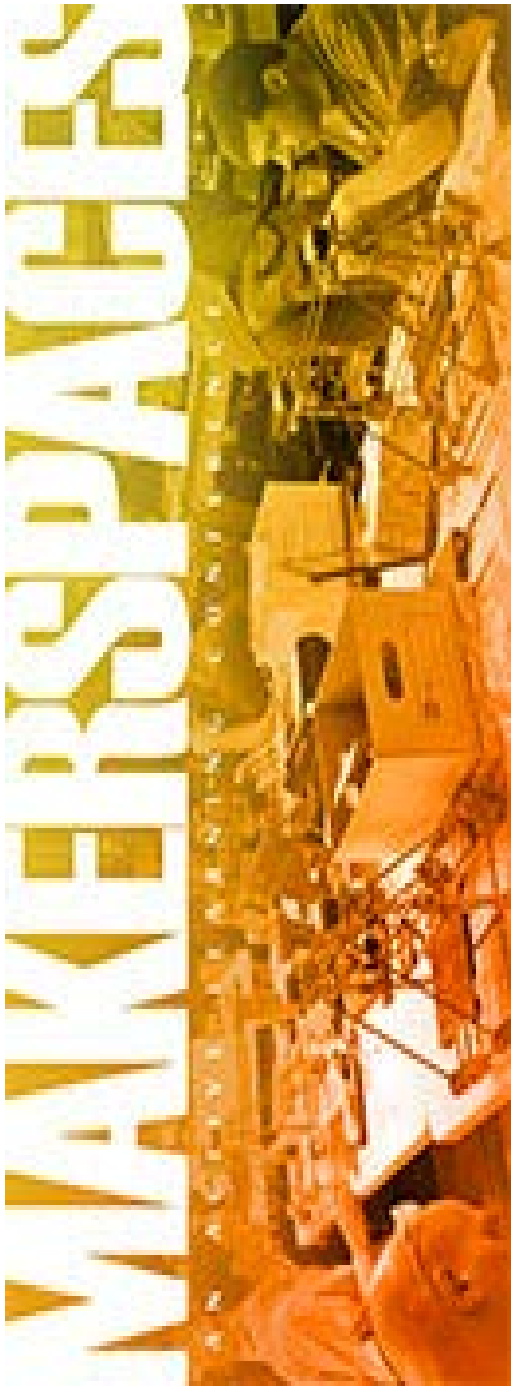


# The Missing Link: It's About the Learning

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What does Design and Transformation of Space really look like?

# Design and Transformation of Space

# Learning Objectives

- Develop an awareness of new learning models that supports modern learners
- Learn how to better design to support modern learners
- Evaluate how learning environments support new instructional models
- Analyze how the environment complements or distracts from learning

