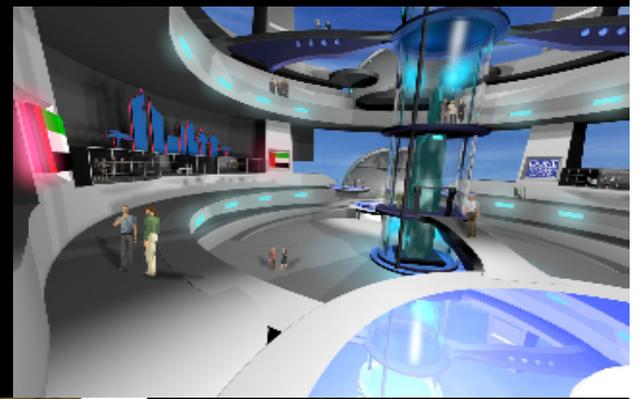
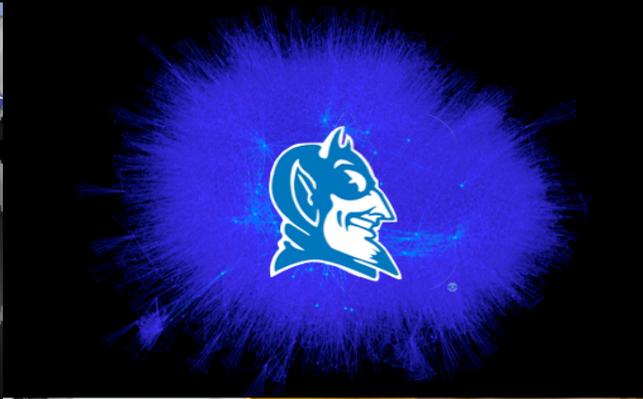
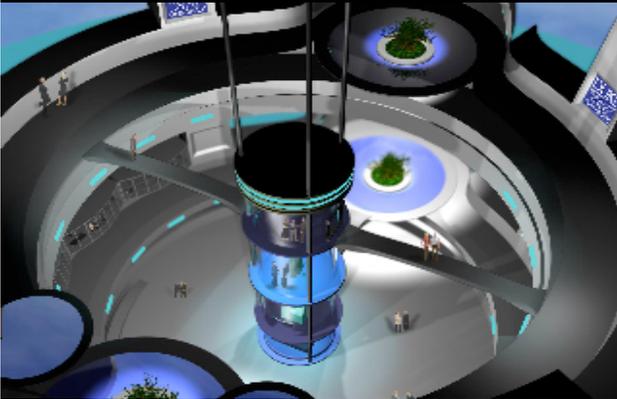


