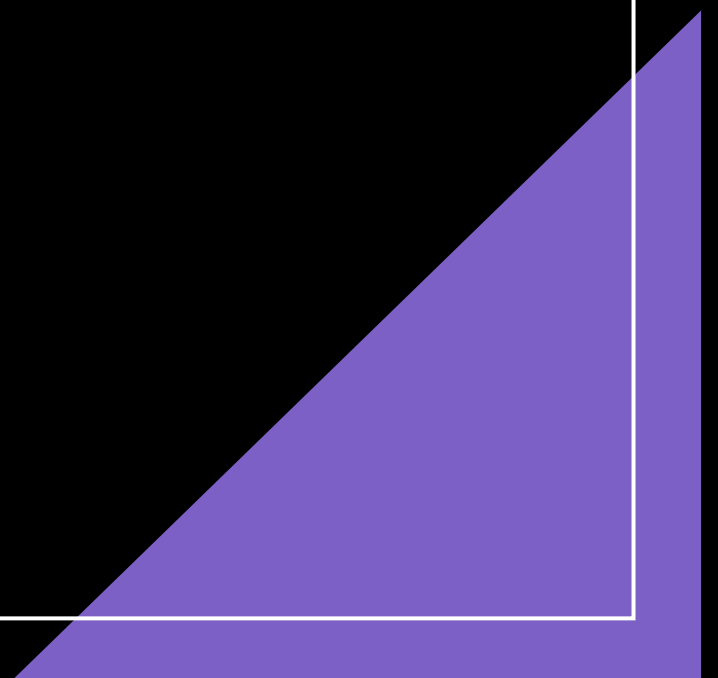# Enhancing Learner Engagement through Immersive and Problem-Based Learning Strategies
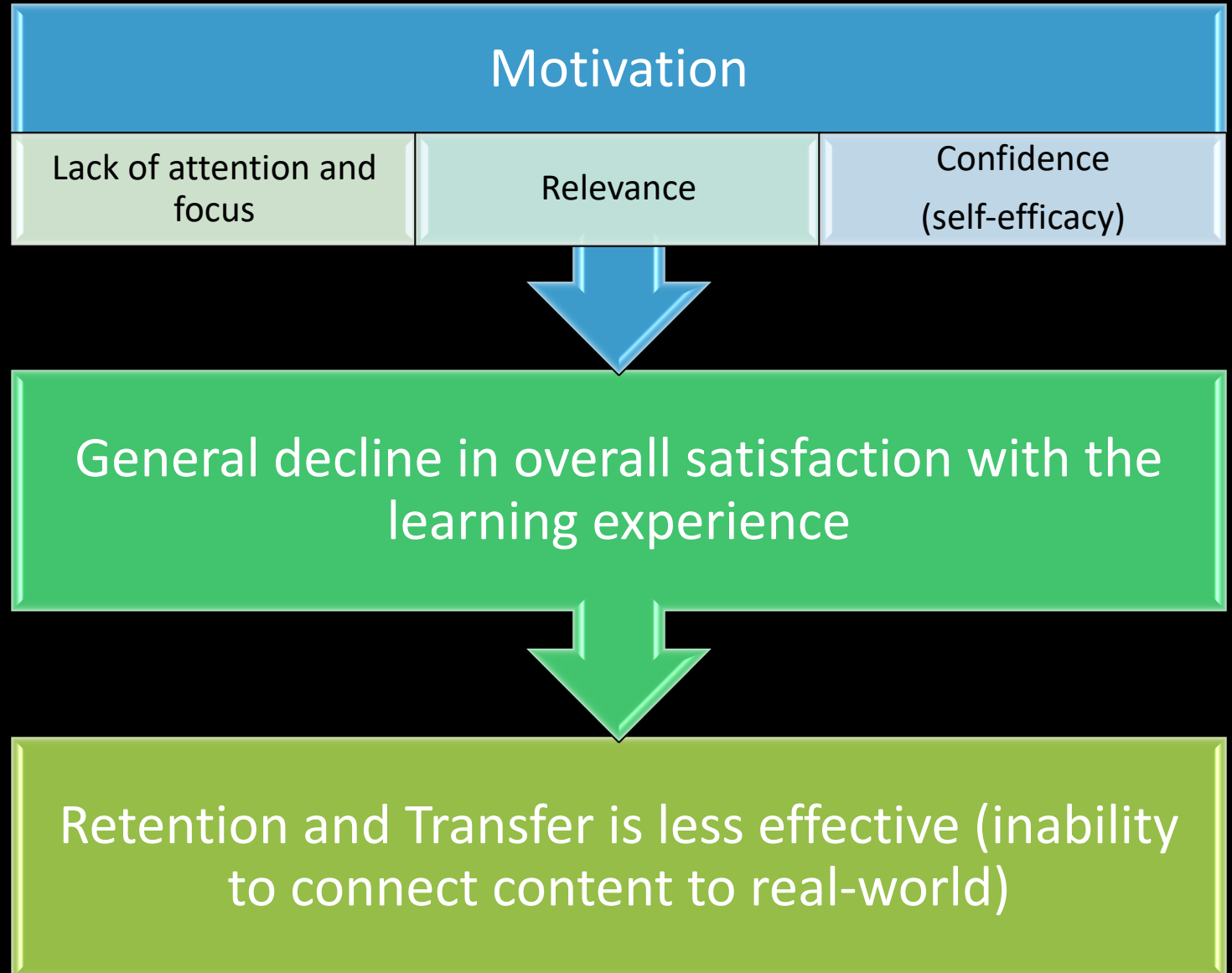
Presenter:

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Florida State University

Challenges of Learner Engagement

Motivation		
Lack of attention and focus	Relevance	Confidence (self-efficacy)

General decline in overall satisfaction with the learning experience

Retention and Transfer is less effective (inability to connect content to real-world)

What are some of the challenges you experience in engaging your students?

Take a few seconds to think about some of the:

- Challenges you experience in engaging your students.

Share your thoughts in the chat?

Why are my students <u>not</u> engaged…

Key Learning Principles

Learning is promoted when:

- Learners engage in solving real-world problems
- Existing knowledge is activated (foundation of new knowledge construction)
- New knowledge is demonstrated and then applied
- The new knowledge is integrated into the learner's world

(Principles adopted from Merrill's First Principles of Instruction, 2002)

How do you engage your students?

Take time to think about the following:

- What you are doing to engage your students?

- How do you involve your students in creating an engaging course?

Share your experience in the chat.

Why Immersive and Problem-Based Learning?

Grounded in learning by doing

Increases the learner "presence" within the learning process

Increases learner empowerment through increased interactivity (de Freitas et al., 2010)
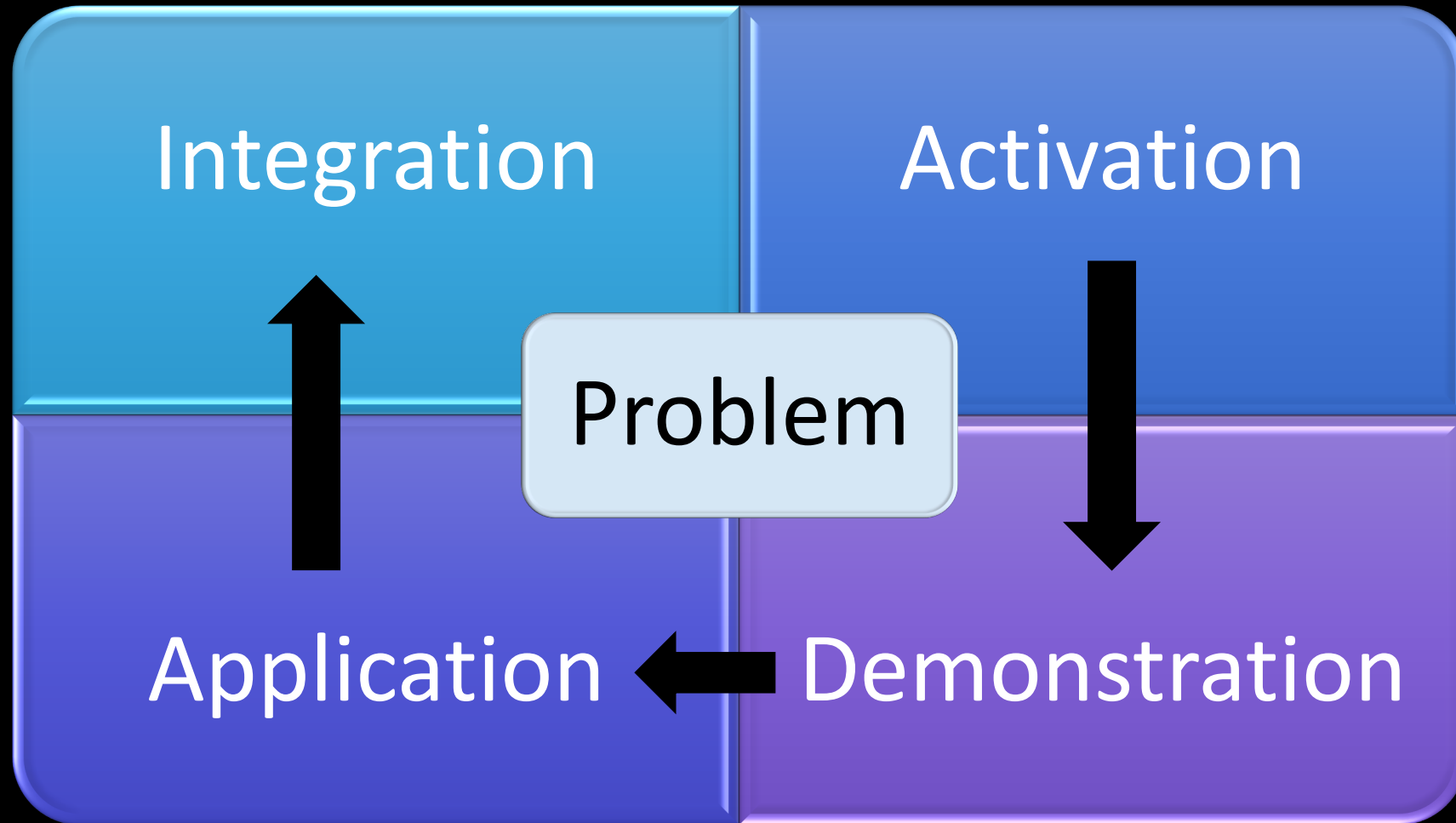
Increases motivation, knowledge retention, and transferability of knowledge/skills
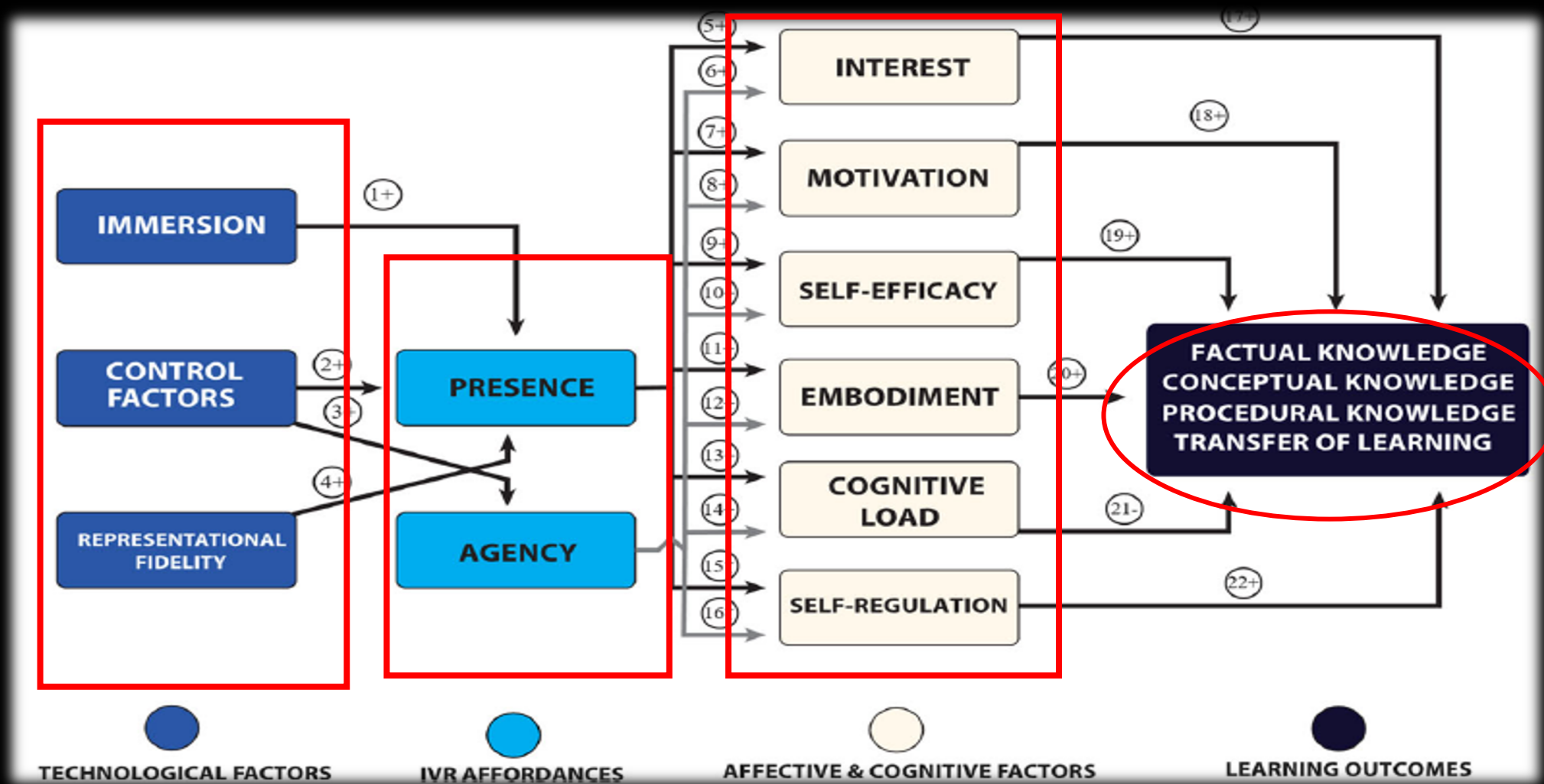
What is Immersive and Problem-Based Learning?

