law 6,7)	Transition
Essential points to summarize	Essential connections to the next Objective. (Scaffold)
Focus on the missed topics from the quiz during the lecture	Now we are going to see if they mastered the safety material by doing Jeopardy Live.

Learning Activity 2 (Laws 3,4,5)	Teaching Method(s):	Jeopardy live	Estimated Time:	15
Instructor Directions / Materials	Brief Content Outline			
Have the students do a jeopardy live. To review the safety material	<i>Split the class into two teams. Have them play through the Jeopardy live as a review for the test we are having on safety the next day</i>			

Summary (Reflection) (Law 6, 7) (End of the class)
Ask each student to give one safety rule or procedure about the shop and tools. Restate EQ and OBJ

Materials, Supplies, Equipment, References, and Other Resources: (Law 1)

PowerPoint to guide the lesson, jeopardy live, quiz live, and a worksheet the students can follow during the lecture

Daily plan	Instructor: Frank Martienz
Course: CAD 1	
Unit Title:	
Lesson Plan Title: EDP paper plane	

Contextual/Set	Where have you been?	Where are you going?
	Learning about the EDP	Applying the EDP
Essential Question: (Law 2)	We are going to develop a paper plane using the engineering design process	
Objective: (Law 1, 4)	<ul style="list-style-type: none"> Implementing the engineering design process, we will build a paper plane design. Critique the pros and cons of your main design. 	

Learning Activity 1 (Laws 3,4,5)	Estimated Time:	5 mins
Instructor Directions	What will the teacher do?	What will the student do?
We are going to review the engineering process	Have the student review the engineering process. By asking them what the steps of the engineering process are	Students will recall the engineering process.

Summary (Law 6,7)	Transition
Essential points to summarize	Essential connections to the next Objective. (Scaffold)
- The engineering process	- Using the engineering process from scratch in our next activity

Contextual/Set	Where have you been?	Where are you going?
	Reviewing the EDP	Applying the EDP
Essential Question: (Law 2)	We are going to develop a paper plane using the engineering design process	
Objective: (Law 1, 4)	<ul style="list-style-type: none"> Implementing the engineering design process, we will build a paper plane design Critique the pros and cons of your main design. 	

Learning Activity 2 (Laws 3, 4, 5)	Estimated Time:	
Instructor Directions	What will the teacher do?	What will the student do?

They have a sheet to follow, first, read the scenario then keep going with the worksheet	Guide them through the worksheet as students work on it.	<i>Students will work through the worksheet to design their paper airplane design for Duncan aviation.</i>
--	--	--

Summary (Reflection) (Law 6, 7) (End of the class)

What did we just do while filling out this sheet?
Have them summarize the EDP one more time.
Ask if there are any questions.

Materials, Supplies, Equipment, References, and Other Resources: (Law 1)