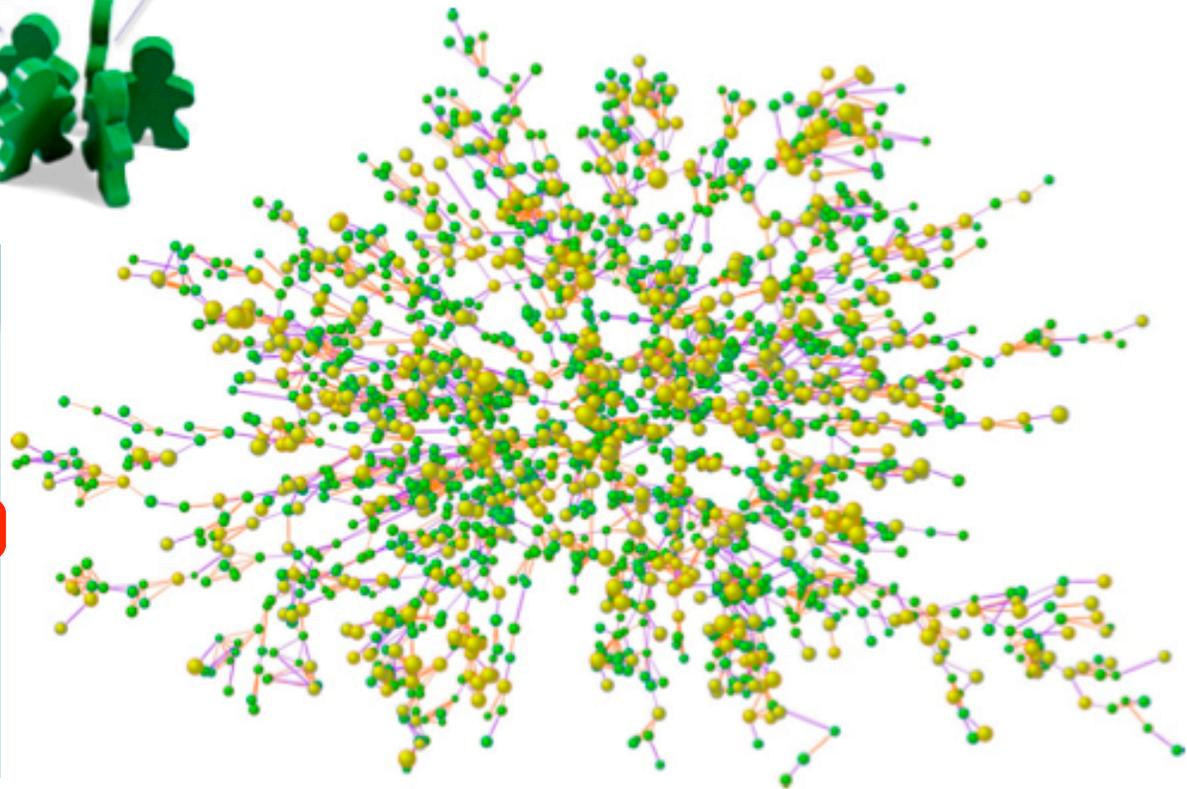
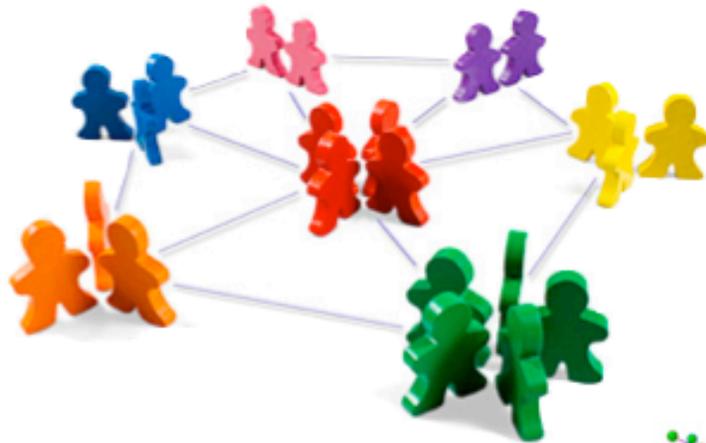
Learning in 3D

How Web 2.0 and the Immersive Internet are Changing the Game in Learning



Dr. Tony O'Driscoll
Fuqua School of Business, Duke University

Is there anybody...OUT THERE?



twitter Home Profile Find People Settings Help Sign out

What's happening? 140

Latest: #lrn3d FINALLY made it to San Diego. Working on my Keynote for Training 2010 tomorrow. Will ask audience to tweet. Join us 4:15 PM Pacific! less than 5 seconds ago

Real-time results for #lrn3d Save this search

wadatrpp #lrn3d FINALLY made it to San Diego. Working on my Keynote for Training 2010 tomorrow. Will ask audience to tweet. Join us 4:15 PM Pacific! less than 20 seconds ago from web

wadatrpp RT @cammybean: Learning Visions: Blog Book Tour: Learning in 3D #lrn3d http://bit.ly/aSqWNJ about 9 hours ago from twitterfeed

jenisecook RT @cammybean: Just posted contribution to @kkapp book tour. Feel like I've handed assignment into my professor just in time! #lrn3d http://bit.ly/cwDV15 about 20 hours ago from Seismic

elearningPosts Blog Book Tour: Learning in 3D #lrn3d http://bit.ly/d3KCCo about 24 hours ago from twitterfeed

cammybean Learning Visions: Blog Book Tour: Learning in 3D #lrn3d http://bit.ly/aSqWNJ 1 day ago from twitterfeed

Papertrumpet #lrn3d - Bought Karl Kapp's book. Just what the "Doctor" ordered #tk10 1 day ago from UberTwitter

wadatrpp 553 tweets 59 following 157 followers 18 listed

o-ver-heard-it n. a collection of eavesdroppers' tweets.

Home @wadatrpp Direct Messages 43 Favorites

Lists are timelines you build yourself, consisting of friends, family, co-workers, sports teams, you name it.

