



Learning From Experience - CEIT609

Case Study 2: Experiencing an Inventory Observation

İrem Gökçe AYDIN
1550268

OUTLINE

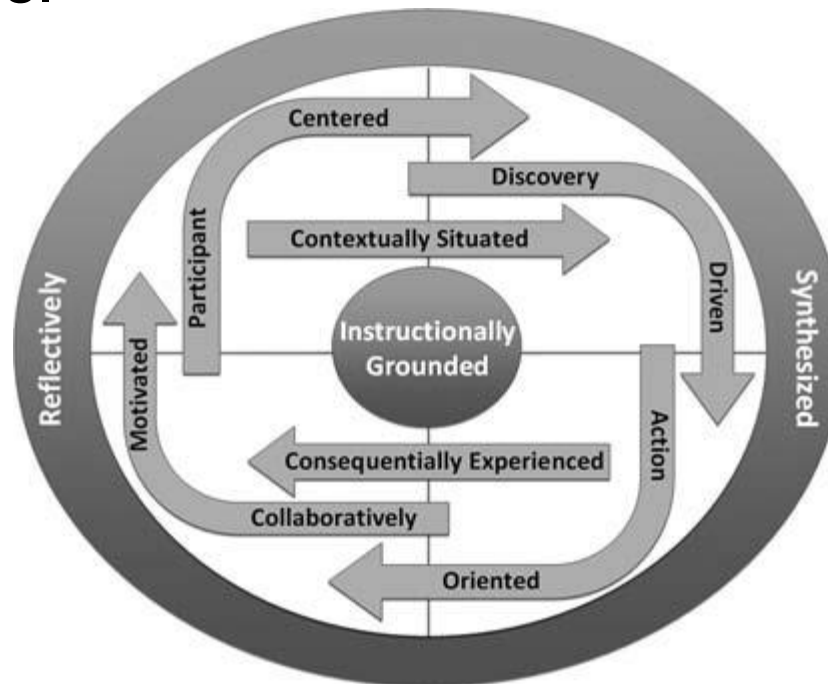
- Building a 3DLEs
 - Design Principles
 - Macrostructures
 - Archetypes & Sensibility
- Architectural Alignment of Learning Experiences
- Designing By Archetype
- Implications
- Learning From Experience
 - Case Study 2
- Our Perspective
- References

1- Building a 3DLEs

- the lack of knowledge or capability of the participant ~ need to have that knowledge or capability to overcome a challenge or complete a specific task
- In designing 3DLEs, content is king, but context is the kingdom.
- Instead, the true potential of 3DLEs will be realized in demonstrating how purposeful they can be in allowing participants to act and interact toward a common goal, fail, try again in a different way, and eventually (but much more rapidly and safely than in real life), achieve the desired learning objectives.
- In essence, the optimal goal of a 3DLE is to blur the lines between learning and doing.

