



Virtual World Interventions that Work !

**Instructional Designs,
Frameworks, and Strategies
proven most effective for
learning in Virtual Worlds**

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Learning Theory

Self-directed learning
Constructivism
Experiential learning
Inquiry and Discovery learning
Social Development Theory
Situational Learning
Communities of Practice

- **Promotes higher-order critical thinking skills**
- **Facilitates construction of argument based reasoning**
- **Requires reflection, reasoning, and analysis**
- **Open-ended opportunities for creativity and innovation**
- **Co-presence, perception, perspective, interaction**



Instructional Design Ideas

- **Immersive Role-Play**
- **3D Visualization**
- **Team Collaboration**
- **Time Capsuled**
- **Barriers of Physics**
- **Scavenger Hunt / Quest / Challenge**
- **Practice**
- **Game Design**
- **Project-based portfolio creation**



Examples

- **Immersive Role-Play:**
 - **Romeo & Juliet**
- **3D Visualization:**
 - **Turbine Engine, Bloom's taxonomy, Solar System**
- **Team collaboration:**
 - **Global, Project team training**
- **Time-Capsuled:**
 - **Harlem, Paris, Holocaust**
- **Physics:**
 - **Mars/gravity, Human cell**
- **Scavenger Hunt / Quest / Challenge:**
 - **VW Quest**
- **Practice:**
 - **UCF accounting, Flight school**
- **Game Design:**
 - **Nutrition Game, Operation Relief Worker Rescue Challenge**
- **Portfolio:**
 - **Assessment, Opportunity for creativity and innovation**
 - **VW Quest**



Pedagogical Value

- **Role-Play: Romeo & Juliet**
 - **Creativity, Imagination, Learning by doing**
- **3D visualization: Turbine Engine, Bloom's taxonomy, Solar System**
 - **Experientially rich, Interactive hands-on, Concept and relationships, Investigation, Manipulation**
- **Team collaboration: Global, Project team training**
 - **Sense of self, Perspective, Convenience, Efficiency of global opportunity**
- **Time-Capsuled: Harlem, Paris, Holocaust**
 - **Experientially rich, Learning by Doing**
- **Physics: Mars/gravity, Human cell**
 - **Experientially rich, Perspective**
- **Scavenger Hunt: VW Quest**
 - **Exploratory, Self-paced, Learner-centered, Learner-empowered**
- **Practice: UCF accounting, Flight school**
 - **Fail-safe, Cost-effective, Repetition, Engaging**
 - **Collaborative peered-learning via teaming**
- **Game-design: Nutrition Game, Operation Relief Worker Rescue Challenge**
 - **Learner-empowered, Challenge/skill design, Independent learning**
- **Portfolio: VW Quest**
 - **Assessment that captures creativity and innovation**



References (SLURLS)

Exploding Turbine Engine

<http://maps.secondlife.com/secondlife/NAWCPAX3D/112/86/23>

Really Engaging Accounting

<http://maps.secondlife.com/secondlife/ReallyEngagingAccounting/9/138/21>

Nutrition Game

<http://maps.secondlife.com/secondlife/Ohio%20University/191/177/27>

Paris in 1800s

<http://maps.secondlife.com/secondlife/Paris%201900/30/142/24>

Virtual Harlem

<http://maps.secondlife.com/secondlife/Virtual%20Harlem/175/195/30>

Holocaust Museum

<http://maps.secondlife.com/secondlife/US%20Holocaust%20Museum1/1/35/28>

Human Cell

<http://maps.secondlife.com/secondlife/Genome/64/53/251>

VW Quest

<http://maps.secondlife.com/secondlife/Huffman%20Prairie%20Omega/224/109/32>

Solar System

<http://maps.secondlife.com/secondlife/Spaceport%20Alpha/133/159/63>



Questions



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