New list

Trending: Worldwide Change

#nowplaying #unwfeable #ThankYouNickJ Retweet if #idothat2

#lrn3d

On My Mind

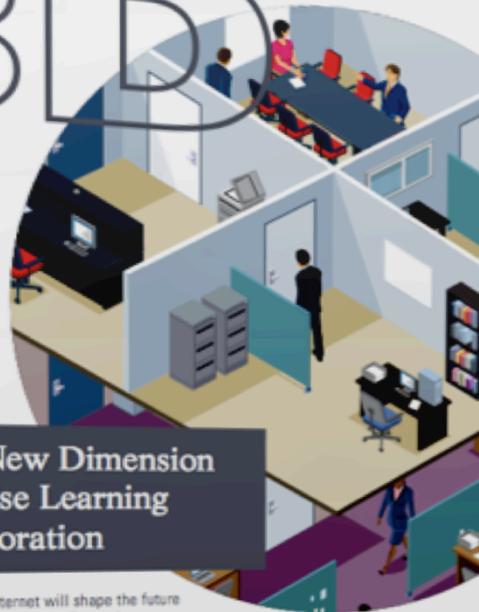
social Networking free
:learning
Virtual Worlds
Functional Design
Microtechnology
innovation
recruiting
second
learning gam
Learning Awar
closed computing
Microtechnology



Pfeiffer

Essential resources for training and HR professionals

Learning in 3D



Adding a New Dimension to Enterprise Learning and Collaboration

How the Immersive Internet will shape the future
of learning and work within the Enterprise

Karl Kapp / Tony O'Driscoll

Karl Kapp / Tony O'Driscoll

How the Immersive Internet will shape the future
of learning and work within the Enterprise

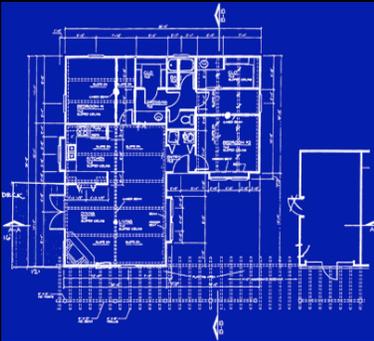
Adding a New Dimension
to Enterprise Learning
and Collaboration

Book Structure



PART I: EXPLORING THE POSSIBILITIES

- Here Comes the Immersive Internet
- Learning to Change
- Escaping Flatland



PART II: BUILDING A BLUEPRINT

- Architecting Learning Experiences
- Designing by Archetype
- Learning from Experience



PART III: BREAKING NEW GROUND

- Overcoming ADDIE Addlement
- Steps to Successful Enterprise Adoption
- Rules from Revolutionaries



PART IV: JUST BEYOND THE HORIZON

- Back to the Future

Oxymoron

Jumbo Shrimp



Death Benefit



Knowledge MANAGEMENT

KM Promise



Just:

In Time

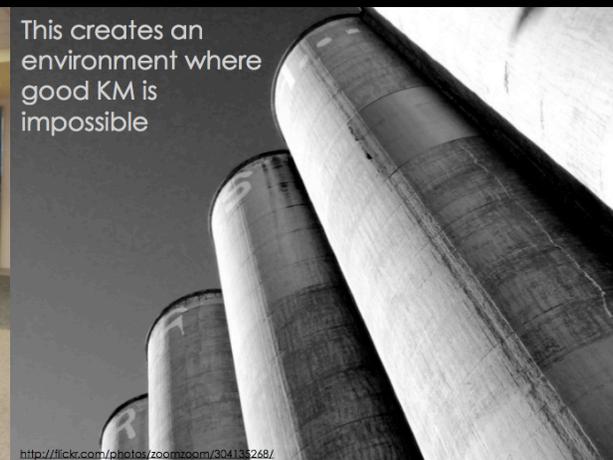
Enough

For Me

KM Reality



Structured Information STOCKS



From/To

STOCKS



FLOWS



Meet Jessica

OMG, I AM SO BUSTED! . . . Mom found the bottle of vodka Tyler got us in the trunk of the car. . . .Get everyone on FB right NOW