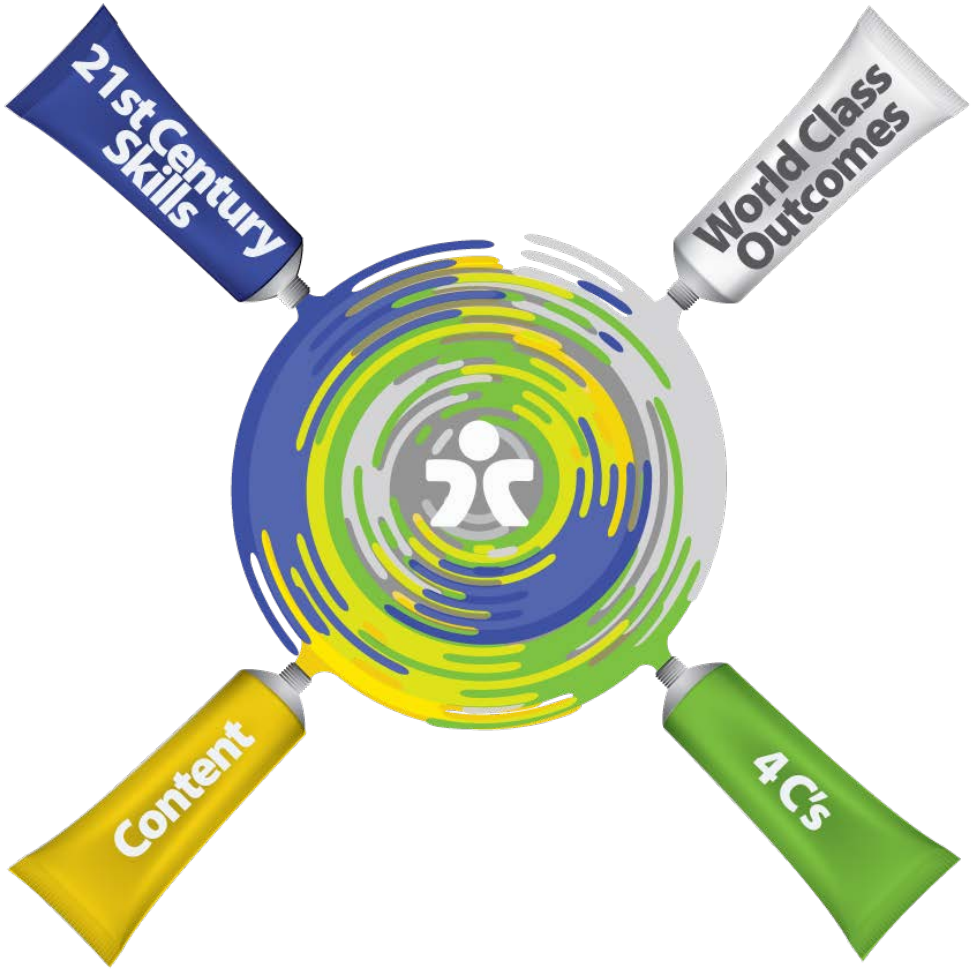
# Agenda

- Introduction
- Overview of learning models
- Design Activity
  - Share designs
- Wrap up
- Questions

# Learning Models

| Project Based Learning (Buck Institute) | Challenged -Based Learning (Apple) | Entrepreneurial Product-Orientated Learning EPoL (Young Zhao) |
|---|---|---|
| Design Thinking (Stanford dSchool) | Inquiry Based Learning (NYC iSchool) | STEM and STEAM |
| Cased Based Learning | Big Picture Learning | Blended Learning |

# Curriculum



# Learning Spaces

| | | |
|---|---|---|
| **Brainstorming or Thinking Walls** | **Research and Inquiry** | **Quiet Reading and Learning** |
| **Makerspace**<br>• **High Tech**<br>• **Low Tech** | **Collaboration** | **Whole Group** |
| **Presentation Area** | **Global Connection Zone** | **Online Learning** |

