CARIFORUM Intellectual Property Rights and Innovation

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Presentation Overview

Presentation Format

Capacity-building is one of the central pillars of this project. This aligns with the goal of training educators as they adapt IP principles in teaching their various subject areas.

This presentation will comprises the following:

- Activity
- A Proficiency-Based Approach
- IP Pedagogical Strategies
  - Active Learning
  - Game-Based Learning
  - Collaborative

What are the six (6) Ps that were identified in the carIPI methodology?

Pedagogical Strategies

- Pedagogical strategies/modern training methodologies refer to any training strategy/approach that is adopted to enhance the training experience by:

1. Improving engagement
2. Facilitating collaboration
3. Allowing for hands-on experiences
4. Allowing for technology integration
5. Increasing retention

Modern Training Methodologies

Game-Based Learning

Collaborative Learning

Self-Learning

Problem-Based Learning

Spaced Learning

The Flipped Approach

3D Modeling

Virtual Worlds

Trainee/Learner-Centred Training is an active experience.
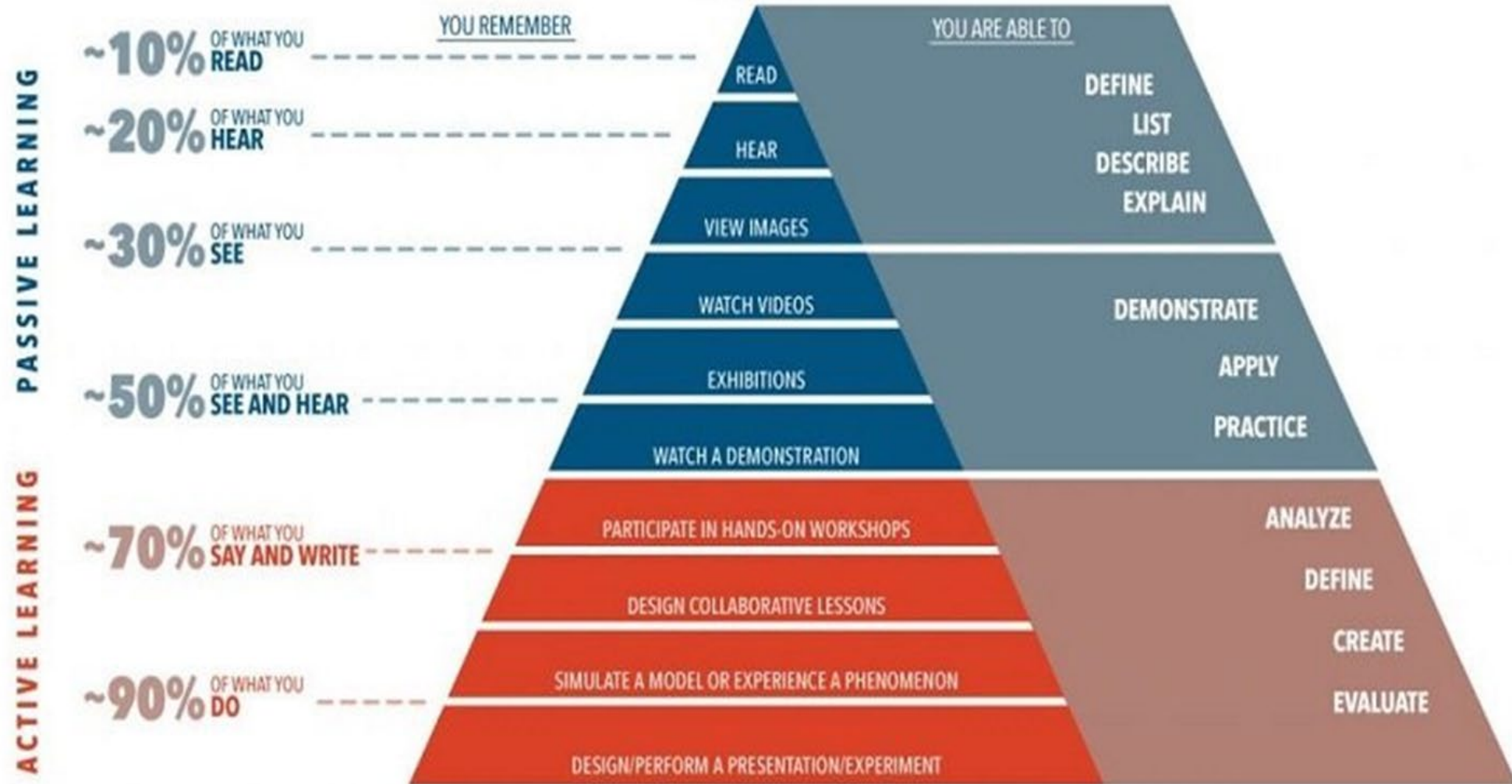