Here Comes **Everybody**

knowledge is
shared freely

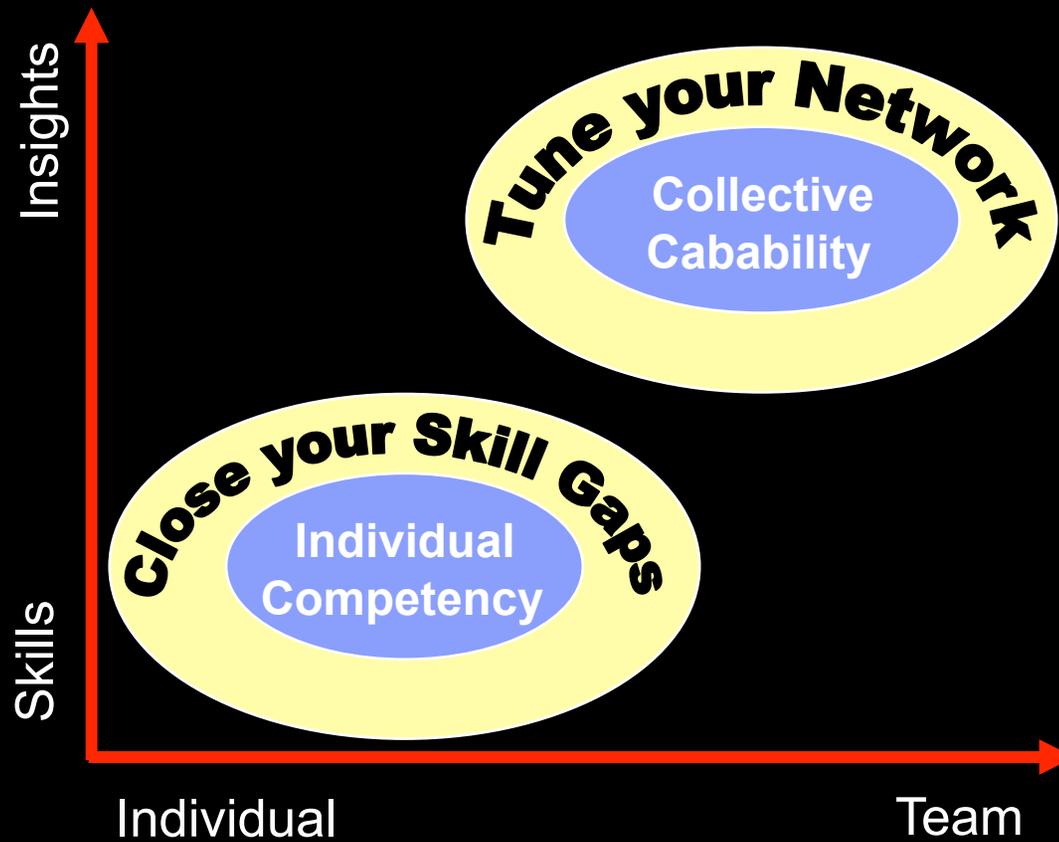
Learning=Net**WORK**ing



Getting things done **requires good connections, both the human kind and the Internet kind.**

Schooling has confused us into thinking that learning was equivalent to pouring content into people's heads. **It's more practical to think of learning as optimizing our networks.**

