

Spice it up!

Innovative Activities for your Class

IX Seminar for English Teaching Professionals

August 23rd, 2025



WEBINAR:

Maximizing English Language Learning through
STEAM-Driven Project-Based Strategies

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1. What comes to mind when you hear:
STEAM? PBL?
2. How often do you step out of your comfort zone in the classroom?



Objectives

Define Core Concepts

Understand what STEAM and Project-Based Learning mean.

Identify Key Benefits

Explore the characteristics and advantages of STEAM and PBL in language learning.

Practical Application

Learn how to integrate STEAM-driven PBL strategies into your lesson planning.

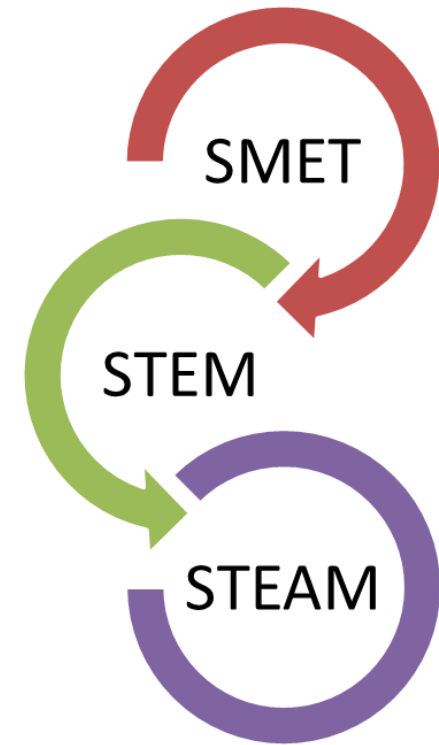
Analyze Activities

Review examples of mini-STEAM + PBL activities.



STEAM: An Integrated Approach

- **S – Science:** Understanding the natural world through inquiry and observation.
- **T – Technology:** Utilizing tools and innovations to solve problems and create solutions.
- **E – Engineering:** Applying scientific and mathematical principles to design and build.
- **A – Arts:** Integrating creativity, design, and communication skills.
- **M – Mathematics:** Developing critical thinking, logic, and problem-solving abilities.



The Imperative of STEAM Education

Future-Proofing Careers

65% of today's primary school children will work in jobs that don't exist yet, highlighting the need for adaptable skills. (English & Kitsantas, 2013)

Boosting Diversity

STEAM attracts girls to science and engineering, ensuring broader participation and economic growth.

Workforce Readiness

Cultivates students for in-demand STEAM careers, addressing global workforce needs.

Academic Proficiency

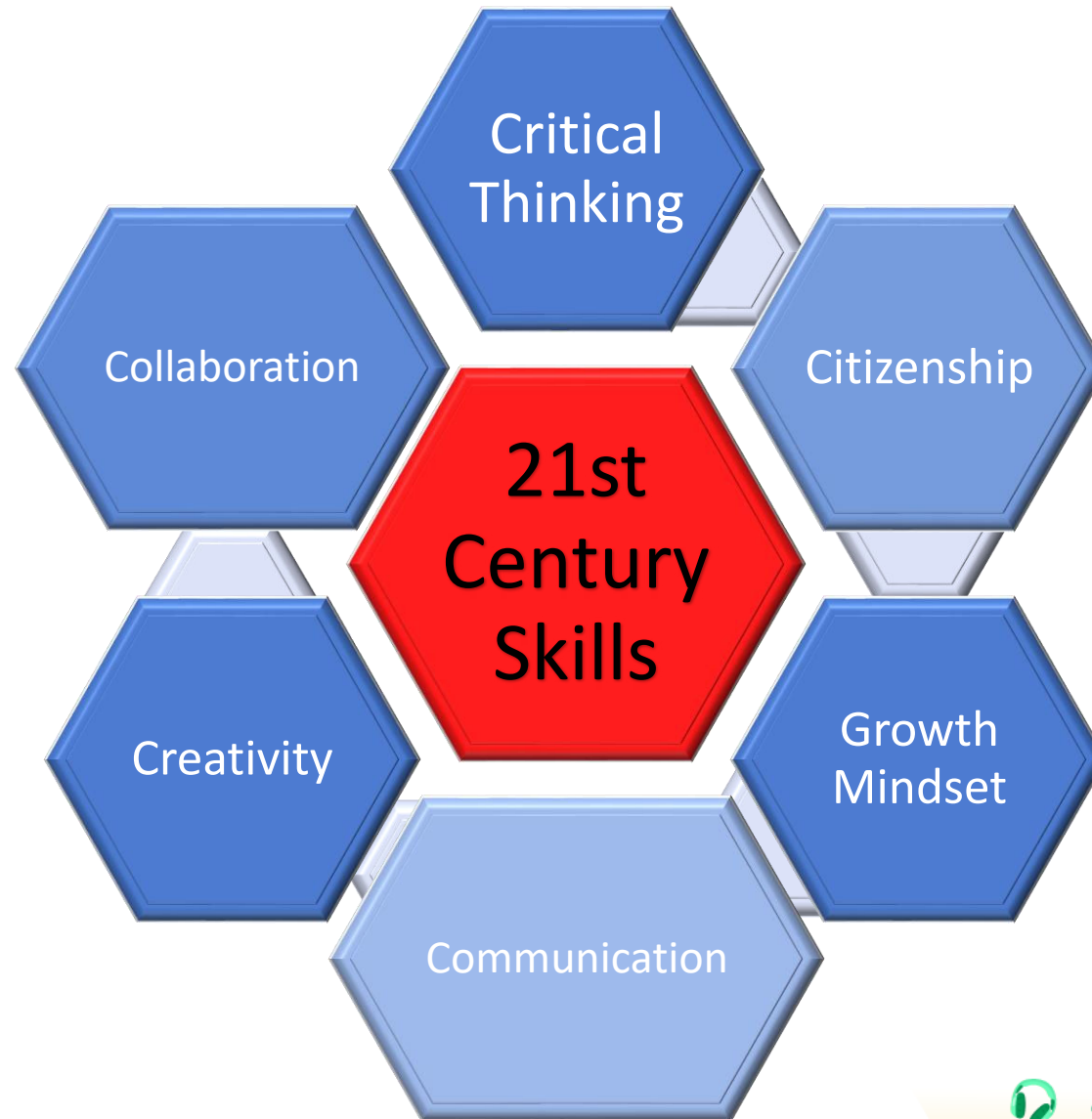
Increases student proficiency levels in Math and Science, building foundational skills.