# University of Salford Manchester

## Environment does matter -

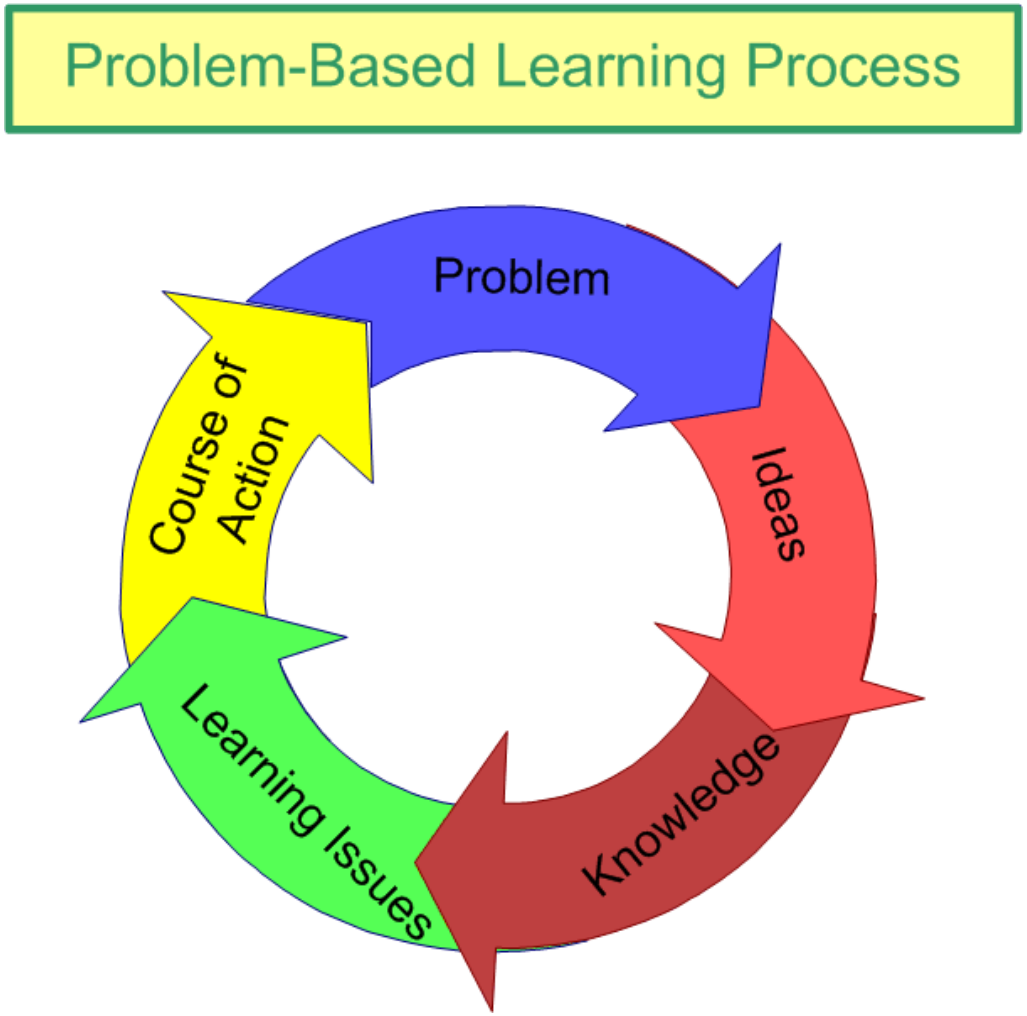
"The learning environment can affect student progress by as much as 16% throughout the academic year."

- 75% of the variation in pupil performance can be explained by a physical environment
- 15% of students are affected by the air quality of a classroom
- 20% of students are affected by the lighting of a classroom
- 12% of students affected by color of a classroom

Link to the research http://www.salford.ac.uk/built-environment/about-us/news-and-events/news/study-proves-classroom-design-really-does-matter

# Problem - Based Learning (PBL)

**Project Based Learning is an inquiry based method of instruction that creates learning environments which empower students to solve authentic problems and transcend content boundaries. PBL was created by The Buck Institute for Education.**