From SME to SMN



New Value Chain

Information = Currency



Individuals = Transport



i⁴



Insight = Outcome



Interaction = Transfer

WebEx
Adobe
Centra
Live Meeting
Citrix G2M
Illuminate

**2D Synchronous
Learning**



**Knowledge
Sharing Spaces**

Share Point
Lotus Team Room
Groove
Yahoo Groups
Blackboard

WebEx
Adobe
Centra
Live Meeting
Citrix G2M
Illuminate

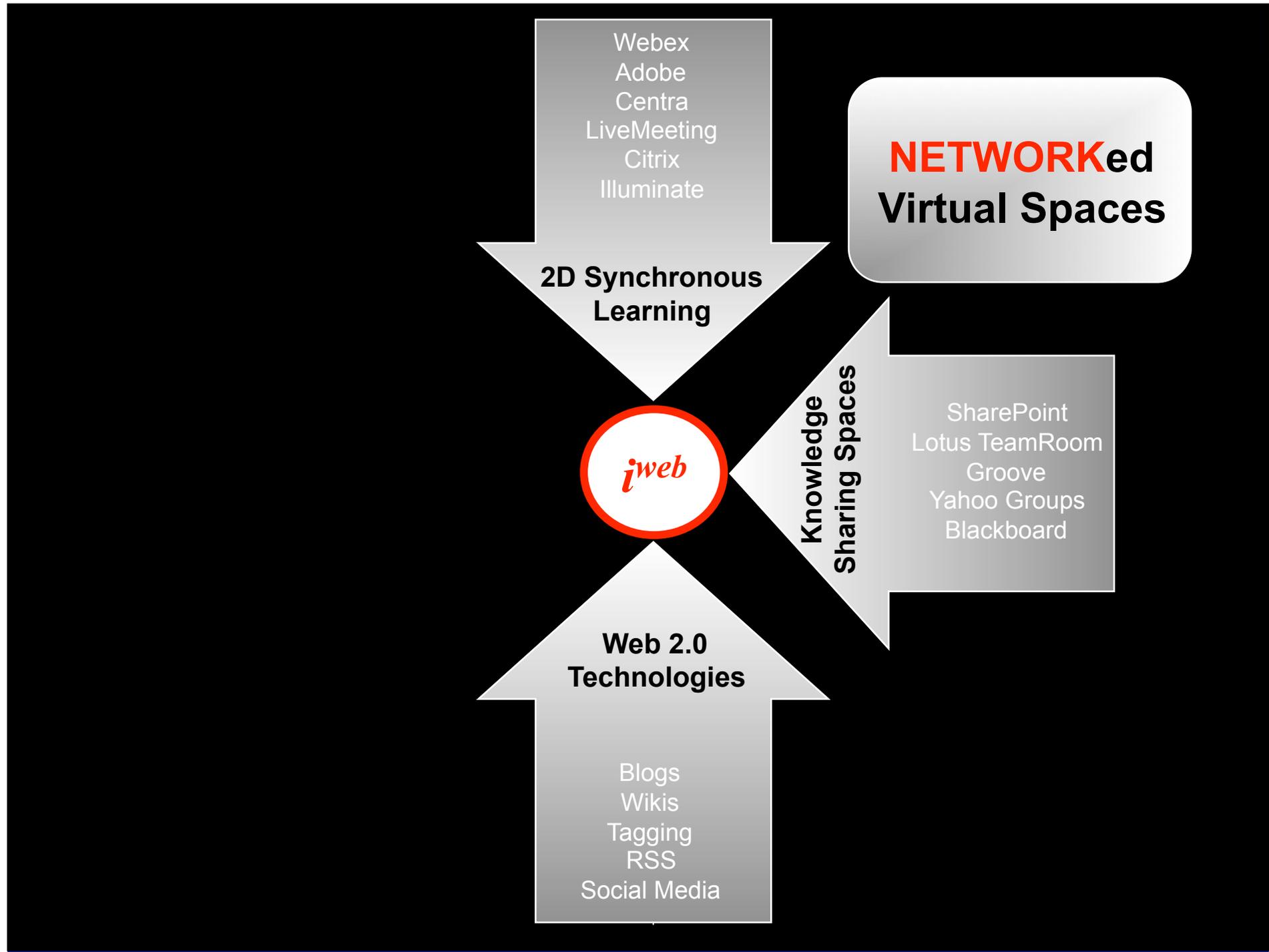
NETWORKed Virtual Spaces

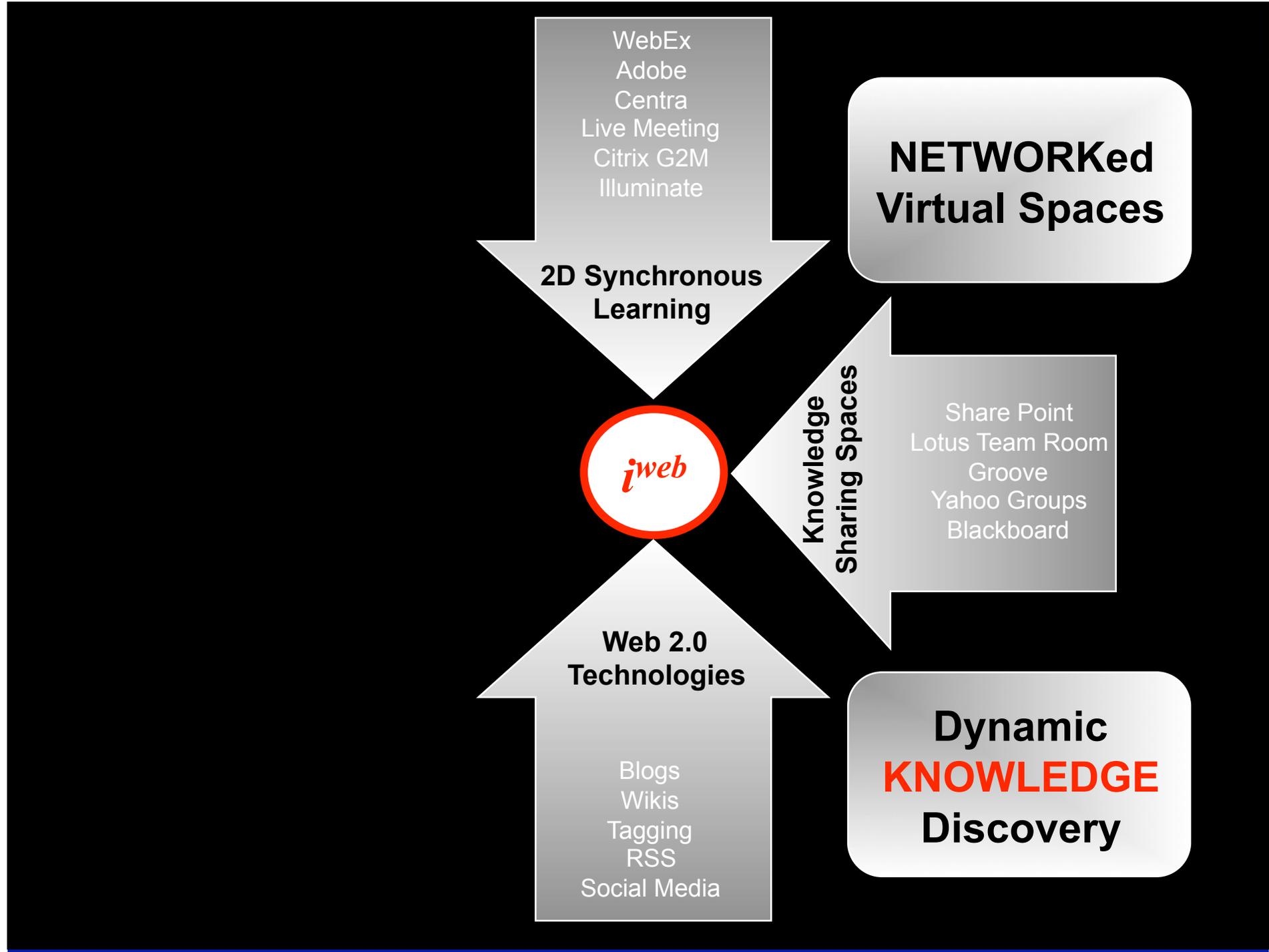
**2D Synchronous
Learning**

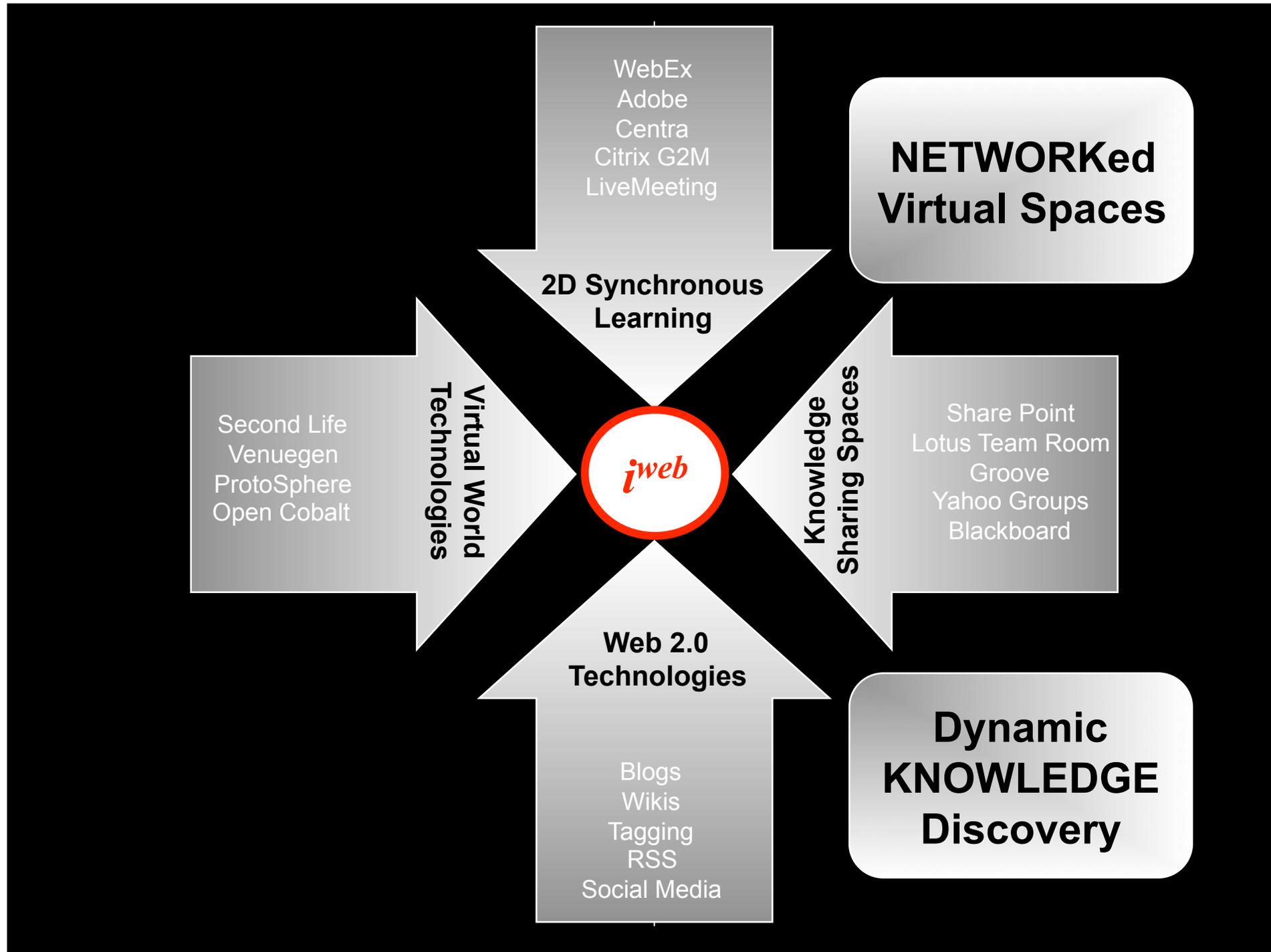