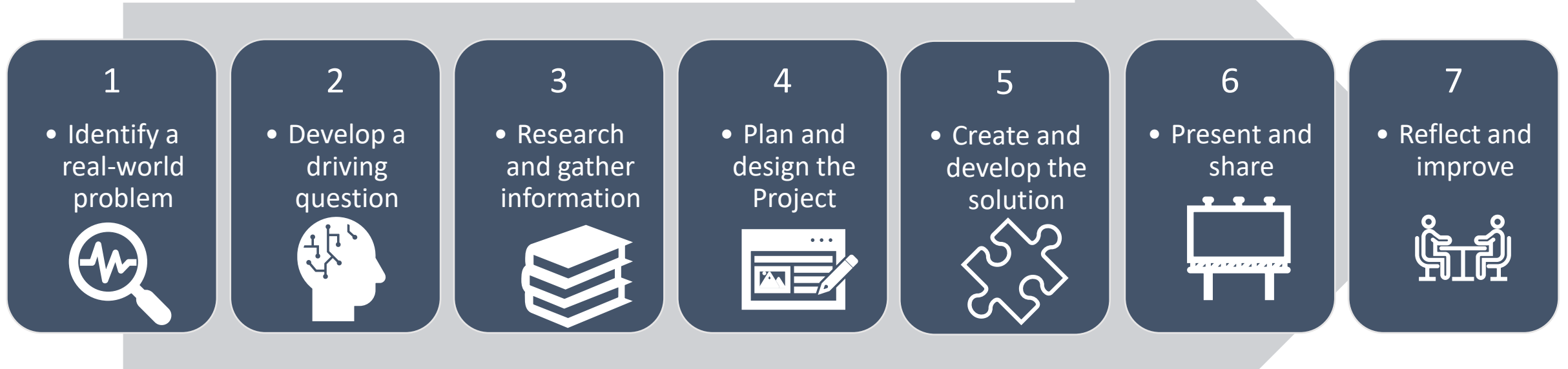
What is Project-Based Learning (PBL)?

- It is a student-centered learning methodology based on **projects**
- It focuses on solving **real-world and relevant problems**
- It develops both content knowledge & 21st-century skills
- It ends with a tangible **product or presentation**





The 7 Project-Based Learning Phases



Transforming Language Learning with STEAM + PBL

- **Authentic Communication**
 - Provides meaningful contexts for language use.
- **Holistic Skill Development**
 - Fosters creativity, critical thinking, and teamwork essential for language acquisition.
- **Promotes Inclusion**
 - Addresses diverse learning needs and styles through varied activities.



Transforming Language Learning with STEAM + PBL

- **Contextual Vocabulary**
 - Develops vocabulary and grammar naturally within project themes.
- **Increased Engagement**
 - Boosts student motivation and active participation.
- **Real-World Relevance**
 - Connects language learning to students' lives and communities.



Student and Teacher's Profiles

- **Cognitive and Linguistic Characteristics**
- **Competency-Based Focus**
- **Values and Citizenship**



Strategies for Aligning STEAM Content with Language Outcomes

- Teach language scaffolds
- Focus on transferable skills
- Use collaborative tasks
- Integrate technology



Strategies for Aligning STEAM Content with Language Outcomes

- Use self and peer assessments
 - Assign team roles
- Facilitate feedback sessions
- Collaborate with colleagues



Case Study 1

- Participants will meticulously analyze the lesson plan, identifying how each PBL phase is represented and how STEAM disciplines are interlaced throughout.
- Focus on the strategic alignment of the content, pedagogical approach, and context required for effective implementation.
- Link to Lesson Plan: [Integrated STEAM Lesson Plan](#)
- Link to checklist: [Checklist](#)



Case Study Analysis



- Each group will be assigned a distinct case study. Your task is to identify areas for improvement within the lesson plan and provide clear justifications for your proposed changes.
- The checklist will help you systematically evaluate the case study against effective PBL and STEAM integration principles.
- **Link to Case Studies & Checklist:** [Case Study Materials](#)
- A representative from each group will then present their analysis and conclusions, fostering a rich, collective learning experience.



Reflection & Discussion

Contextual Adaptation

How can you adapt the STEAM + PBL strategies and phases discussed today to fit your specific school environment, student demographics, and curriculum requirements?

Anticipating Challenges

What potential challenges might arise when implementing these approaches in your classroom, and how might you proactively address them? Share your concerns and potential solutions.





Questions and Answers

References

- Beers, S. Z. (2011). 21st Century Skills: Preparing Students for THEIR Future. STEM Education Coalition.
- English, M. C., & Kitsantas, A. (2013). Supporting Student Self-Regulated Learning in Problem- and Project-Based Learning. Interdisciplinary Journal of Problem-Based Learning.
- The Enterprise World. (2023, July 18). 7 steps to effective project-based learning. <https://theenterpriseworld.com/project-based-learning/>
- Thomas, J. W. (2000). A Review of Research on Project-Based Learning. The Autodesk Foundation.