# Challenge Based Learning (Apple)

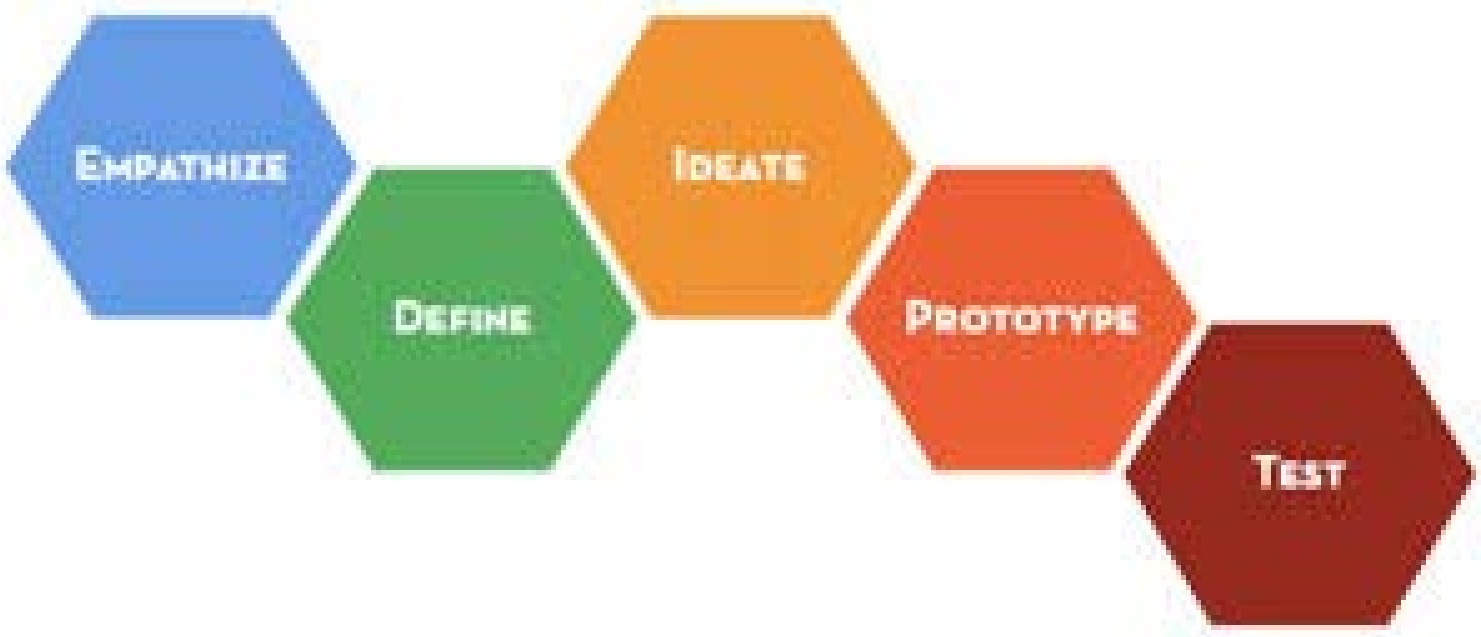
**A collaborative learning experience in which teachers and students work together to learn about compelling issues, propose solutions to real world problems and take action. The approach asks students to reflect on their learning and the impact of their actions and publish their solutions to a worldwide audience.**

# Product-Orientated Learning EPoL (Young Zhao)

**A personalized learning approach where students set their own goals and learning pathways. This model integrates inquiry, product  oriented learning, design thinking and challenge-base learning. The students connect with others globally as problem solvers, co-creators and partners for customers.**

# Designed Thinking
## (Stanford dSchool)

**Design Thinking is human-centered problem solving. The needs of the user are the focus in problem solving to implement solutions. The design thinking process consists of 5 steps:**