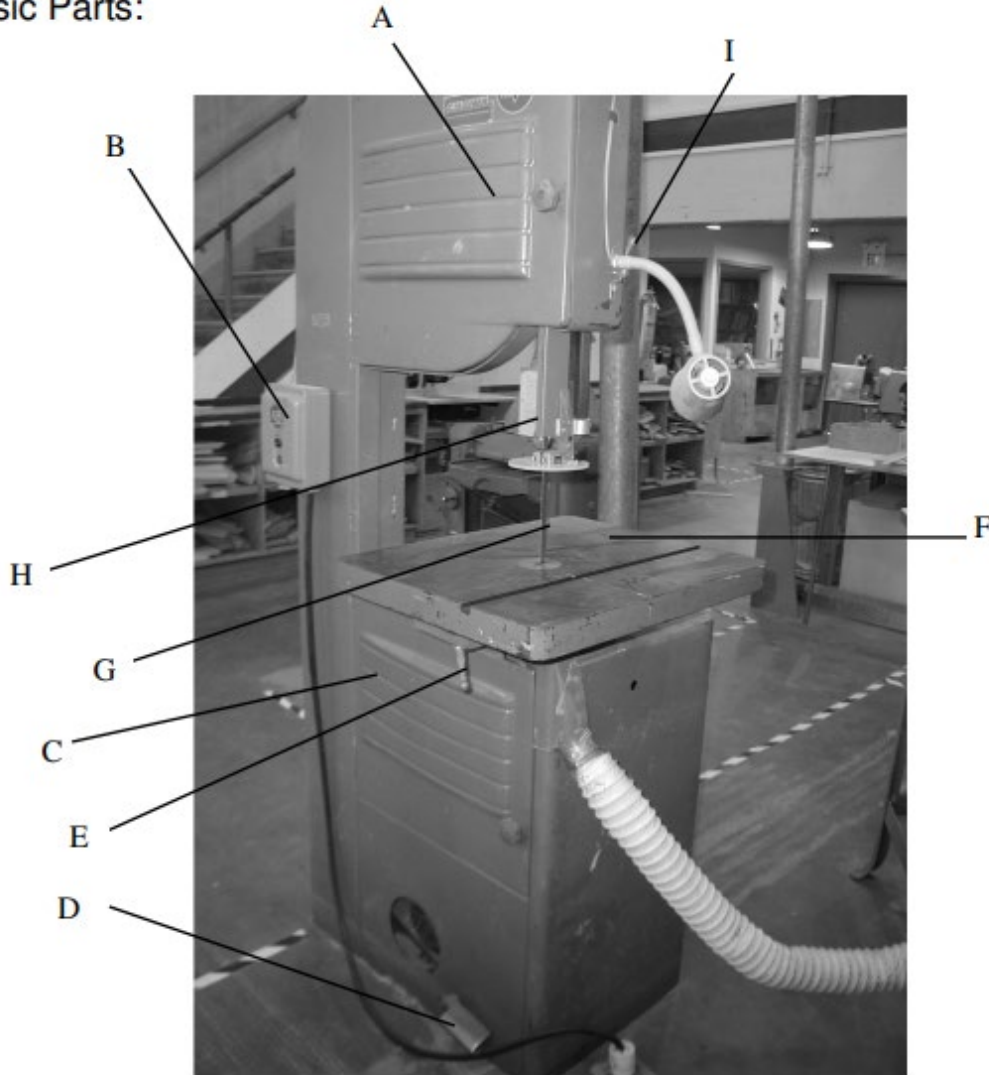
Worksheet using the EDP <https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:71fd6fbc-d149-3468-a254-b8ed354f8f6b>
PowerPoint
Paper for the planes
Tape measure

Example assessment

Band Saw Operation and Safety

Purpose: The band saw can be used for many different cutting operations, but basic uses are, cutting curves, and circles and re-sawing wide boards to make them thinner. The band saw does not work well for making accurate straight cuts.

Basic Parts:



A. Upper Wheel Cover

B. On-Off Switch

C. Lower Wheel cover

D. Brake

E. Table Tilt Adjustment Handle

F. Table

G. Blade

H. Blade Guard

I. Blade Guard Adjustment Handle

Band Saw Safety Rules

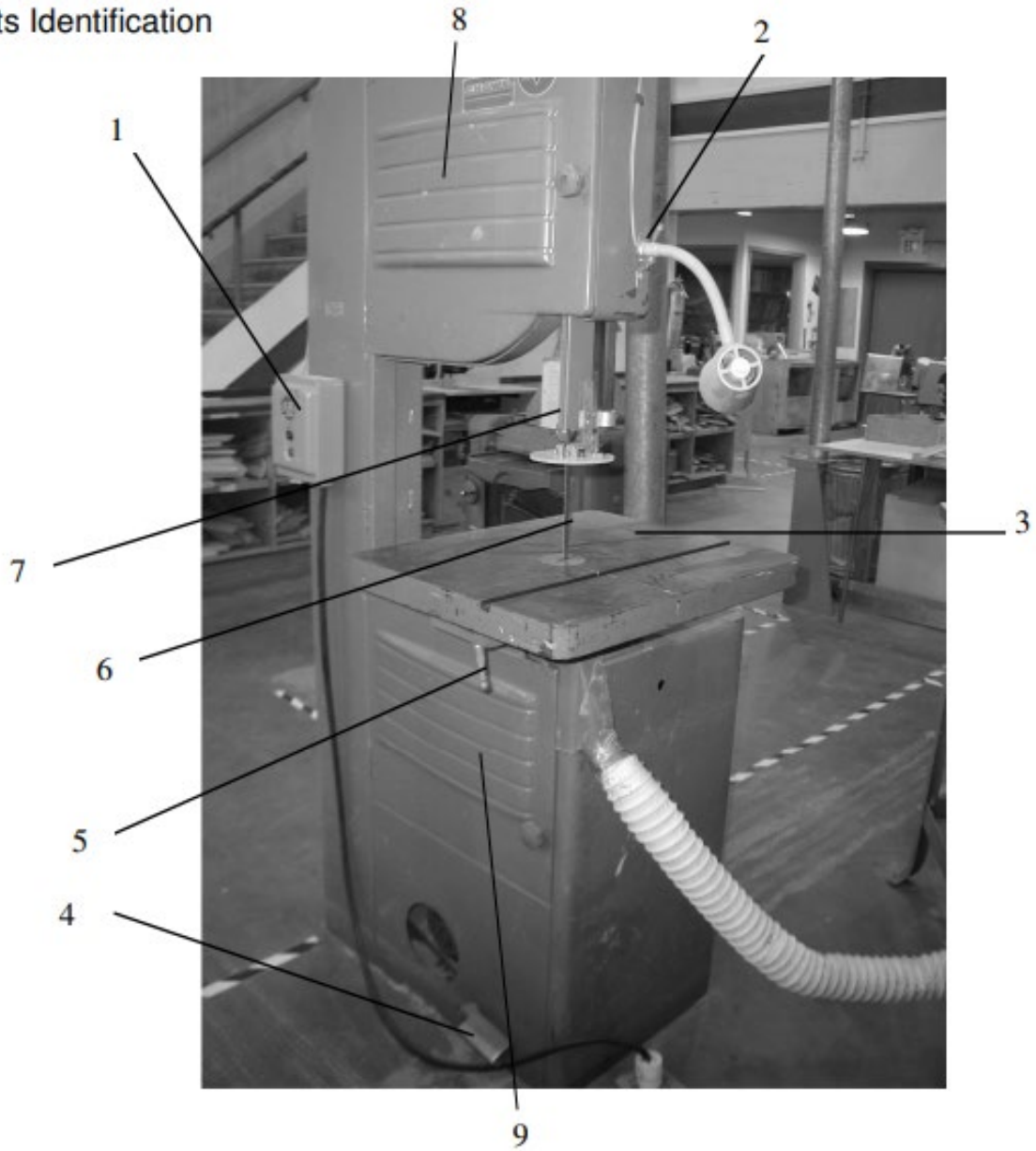
1. Eye protection is required when using the band saw.
2. The saw guard should be adjusted 1/4" or less above the work before the machine is to be turned on.
3. Do not allow anyone to stand to the right of the machine while it is running. If the blade breaks it could come their way.
4. When the blade is moving, ensure that your hands are not in front of it. Your hands should be positioned:
 - a. One on each side of the blade
 - b. Both hands are on the same side of the blade.
 - c. Hands behind the blade.
5. Your hands should never be closer than 3" from the blade. If your project is small, fasten it to a larger piece of wood or use a push stick so that your hands don't have to be too close to the blade.
6. If the blade breaks, step back, turn off the machine, and call the instructor. **Do not try to remove the blade because you could be injured.**
7. Round stock such as dowels, should be placed in a v-block when being cut. Round stock tends to spin out of your hand if it is not held in place.
8. Turn off the motor, let the blade stop, lower the blade guard, and clean the table of scraps and tools before leaving the band saw.
9. Use relief cuts on small curves or circles to prevent the blade from binding or breaking.

