

Driving It Home

Using Driving Questions and PBL to Facilitate Student Mastery of CTE Content and Skills.



Influences of Our Practice

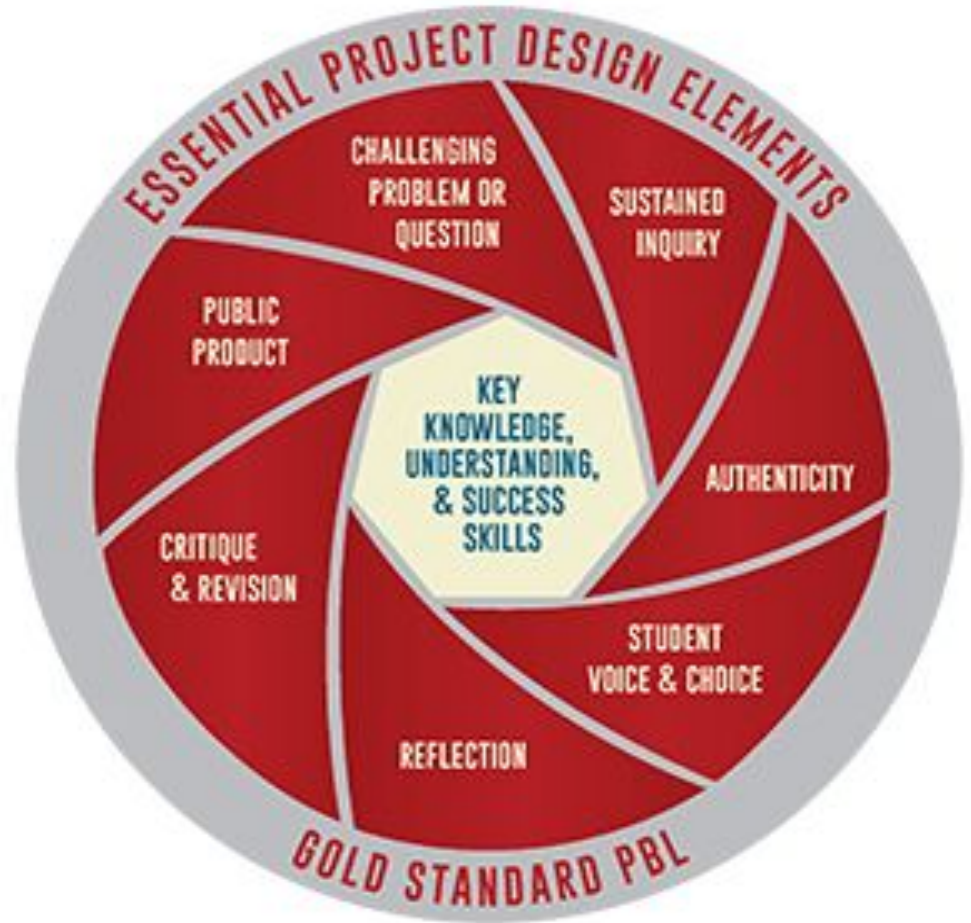
PBL Works

- Key Knowledge
- Challenging Problem or Question
- Sustained Inquiry
- Student Choice
- Critique and Revision
- Public Product