Table includes elements from Kumar, J. (2020). Everything you need to know about immersive learning, Elearning Trends.

Immersive Learning	Problem-Based Learning
Environmental-centered strategy that uses simulated or artificial environments to immerse students in the learning process.	Problem-center approach in which students learn by working to solve a problem.
Leverage technology, such as Virtual Reality, Augmented Reality, mobile devices, etc.	Technology is not required [but can be used or incorporated]
Immerses learner into a simulated, realistic world	Uses a problem-centered approach to immerse the learner into authentic real-world problems
Always implements gamification in learning	Not necessarily game-based [but can incorporate games or play]
Learning happens by enabling students to develop skills through experience and control the environment	Learning happens by enabling skill development through problem-solving and social exchange with others
A single activity can lead to multiple iterations	Multiple activities make up a single iteration

Merrill's First Phases of Effective Instruction

Cognitive Affective Model of Immersive Learning

Makransky, G. and Petersen, G. (2021). The Cognitive Affective Model of Immersive Learning (CAMIL): A theoretical research-based model of immersive virtual reality. Educational Psychology Review. https://doi.org/10.1007/s10648-020-09586-2

Example – Immersive Virtual Reality
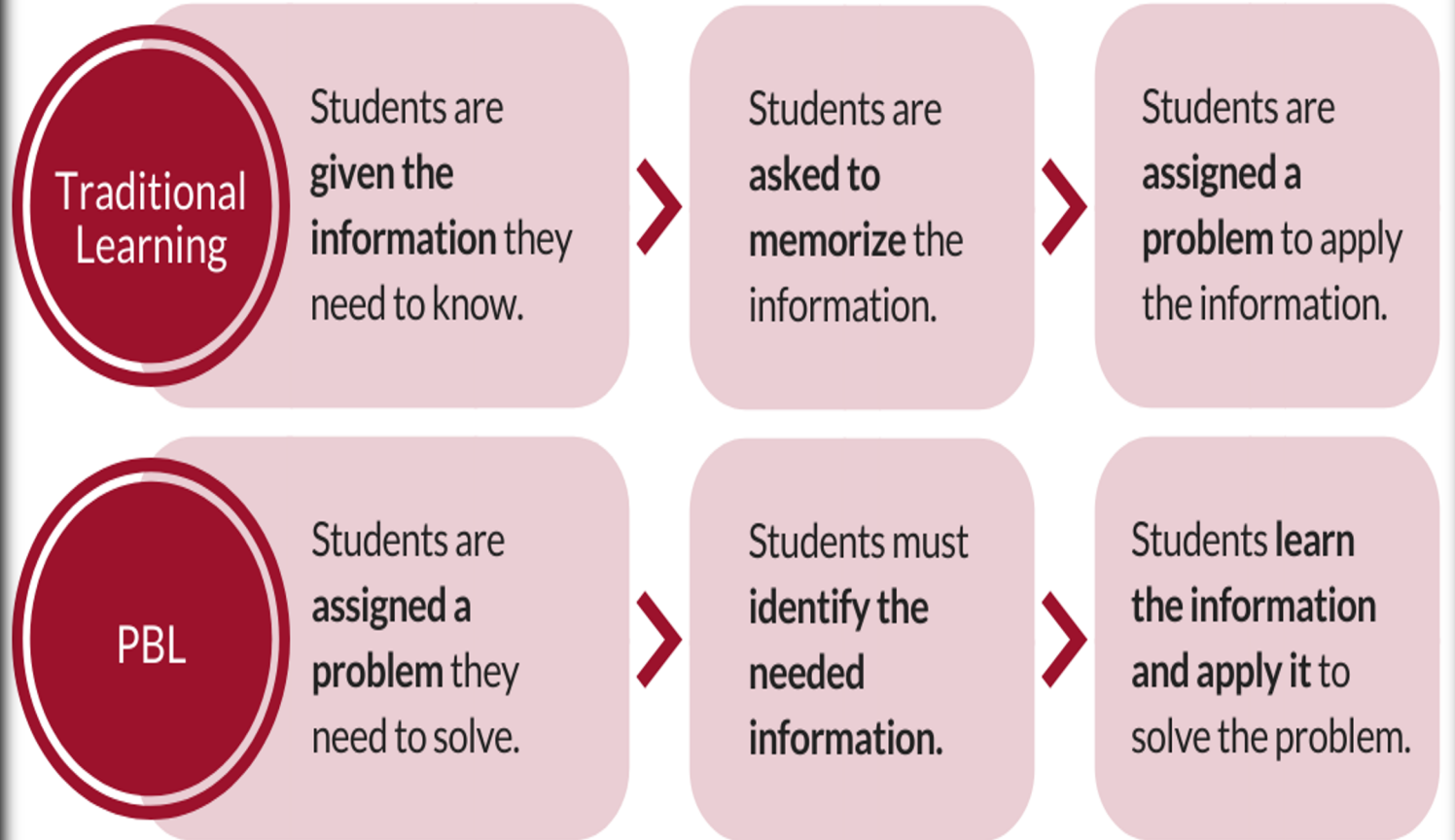
Problem-Based Learning Example

- Compensation Management Consulting Project

- Course is built around a semester long project

- Incorporates theory, methodology, statistics, judgement and interpretation, critical thinking into the project.

- Social interaction and exchange a foundational element of the project

- Encourage failure as an opportunity to learn

- Assigned to small group (4 to 5 students)

- Serve as consultants

- Each group is assigned to a client – local business

- Five phases of the project:
  - ✓ Market-analysis
  - ✓ Job Analysis
  - ✓ Job Evaluation
  - ✓ Job Description and Pay Grade Development
  - ✓ Pay Policy Mix (includes evaluation of total compensation)

- Present results to clients; client feedback and evaluation key to the learning experience

- Accept your role as a facilitator and coach versus a lecturer
- Deciding how best to apply principles of Immersive and PBL to your course
- Technology challenges
- Recognize the importance is skill development of problem-solving and processing skills
- Creating an appropriately supportive learning environment
- Deciding how to assess learning

Common Challenges

Benefits of Immersive and Problem-Based Learning Strategies

- Motivation
  - Increased attention throughout the course
  - Applying relevant knowledge and skills
  - Enhanced self-efficacy

- Transfer (ability to connect content to real-world)
  - Relevance of the content to their interests
  - Retention of content enhanced

- Enhanced satisfaction of the learning experience

Questions

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