‘tell me and i'll forget.
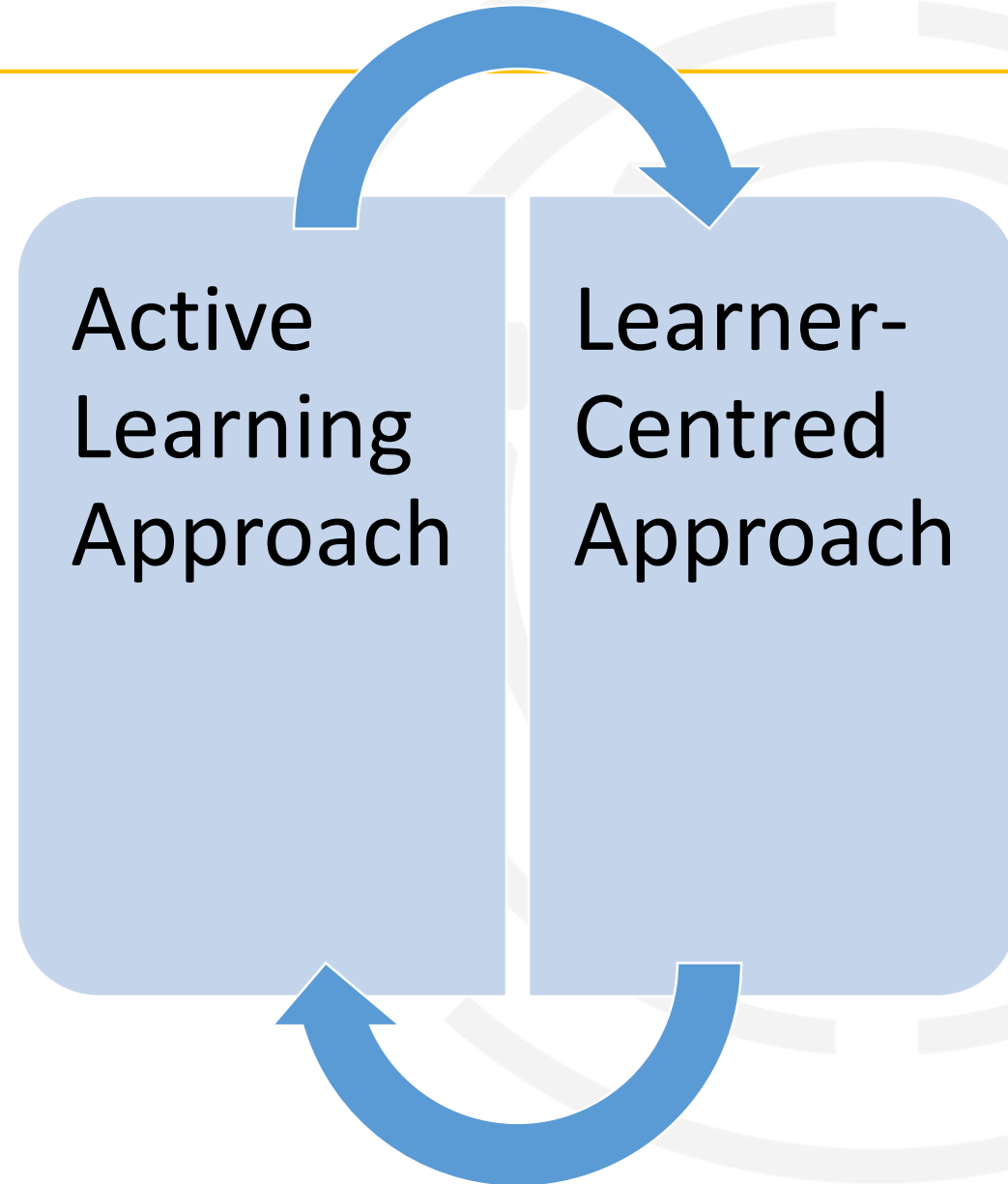show me and i may remember.
involve me and i learn.