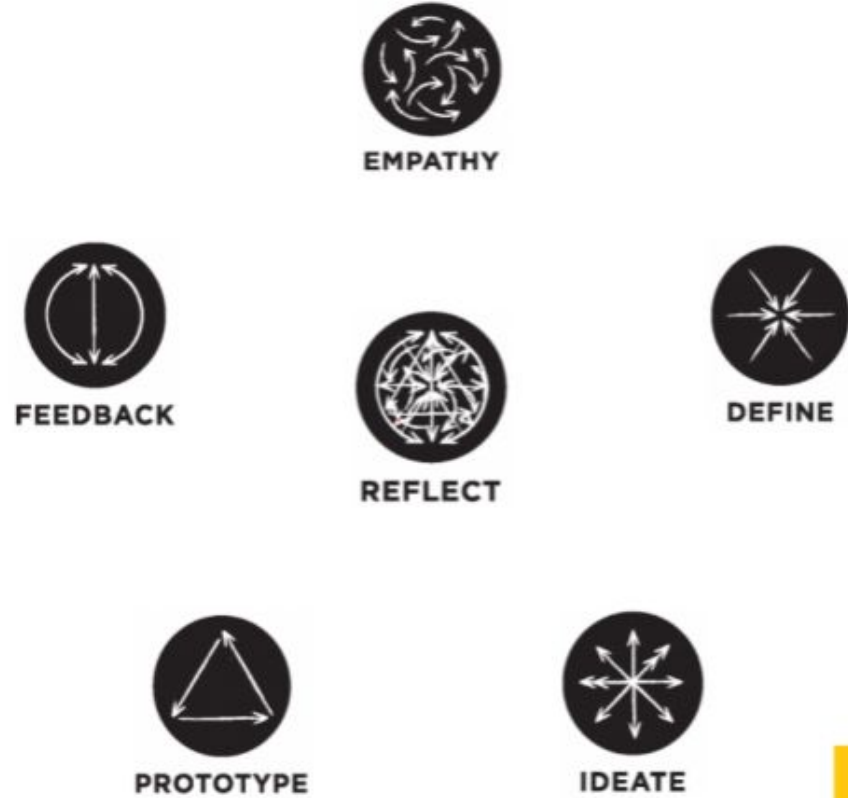
Henry Ford Design Thinking

- Empathy
- Define
- Ideate
- Prototype
- Feedback
- Reflect

Essential Project Design Elements



The Design Thinking Cycle



The Henry Ford
Learning Institute



Doing Projects vs. Project Based Learning



Traditional Unit with Culmination Project



Project Based Learning Unit



Necessary Mindsets

Teacher Must:

- Frame the learning
- Give up control
- Provide empathy and build relationships
- Ask questions that nudge learning
- Consult and drive idea development
- Provide feedback and guide in self assessment and reflection
- Trust the process

Students Will:

- Engage in deep learning
- Take ownership
- Cultivate a growth mindset
- Engage in productive struggle
- Seek out experts to answer questions
- Collaborate with peers
- See relevance

What do students say?

Different way to learn.

Hands on material and now I know what I want to do.

Develop learning skills in a very different way.


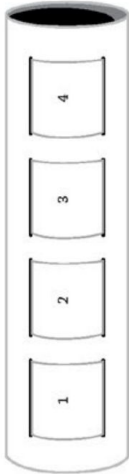

Different ways to study for this class.



The Driving Question

- Framing Words
- Person or Entity
- Action or Challenge
- Audience or Purpose

DRIVING QUESTION: TUBRIC 2.0

	1	2	3	4	
	[Wild Card]	[Wild Card]	[Wild Card]	[Wild Card]	
	How can...	I We	Build... Create... Make...	Real-World Problem	
	How do...	We as, [Roles] [Occupations]	Design... Plan...	For a Public Audience	
	Should...	[Town] [City] [County]	Solve...	For a School	
	Could...	[State] [Nation]	Write...	For a Classroom	
	What...	[Community] [Organization]	Propose... Decide...	For an Online Audience	
					<p>Assembly required. Instructions not included. Application open-ended</p> <p>It's Project Based Learning.</p> 
					TUBRIC™ bie.org