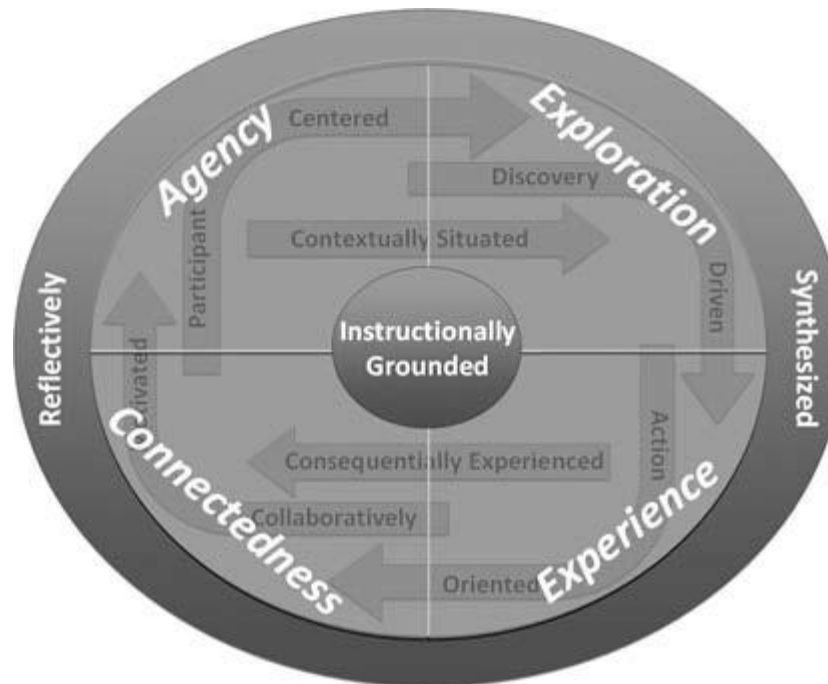
1.1 - Design Principles

- Eight design principles to guide instructional designers in their quest to create immersive and engaging 3DLE
- The grounding principles and the experiential principles.



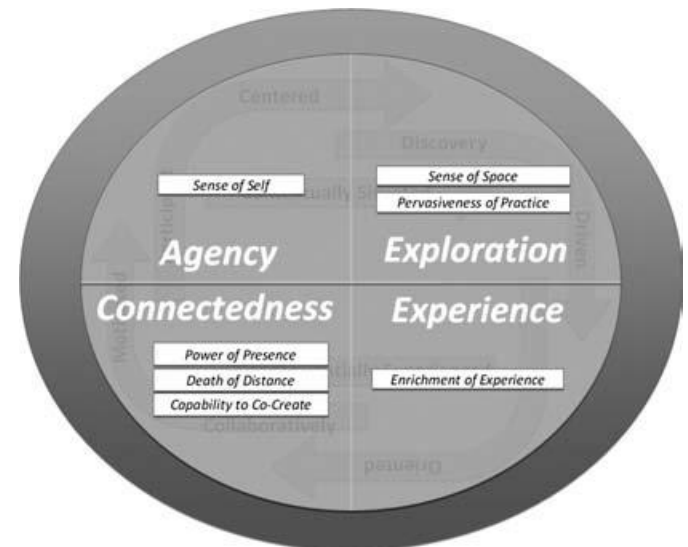
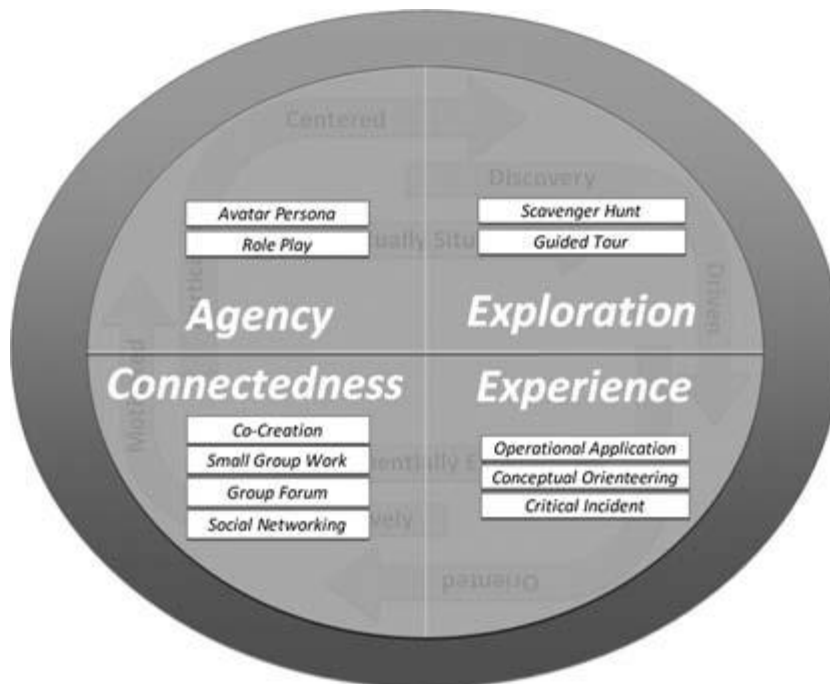
1.2 - Macro Structures