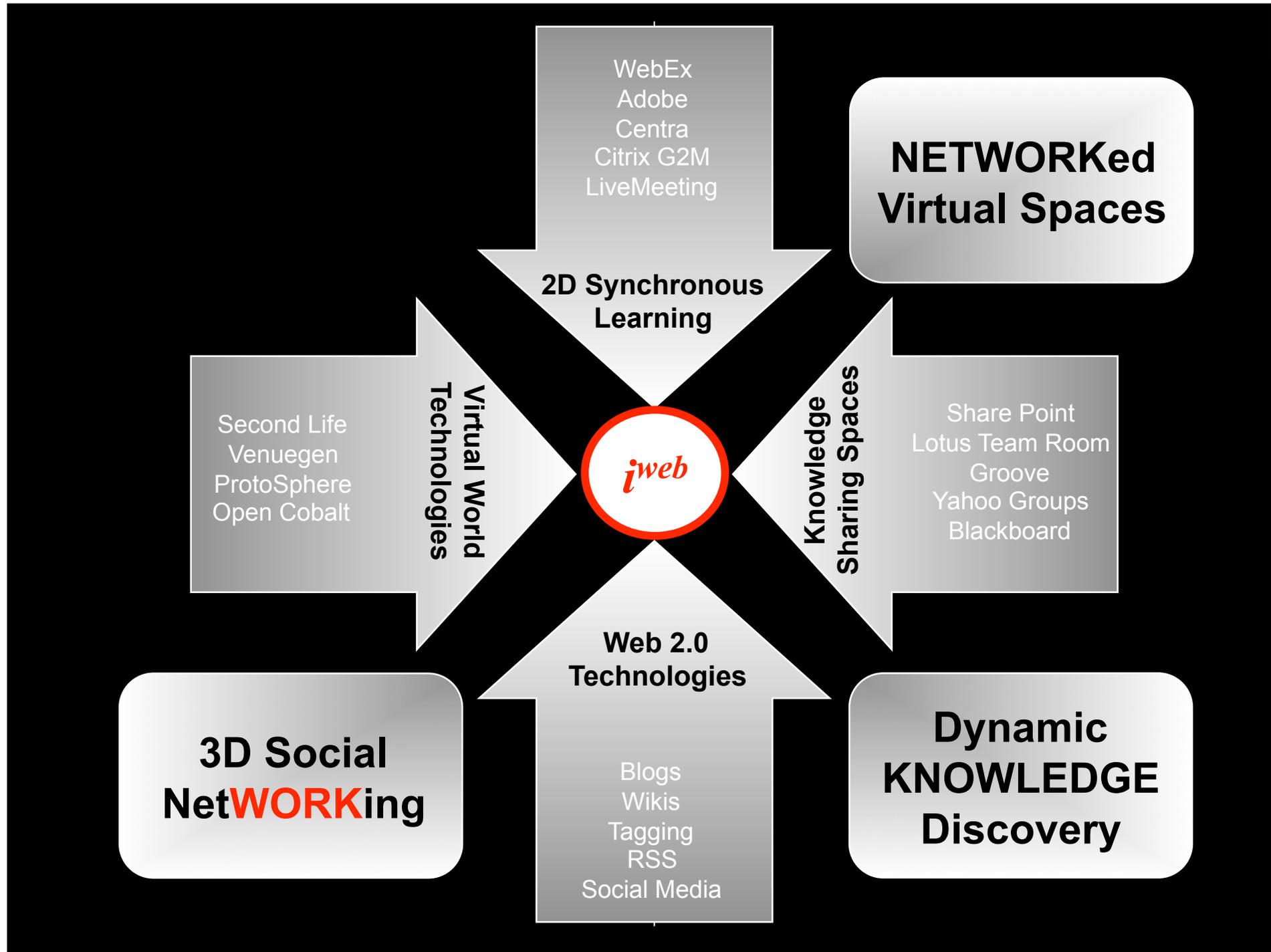
**Knowledge
Sharing Spaces**

Share Point
Lotus Team Room
Groove
Yahoo Groups
Blackboard









**3D Synchronous
LEARNING**

WebEx
Adobe
Centra
Citrix G2M
LiveMeeting

**NETWORKed
Virtual Spaces**

**2D Synchronous
Learning**

Second Life
Venuegen
ProtoSphere
Open Cobalt

**Virtual World
Technologies**

**Knowledge
Sharing Spaces**

Share Point
Lotus Team Room
Groove
Yahoo Groups
Blackboard

**Web 2.0
Technologies**

**3D Social
NetWORKing**

Blogs
Wikis
Tagging
RSS
Social Media

**Dynamic
KNOWLEDGE
Discovery**