Hospitality and Tourism

CIP: 12.0500

Cooking and Related Culinary
Arts



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Technical: ProStart

Global Cuisine

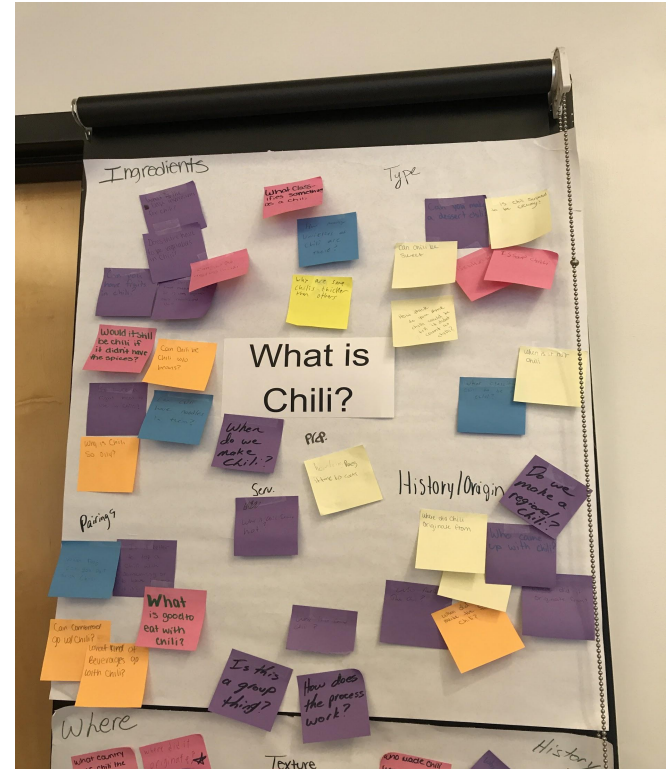
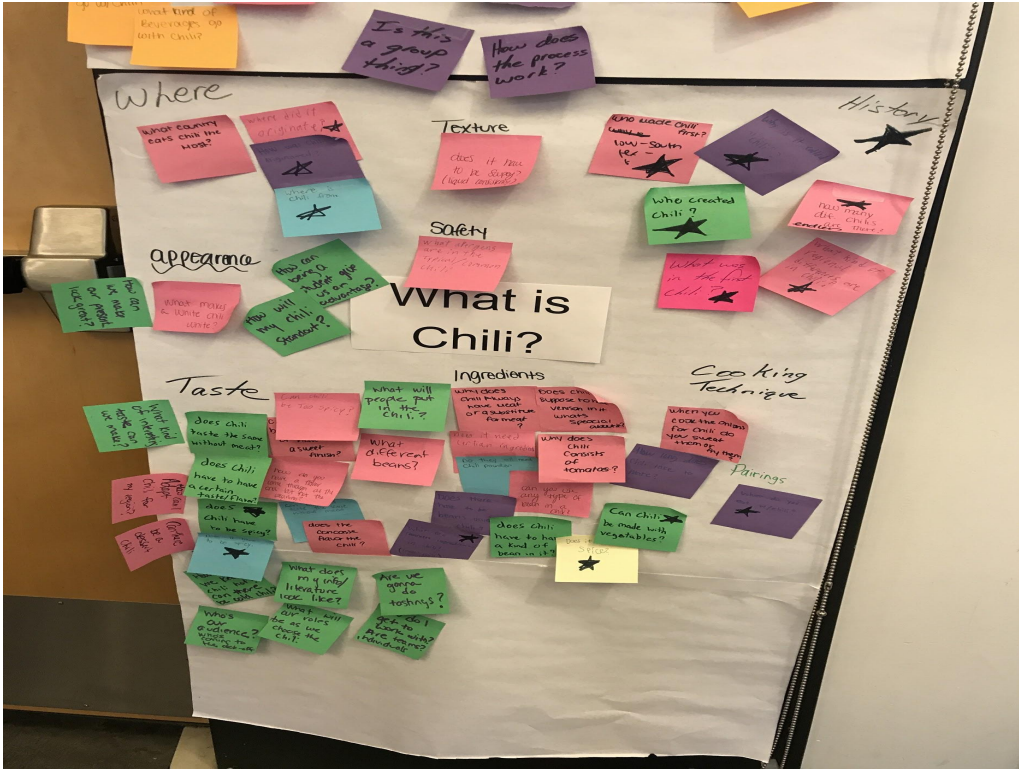
Kitchen Essentials