- Benjamin Franklin

Trainee-Centred Training
Active Learning

CONE OF EXPERIENCE
EDGAR DALE

Obsidian LEARNING

PASSIVE LEARNING

YOU REMEMBER

~10% OF WHAT YOU READ

~20% OF WHAT YOU HEAR

~30% OF WHAT YOU SEE

~50% OF WHAT YOU SEE AND HEAR

ACTIVE LEARNING

~70% OF WHAT YOU SAY AND WRITE

~90% OF WHAT YOU DO

READ
HEAR
VIEW IMAGES
WATCH VIDEOS
EXHIBITIONS
WATCH A DEMONSTRATION
PARTICIPATE IN HANDS-ON WORKSHOPS
DESIGN COLLABORATIVE LESSONS
SIMULATE A MODEL OR EXPERIENCE A PHENOMENON
DESIGN/PERFORM A PRESENTATION/EXPERIMENT

YOU ARE ABLE TO

DEFINE
LIST
DESCRIBE
EXPLAIN

DEMONSTRATE
APPLY
PRACTICE

ANALYZE
DEFINE
CREATE
EVALUATE

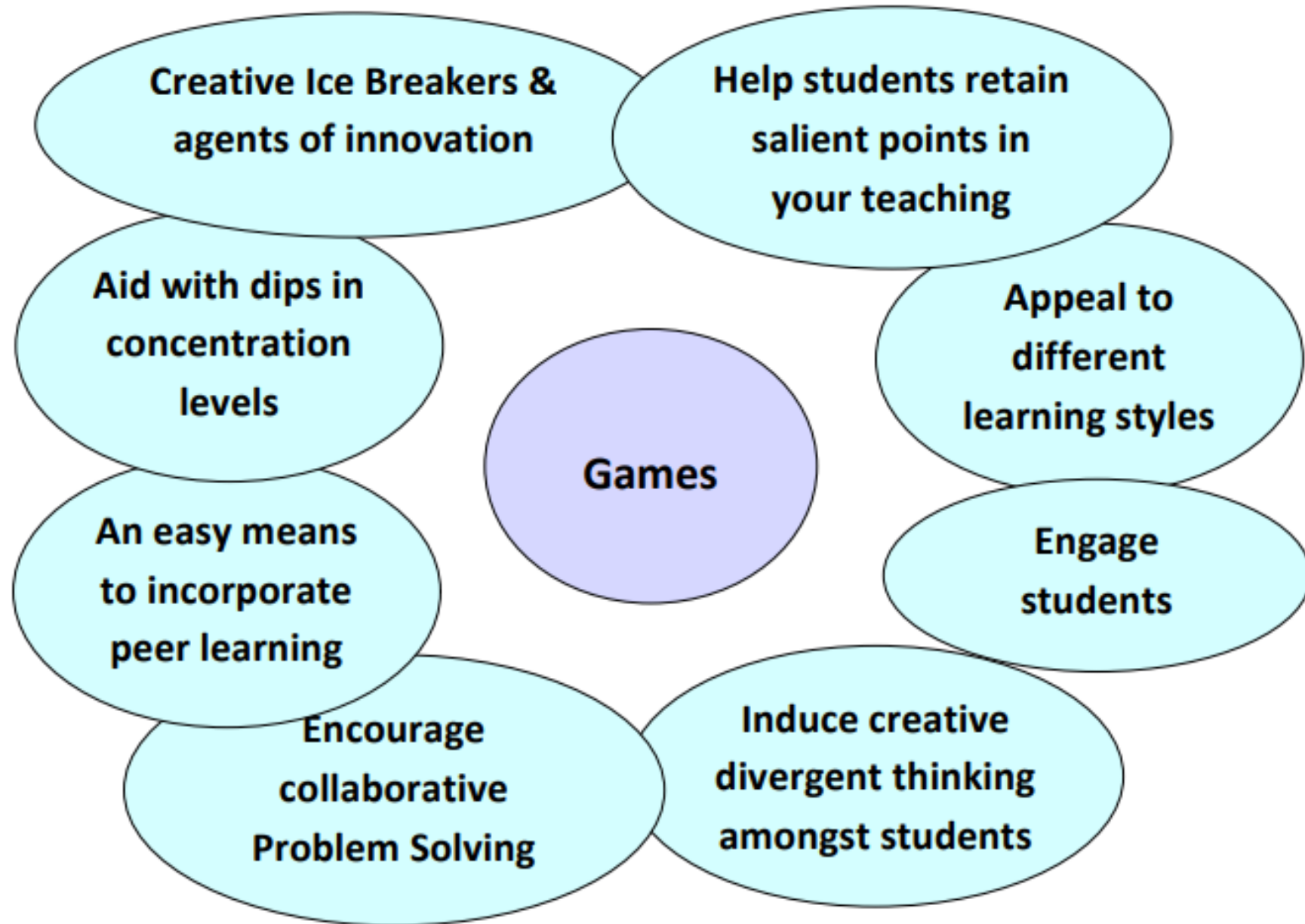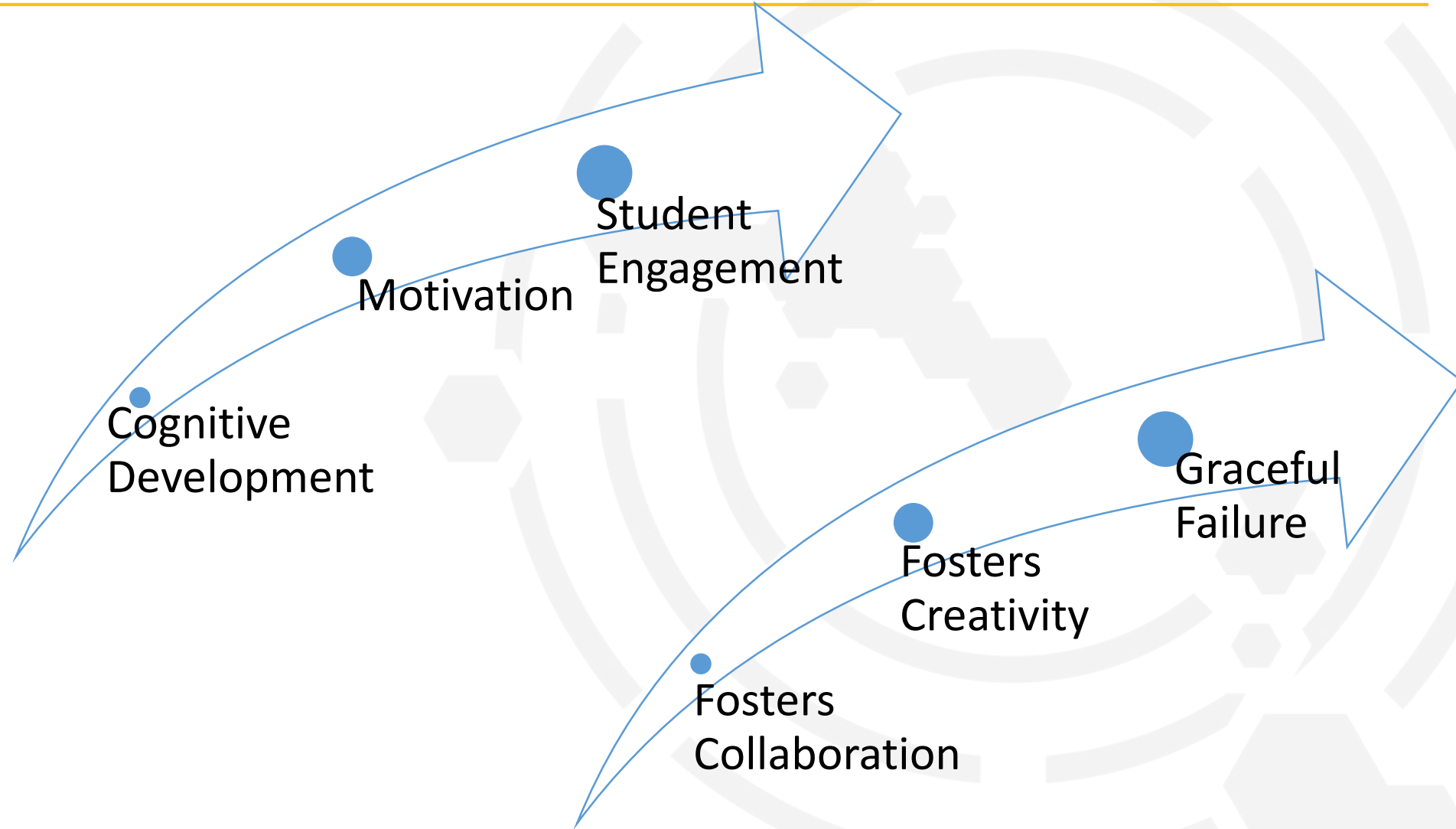# Active Learning