- each macrostructure is activated within the 3DLE design principles



1.3 - Archetypes & Sensibility

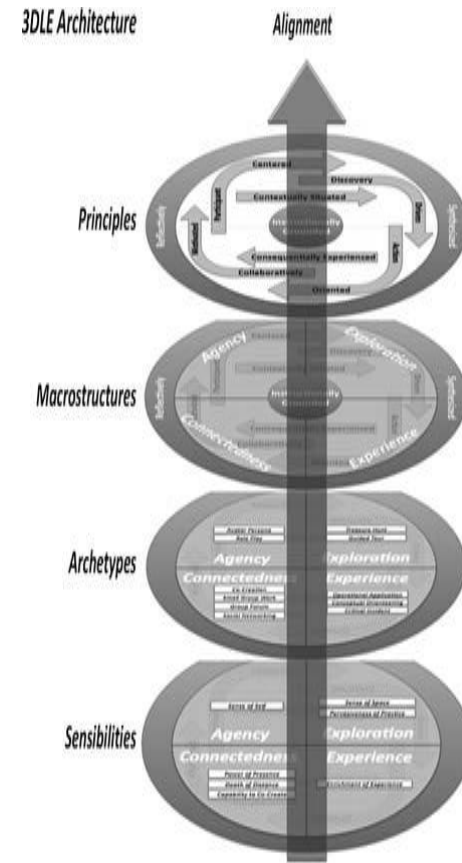
- Archetypes are the basic building blocks of 3DLEs. Each archetype achieves a specific set of learning outcomes and activates a specific macrostructure.



2- Architectural Alignment of Learning Experiences

Table 4.2. Key Questions to Ask at Each Level of the Architecture

| Architecture Level | Key Questions to Consider |
|------------------------|---|
| Principles | <p>Do the desired learning outcomes absolutely require the application of a 3DLE?</p> <p>Is the design instructionally grounded and does it incorporate reflective synthesis following the immersive activities?</p> <p>Has every effort been made to ensure that the eight experiential design principles have been adhered to in 3DLE design?</p> |
| Macrostructures | <p>What are the primary macrostructures that are activated by the desired learning outcomes?</p> <p>What design principles are most aligned with these macrostructures, and do they receive appropriate emphasis within the 3DLE design?</p> <p>Is the 3DLE design balanced? Have all macrostructures been activated to some degree?</p> <p>Is there alignment with the learning goals?</p> |
| Archetypes | <p>Which archetypes are most aligned with the primary macrostructures and emphasized design principles?</p> <p>Is the 3DLE design streamlined?</p> <p>Do the archetypes fit together seamlessly into a narrative or set of activities that engage the learner?</p> |
| Sensibilities | <p>Which sensibilities are most aligned with the primary macrostructures, emphasized design principles, and archetypes?</p> <p>How can these sensibilities be leveraged to create a more immersive and engaging 3DLE?</p> |



3- Designing By Archetype

- Lesley Scopes', at the University of Southampton, UK, macrostructures were divided by learning domains. She called them Cognitive Domain, Dextrous Domain, Social Domain, and Emotional Domain.
 - **Avatar Persona** : most frequently used “ modes ” is the third - person perspective, it seems reasonable that the person ' s behavior would change as a result of viewing him - or herself performing that behavior
 - **Role-play**: A disadvantage of role playing is that both the learner and the instructor need to be in the virtual world at the same time.
 - **Scavenger Hunt** : The interaction of individuals or groups in either freeform or prescribed environments with the intent of developing knowledge. An advantage of scavenger hunts is that an instructor or facilitator does not have to be present. A disadvantage is that a scavenger hunt usually takes a while to plan and set up.
 - **Guided Tours, Operation Application, Conceptual Orienteering(macro-micro), Critical Incident, Co-Creation, Small Group Work, Group Forums, Social Networking**