Steps of Operation

1. Check eye protection.
2. Adjust the blade guard.
3. Check hand position.
4. Turn on the saw.
5. Make relief cuts on tight curves to prevent the blade from binding and breaking.
6. When you have finished cutting, turn off the machine, stop the blade, lower the blade guard, and clean the table.

Review Quiz

1. Parts Identification



___ Blade

___ Table Tilt Adjustment Handle

___ On-Off Switch

___ Brake

___ Table

___ Blade Guard Adjustment Handle

___ Blade Guard

1. How far above the work surface should the blade guard be adjusted?

2. List the three things you should do if the blade breaks on the band saw.

1. _____

2. _____

3. _____

4. What is the one thing you should not do if the saw blade breaks?

5. Where should your hands be located when you are operating the band saw?

6. Why should you use a v-block when cutting round pieces?

7. Cutting too sharp of a curve may cause the blade to break. How can you avoid this problem? _____

8. List the things that need to be done after you are finished using the bandsaw. _____

9. Do we need to have safety glasses when using this machine if so, why?

Safety guided notes

Name _____ date _____ period _____

Shop Safety Procedures

- PPE must be _____ always in the shop.
Especially _____ should be always worn while in the shop.
- Ensure you are _____ wearing loose _____ or _____ like chains, rings, and bracelets.
- _____ things in the shop
- Report any injuries to me. _____
- Keeping the shop and our workplace _____

Extra space for notes

Tool Safety

- Always use tools with their _____ on at all time
- If you break a machine or something is wrong with a machine. _____
- Never mess around when someone is using _____. Don't mess around in general in the lab.
- Use the tools and machine for _____
- If you don't remember how to use a machine or tool _____

Extra space for notes

Teaching evaluation

Evaluation of Classroom Instruction

Student Teacher Observed: Frank Martinez Cooperating School: Daves
 UNL Evaluator: Kristin Page Date: 5-5-23
 Lesson(s): Space Engineering, Transportation / Model Rocket Unit

Competency	YES/No	Comments
Was the teacher ready for instruction? Did the teacher: <ul style="list-style-type: none"> • know their content? • use familiar analogies? • practice what they asked students to do? • prepare varied instruction at an appropriate level? 	Y	Discussed with teacher about lesson pacing + literacy strategies for reading article + answering questions
Were students ready for instruction? Did the teacher: <ul style="list-style-type: none"> • gain student interest and attention before beginning? • pause when attention was interrupted? • exhaust students' attention? 	Y	Asked to put away Chromebooks + re enforced expectations individually Sitting + voices off
Essential Question Did the teacher use an essential question or bell ringer to establish the focus of the lesson? Did they: <ul style="list-style-type: none"> • know the language of the learners? • USE the question through the lesson to gain feedback from students? • use clear and concise language? 	Y	
Objectives presented Did the teacher state/present the lesson objectives? Did they: <ul style="list-style-type: none"> • communicate a clear objective, using verbs, for what students should be able to do at the end of the lesson? • assess/summarize with students based on the objective? 	Y	Space Engineering, careers Transportation Vehicles
Student Engagement in Learning Did the teacher clearly define the activity and excite the learner to engage in the learning process? • could students connect to the learning? • did the teacher activate students' thinking and encourage students to do the work of learning?	Y	Individually checked in with students not engaged in reading - reviewed past learning about space vehicles - connected to ^{engineering} careers AWESOME!
Summary/Closure Did the teacher summarize all key elements of the lesson? Did they: <ul style="list-style-type: none"> • assess/summarize with students based on the objective? 	Y	