What is Game-Based Learning?

- Game play with defined learning outcomes (Shaffer, Halverson, Squire, & Gee, 2005).

- The design process of games for learning involves balancing the need to cover the subject matter with the desire to prioritize game play (Plass, Perlin, & Nordlinger, 2010).

Why Game-Based Learning? (Benefits)

Creative Ice Breakers & agents of innovation

Help students retain salient points in your teaching

Aid with dips in concentration levels

Appeal to different learning styles

Games

An easy means to incorporate peer learning

Engage students

Encourage collaborative Problem Solving

Induce creative divergent thinking amongst students

Why Game-Based Learning? (Benefits)

Cognitive Development

Motivation

Student Engagement

Fosters Collaboration

Fosters Creativity

Graceful Failure

Principles of Game-based Learning

Deep Understanding

Problem-based Learning

**Empowered Learners**

Principles of Game-Based Learning

- **Empowered Learners:** games empower students by making them agents/players. The **actions/decisions** of these players ultimately affect the outcome of the game.
  - Games also empower learners by allowing **customization** of the learning experience eg via attempting different strategies to beat/complete the game and become a new type of learner.
  - Games help to empower learners via **identity** (e.g. gaming avatars, goals).

- **Problem-based Learning: Sequencing of problems** (from simple to more difficult) helps the brain to develop effective genitive solutions that learners can adapt/use later on.
  - The **pleasantly frustrating principle** ensures that a problem must be somewhat challenging to the student.

- **Deep Understanding: System thinking** games give rise to effects based on the decisions players make. This allows for model-based reasoning (building a model of how rules interact) which is the basis of scientific thinking.