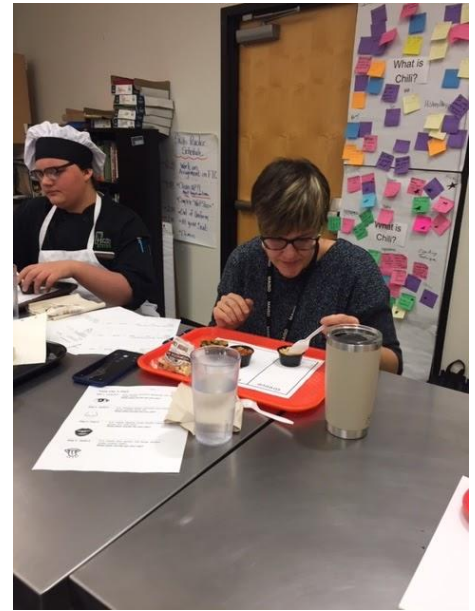
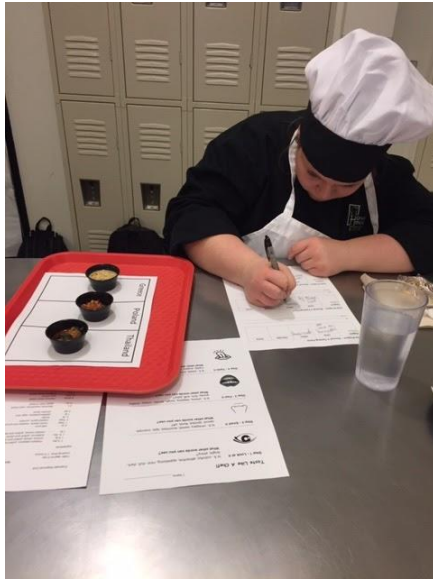
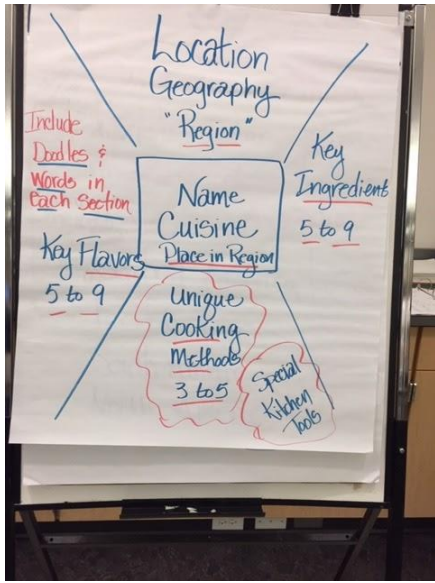
Keeping Food Safe

Cost Control

Driving Question Boards Hospitality and Tourism

What is Chili?





Allied Health

CIP: 51.000
Health Sciences



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Cluster: Utilize Structure and Function to Conduct Health Care Role

- Describe basic structures and functions of cells, tissues, organs and systems as they relate to homeostasis
- Compare relationships among cells, tissues, organs and systems
- Explain body planes, directional terms, quadrants and cavities

Driving Question Board: Allied Health

How can we create a quality prosthesis?

How can we create a quality prosthesis?

The whiteboard features a central question, "How can we create a quality prosthesis?", written in black marker. Surrounding this central text are several clusters of colorful sticky notes (yellow, pink, blue, orange) and handwritten labels in various colors:

- Design:** A large cluster of sticky notes on the left side, enclosed in a black hand-drawn circle.
- mobility/motion:** A cluster of sticky notes at the top center, enclosed in a blue hand-drawn circle.
- cost/access:** A cluster of sticky notes at the top right, enclosed in a red hand-drawn circle.
- anatomy of amputation:** A cluster of sticky notes at the bottom center, enclosed in a blue hand-drawn circle.
- PT goals:** A cluster of sticky notes at the bottom right, enclosed in a red hand-drawn circle.
- Specific pt. needs:** A cluster of sticky notes on the far right, enclosed in a red hand-drawn circle.

At the bottom of the whiteboard, there are several markers and a blue pom-pom.

Allied Health

CIP: 51.000
Health Sciences



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Career Ready Practices

Career Ready Skills

Act as responsible and contributing citizen and employee.

Apply appropriate academic and technical skills.

Attend to personal health and financial well-being.

Employ valid and reliable research strategies.

Model integrity, ethical and leadership and effective management.