Engaging & Adjusting to Students		
Checking for understanding Did the teacher confirm students knew essential concepts from the lesson? Did they: <ul style="list-style-type: none"> • use questions to confirm learning? • solicit specific feedback to help students self-assess? • AND can students reproduce what was taught? 	Y	Frank - Pre-made questions for the NASA rover article for students to answer at varying levels of reading/Comprehension
Smooth transitions Did the teacher plan and implement transitions within the lesson to connect within and between ideas?	Y	Gave expectations for next activity + reinforced them
Instructional adjustments Did the teacher adjust to instructional disruptions? Did they: <ul style="list-style-type: none"> • adjust to student behavior? • vary timing/methods in relation to student understanding? 	Y	- talked individually to students for behaviors + academic engagement - Called on students to share answers - no hands raised: GREAT strategy!
Questioning Did the teacher use questions to effectively check for understanding and encourage students to think?	Y	Written questions on worksheet

Additional comments:

* Nice job engaging students who arrived to class late due to testing

Evaluation of Classroom Instruction

Student Teacher Observed: Frank Cooperating School: _____
 UNL Evaluator: Karell Date: 3/2/2013
 Lesson(s): _____

Competency	YES/No	Comments
Connecting with Students		
Was the teacher ready for instruction? Did the teacher: <ul style="list-style-type: none"> • know their content? • use familiar analogies? • practice what they asked students to do? • prepare varied instruction at an appropriate level? 	yes	power point - rmdout connect with a story if students are not connected
Were students ready for instruction? Did the teacher: <ul style="list-style-type: none"> • gain student interest and attention before beginning? • pause when attention was interrupted? • exhaust students' attention? 	yes	Good job getting out in the midst of four students
Processing Content		
Essential Question Did the teacher use an essential question or bell ringer to establish the focus of the lesson? Did they: <ul style="list-style-type: none"> • know the language of the learners? • USE the question through the lesson to gain feedback from students? • use clear and concise language? 	yes	PPT slide slow down and use your questions
Objectives presented Did the teacher state/present the lesson objectives? Did they: <ul style="list-style-type: none"> • communicate a clear objective, using verbs, for what students should be able to do at the end of the lesson? • assess/summarize with students based on the objective? 	yes	PPT slide slow down and connect with student through questions
Student Engagement in Learning Did the teacher clearly define the activity and excite the learner to engage in the learning process? <ul style="list-style-type: none"> • could students connect to the learning? • did the teacher activate students' thinking and encourage students to do the work of learning? 	yes	with your activity. Get them engaged with questions to start T-R-S is good to individually the career search: what if no interest is there?
Summary/Closure Did the teacher summarize all key elements of the lesson? Did they: <ul style="list-style-type: none"> • assess/summarize with students based on the objective? 	yes	Good Summary of A13- Good end w/ Summary over all

Engaging & Adjusting to Students

<p>Checking for understanding Did the teacher confirm students knew essential concepts from the lesson? Did they:</p> <ul style="list-style-type: none"> • use questions to confirm learning? • solicit specific feedback to help students self-assess? • AND can students reproduce what was taught? 	<p>yes</p>	<p>slow down to check, especially at the start. good organization</p>
<p>Smooth transitions Did the teacher plan and implement transitions within the lesson to connect within and between ideas?</p>	<p>yes</p>	<p><u>just slow it all down</u></p>
<p>Instructional adjustments Did the teacher adjust to instructional disruptions? Did they:</p> <ul style="list-style-type: none"> • adjust to student behavior? • vary timing/methods in relation to student understanding? 	<p>yes</p>	<p>after your AB - each teach you did a good job summarizing how Broad Careers are in CD</p>
<p>Questioning Did the teacher use questions to effectively check for understanding and encourage students to think?</p>	<p>yes</p>	<p>use your end of question to Ellie Be ready to "dig deeper" with follow up questions</p>

Additional comments: Frank, you did a good job planning your lesson. Be intentional to get all students engaged when starting your lesson. "slow down" with questioning as you move into INQUIRY. Organized lesson was your strength.