Face-to-Face

Synchronous

Asynchronous

Blended
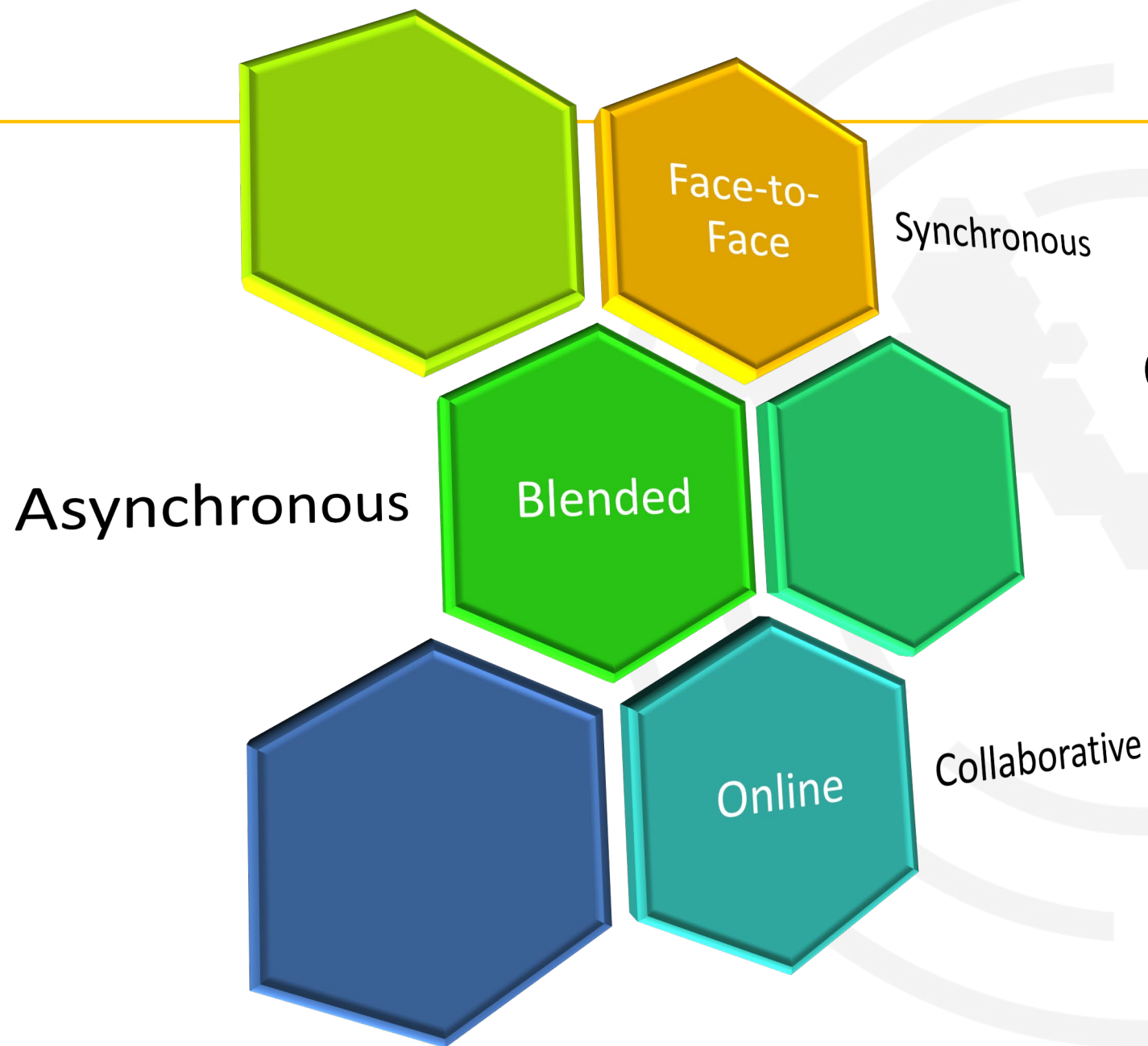
Game-Based Learning Contexts

Online

Collaborative

Collaborative Approaches
Dr. Roberta Niles

What is Collaborative Learning? -
"Two heads are better than one."

❑ ***Collaborative learning*** is the educational approach of using groups to enhance learning through working together

❑ Collaborative learning is a form of social learning that is distinctive in one respect: Individuals learn along *with* others, not *from* an instructor or expert.

❑ Learners work with each other on projects, where they must collaborate as a group to understand the concepts being presented to them

# What is Collaborative Learning -
"Two heads are better than one."

❑ Some confusion exists about the difference between collaborative and cooperative learning
  ❑ In cooperative learning, participants are responsible for a specific section of their own learning and success, and also that of the group as a whole. The group has a director.
❑ In collaborative learning, individual participants must also take responsibility for their team learning and succeeding, but their roles, resources, and organization are left up to them. The group self-directs.