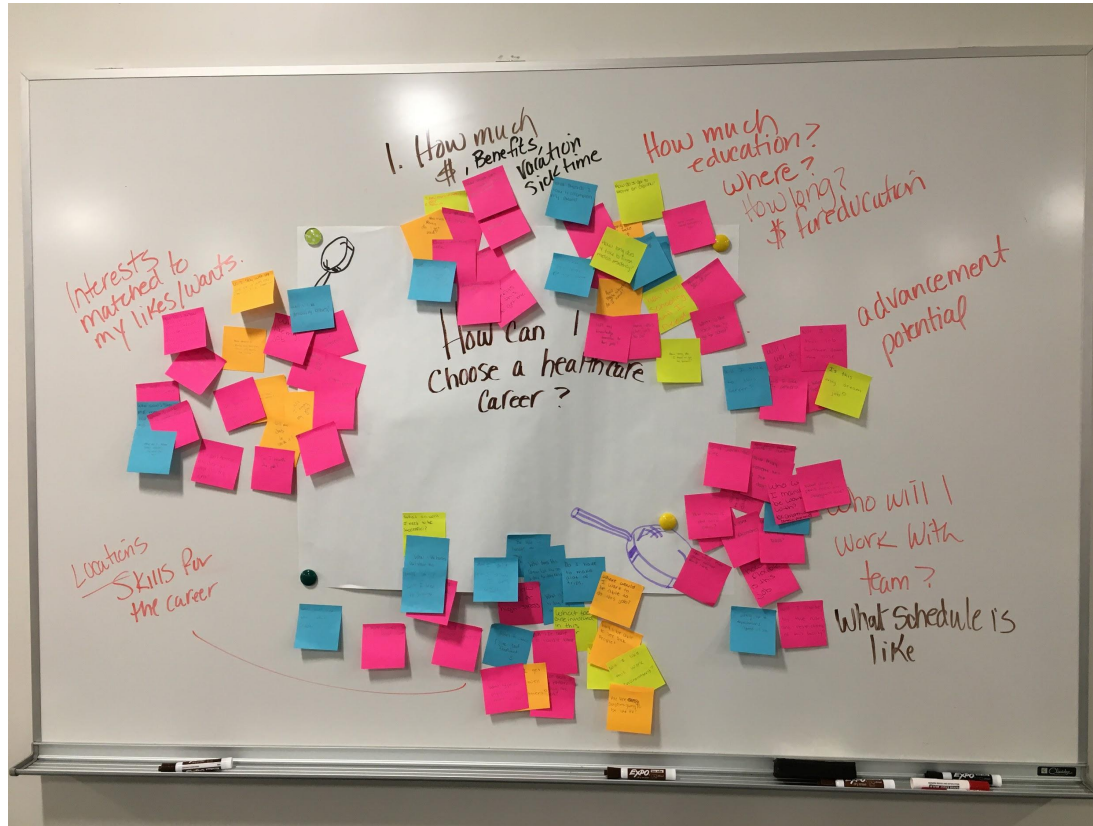
Plan education and career path aligned to personal goals.

Use technology to enhance productivity.

Utilize critical thinking to make sense of problems and persevere in solving them.

Work productively in teams while using cultural/global competence.

Driving Question: *How do we choose a healthcare career?*



The Assessment Question

ASSESSMENT IN PBL



10 Tips for Best Practices in PBL Assessment

1. Assess more, grade less.
2. Informal assessment is important too; ask students to explain and reflect on what they're learning.
3. Be transparent with students about the assessment process and bring them into it.
4. Allow student voice and choice in assessment, including differentiation.
5. Make sure students understand, can use, and "own" the tools of assessment, such as rubrics.
6. Assess success skills such as critical thinking, problem solving, and collaboration, in addition to content knowledge.
7. Be sure to assess individual learning and work, not just team-created products.
8. Focus on formative assessment, and give students the opportunity to improve their work.
9. Help parents make a shift in their expectations for what assessment information is shared with them, beyond traditional grades.
10. Broaden your thinking about *who* assesses; it's more powerful for students to hear a range of assessment voices, not only from the teacher but also peers, outside experts, parents and community members.

Rubrics

Career
Interaction

Prosthetic

Your Turn

Today's DQ:
**"What makes a
good
employee?"**