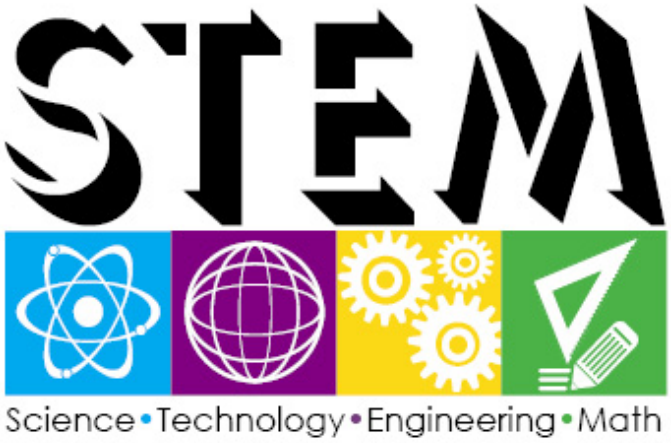


# Inquiry/Personalized Learning

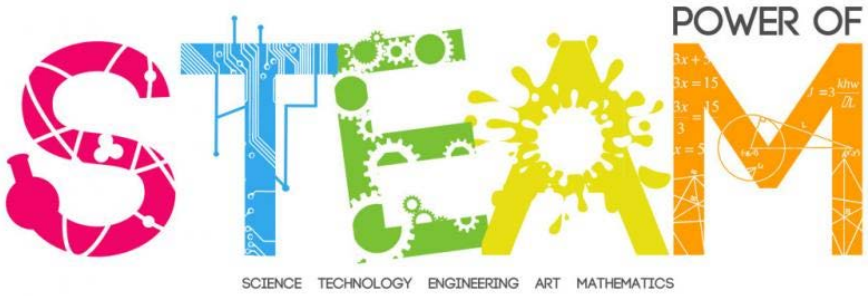
**Students are actively involved in solving authentic (real-life) problems within the context of the curriculum and/or community. Questioning is at the heart of this learning model. Research suggests that inquiry-based learning increases student creativity, independence, and problem solving skills.**

# STEM and STEAM

**An interdisciplinary approach that uses hands-on problem-based learning for real world solutions. This interdisciplinary approach provides a foundation for preparing students for the global job market**

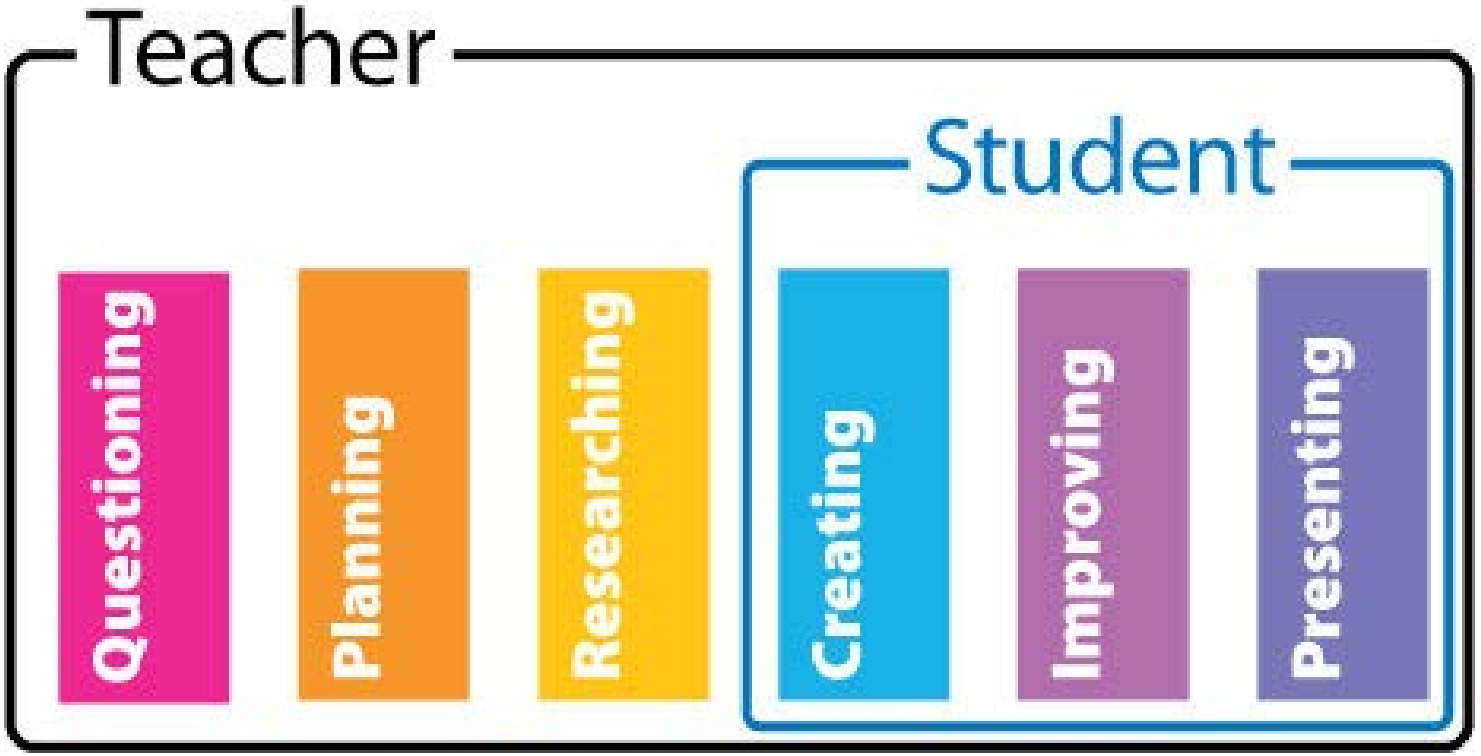



**A framework that connects all subjects in an interdisciplinary way. Shifting to a STEAM perspective means adding the art component to illustrate not only how the subjects are intertwined, but also for provides a learning structure for ever changing personal and global development.**