Combined Approaches & Examples

A combination of approaches is often more effective.
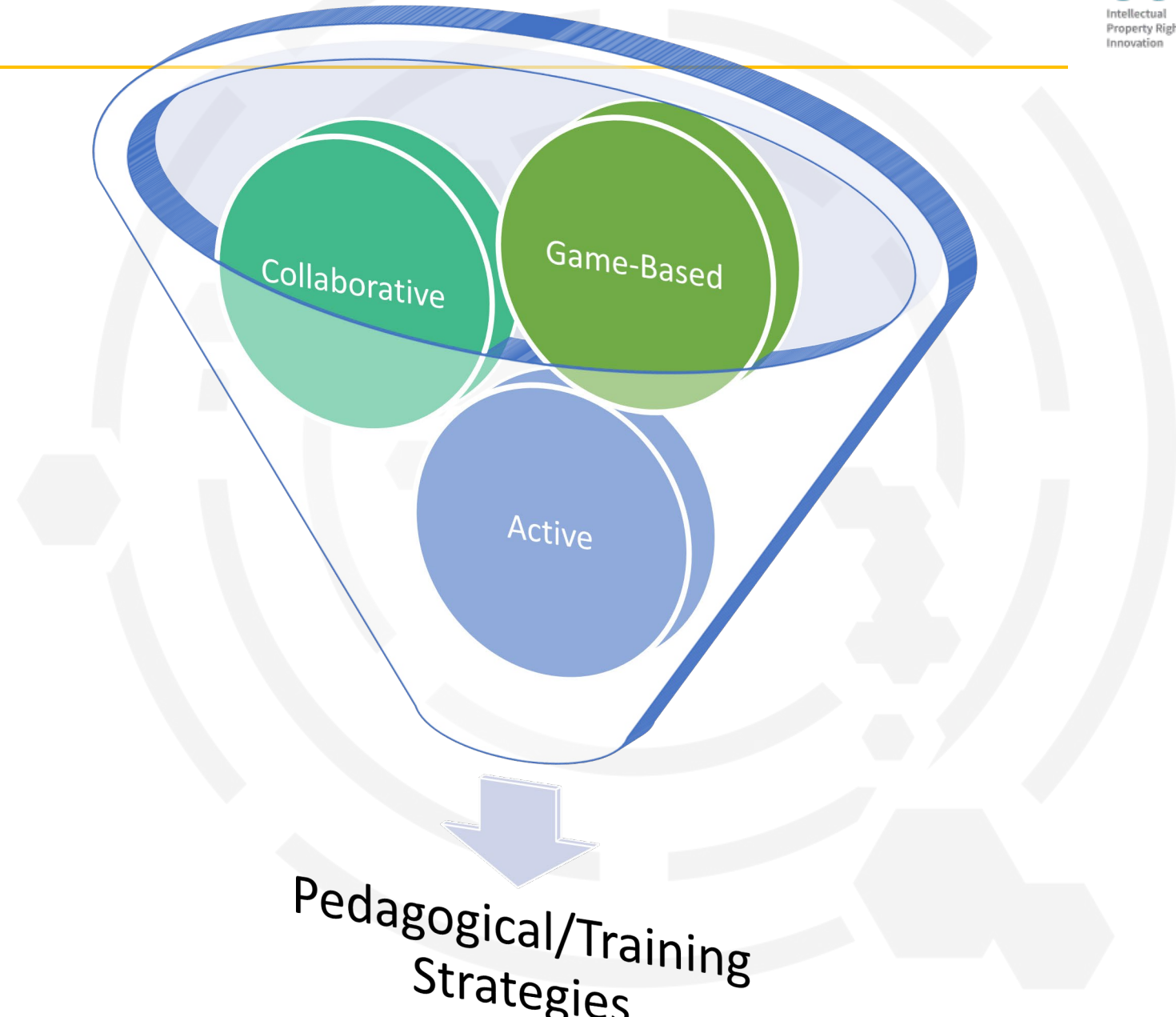
Combined Approaches & Examples

IdeasPowered@school Educational Materials

- **<u>Primary School</u>**
- Go Creative Boardgame (upper primary)
- Go Creative Lesson Pack
- Playground Games
- Inventor Corner
- Logo Making

Combined Approaches & Examples

IdeasPowered@school Educational Materials

Secondary School

- Creativity Diary
- Creatrivia Boardgame
- Creatrivia EU/Caribbean Questions
- Entrepreneurship

Combined Approaches & Examples

IdeasPowered@school Educational Materials

Guidance provided on how IP can be incorporated in the various subject areas.

- Art

- Economics

- Geography

- History

- IT

- Language

- Music

- PE

- STEM

Which of the following are you most anticipating in the training experience?

Collaborative Approaches

Game-Based Approaches

Hands-On/Active Learning Approaches

All of The Above

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Thank you * Gracias * Merci * Bedankt

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