4- Implications

Table 5.1. Different Types of Knowledge and the Matching Learning Archetypes

| Type of Learning | Description | Archetype |
|------------------------------|---|--|
| Facts, Jargon, Labels | An association between two or more items or objects | Guided Tour; Scavenger Hunt; Large Group Forum; Avatar Persona |
| Concepts | Categories used for grouping similar or related ideas, events, or objects | Conceptual Orienteering; Role Play; Small Group Discussion; Social Networking; Avatar Persona |
| Rules/Procedures | Ordered sequence of rules or steps a learner must complete to perform a task | Role Play; Operational Application; Social Networking; Avatar Persona |
| Principles | Guidelines for behavior or actions that are not sequential | Role Play; Social Networking; Avatar Persona |
| Problem Solving | Learner confronts a novel situation and must use previous knowledge to solve the problem | Critical Incident; Role Play; Co-Creation; Social Networking; Avatar Persona |
| Affective Domain | Impacting the emotion of the learner, such as influencing a person's attitude toward something like quality, safety, or diversity | Conceptual Orienteering; Role Play; Small Group Discussion; Co-Creation; Social Networking; Avatar Persona |
| Psychomotor Practice | Mimicking the physical actions and reactions that would occur within the actual work environment | Operational Application; Avatar Persona |

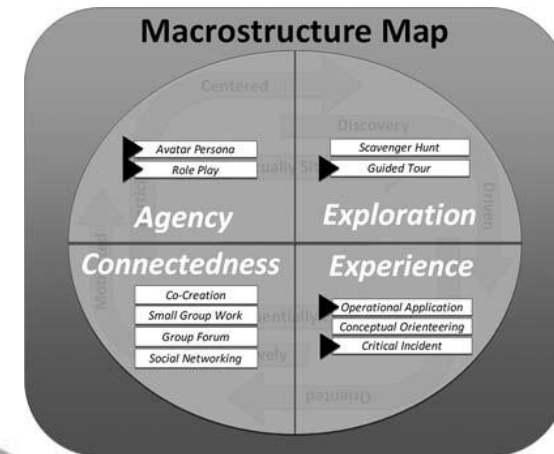
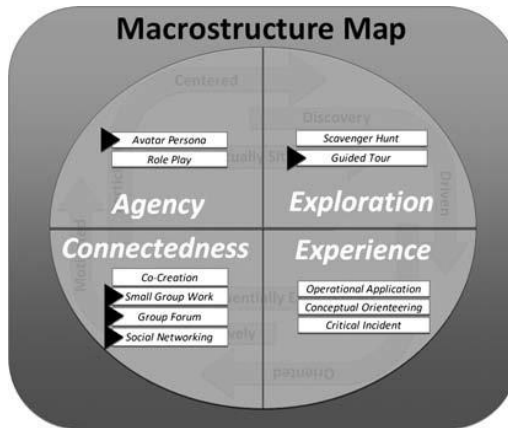
5- Learning From Experience

- **Case Study 2-(1) : Experiencing an Inventory Observation**
 - **Organization Background** : Ernst & Young (EY)
 - **The Challenge** : more efficient in transferring IO(inventory observation) knowledge requirements and more effective in preparing the participants to successfully execute an IO
 - **Why 3D?** : Inventory observations are very situational in nature.
 - **Making the Case** :Can participants learn and retain as much knowledge via an individual ILE approach as they do in a traditional instructor - led training (ILT) approach
 - **The Solution** : Traditional lecture, where terminology and procedures were covered, followed by a case study exercise and debriefing activity, orientation, teleportation to experience.

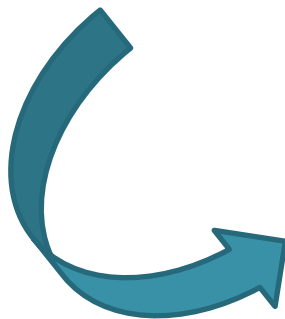
6- Our Perspective

- **Organization Background**
 - 4 M.S Student from different fields, talented in educational and pedagogical concepts and having experience in game design&development.
- **The Challenge**
 - More efficiently propose the user brain training activities and increase knowledge about this concept more interestingly.
- **Why 3D?**
 - Contextual & experinece & collaboraation based.
- **Making the Case**
 - Especially children get their attention on doing something with crowd. Collaboration gives them confidence and ambition to succeed in the aim.
- **The Solution**
 - It is assumed that the interaction with the activities in the environment and collaborators are challenging and interesting.
- **The Benefits**
 - Time saving, efficient in progress, more immerse environment, entertainment
- **The Results**
 - Time will tell.

6 - Our Perspective(Macrostructure Map)



Case Study 1



Case Study 2



7- References

- Learning in 3D, Pfeiffer Wiley