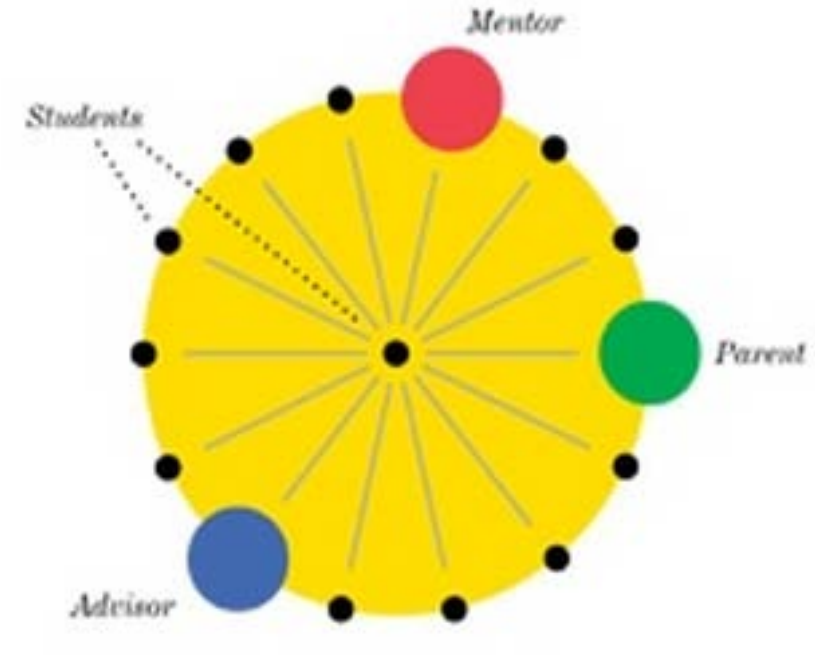
# Cased Based Learning

**Pioneered at Harvard University is an instructional design model where students are presented with cases from business and industry that are factually-based, complex real world problems accompanied by relevant events.**



# Big Picture Learning

**Personalized learning that puts the student's interest at the core of learning. Provides various structures and practices that are designed for teachers to know students and create learning pathways for them. Students are connected to internships based upon their interests, then teachers coach students to contact businesses job shadow then develop their internships. Students envision various future career and college pathways that are appealing to them based upon their interactions with the teachers and business mentors.**



# Blended Learning

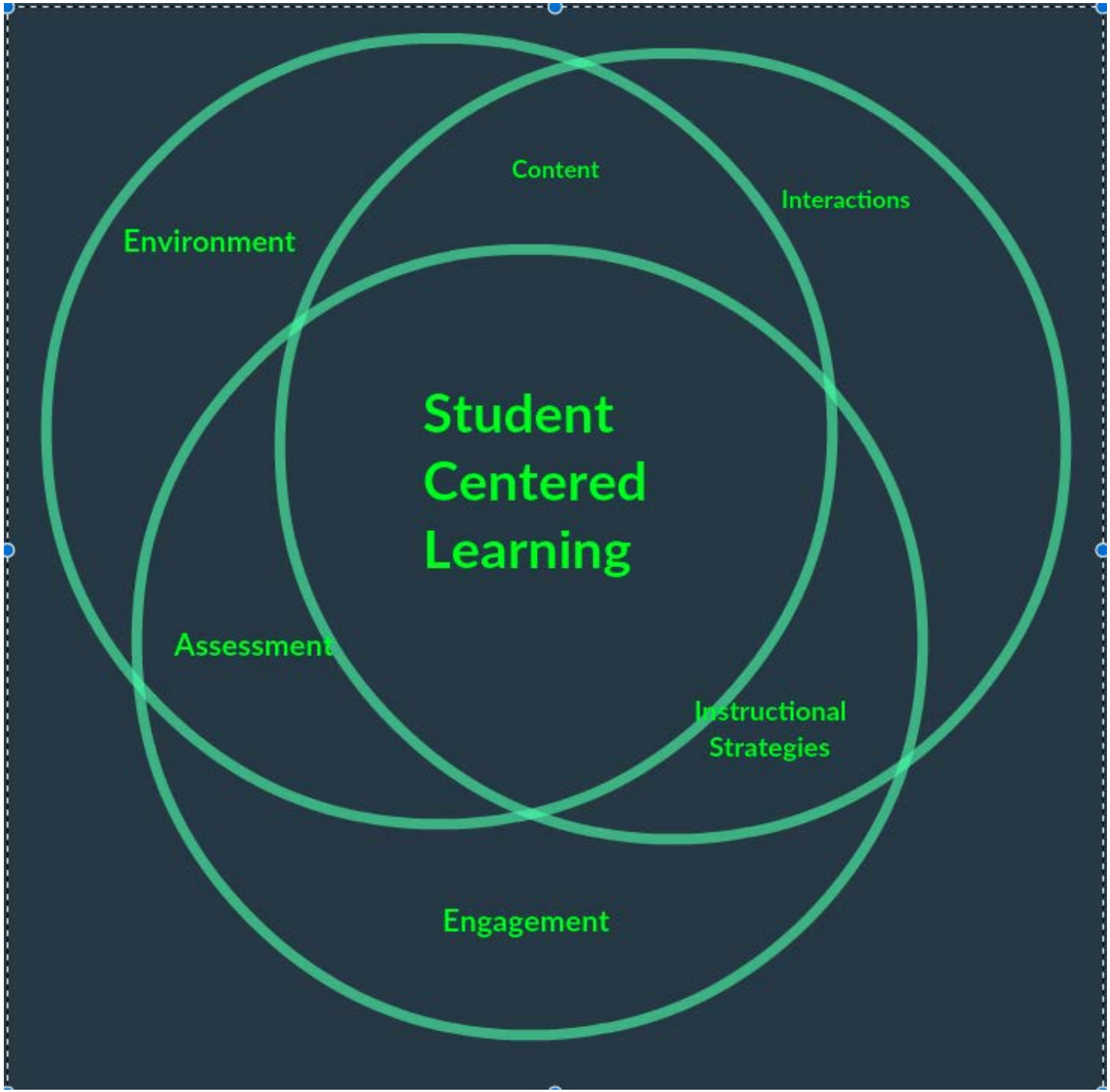
**Blended learning is a disruptive innovation that takes many forms. In a blended learning model students learn in both a physical space and through online delivery. These models will vary and are always evolving based on teacher roles, physical space, delivery methods, and scheduling. In a blended learning model, students control the time, place, path, and pace.**

# Rapid Prototyping Activity

- You will need:
  - 3 Student cards
  - 1 teacher card
  - 1 square foot card
  - 1 Instructional Model Document
  - 1 piece of graph paper
- In groups of 3 or 4 collaborate to design a learning environment based on your new knowledge and the needs of the learners.
- Be prepared to report on your design during a gallery walk.

# Common Threads of Learning Models

- Hands on Learning
- Global or Community Connection
- 4 C's (Critical Thinking, Collaboration, Creativity, Communication)
- Authentic Problem solving
- Student Centered
- Final Product


Content
Interactions
Environment
Student
Centered
Learning
Assessment
Instructional
Strategies
Engagement

# Reflection

- How has this experience changed the way you would design for learning?
- Why is it important to find out how learning happens in the classroom before design?
- In modern learning environments how can design distract or complement learning?

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# Questions

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# Design to Support Learners