jweb

Immersive

3D Synchronous LEARNING

WebEx
Adobe
Centra
Citrix G2M
LiveMeeting

Immediate

NETWORKed Virtual Spaces

2D Synchronous Learning

Second Life
Venuegen
ProtoSphere
Open Cobalt

Virtual World Technologies

Share Point
Lotus Team Room
Groove
Yahoo Groups
Blackboard

Knowledge Sharing Spaces

Web 2.0 Technologies

Interactive

3D Social NetWORKing

Blogs
Wikis
Tagging
RSS
Social Media

Intuitive

Dynamic KNOWLEDGE Discovery

jweb

i-web Singularity

Immersive

Immediate

*i*⁴

Interactive

Intuitive

Meet Megan



Life Imitates Art

From *TRON* to *AVATAR*



Alphabet Soup

OUTCOME

3DLE



TECHNOLOGY

VIE

VSW



Unbounded Space
Avatar Persona
Social Interaction
Communities
User Created Content
Business Opportunity

Avatar-Mediated
Persistent World
Reputational Capital
Immersive Environment
Interactive Platform
Real-Time Communication
Virtual Economy
Digital Assets

MMORPG



Bound by a Narrative
Defined Roles
NPCs
Rules
Tokens
Ranks and Levels

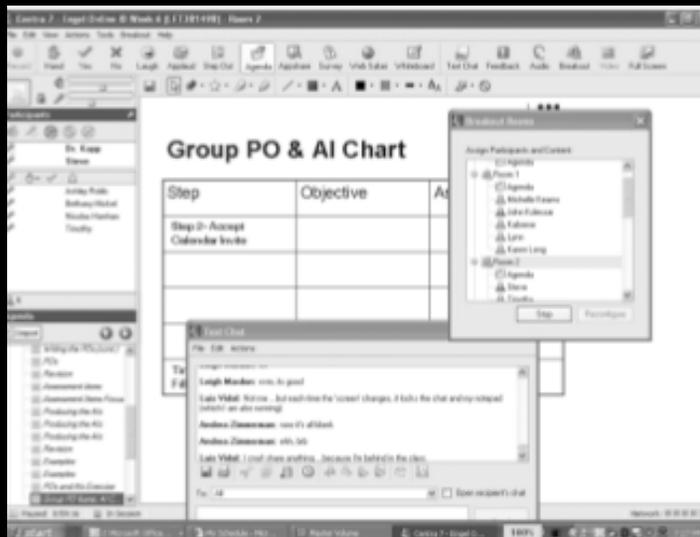
Meet Jane and Jack



2D Synchronous Learning



3D Learning Experience



Equation

$$I * I = E$$

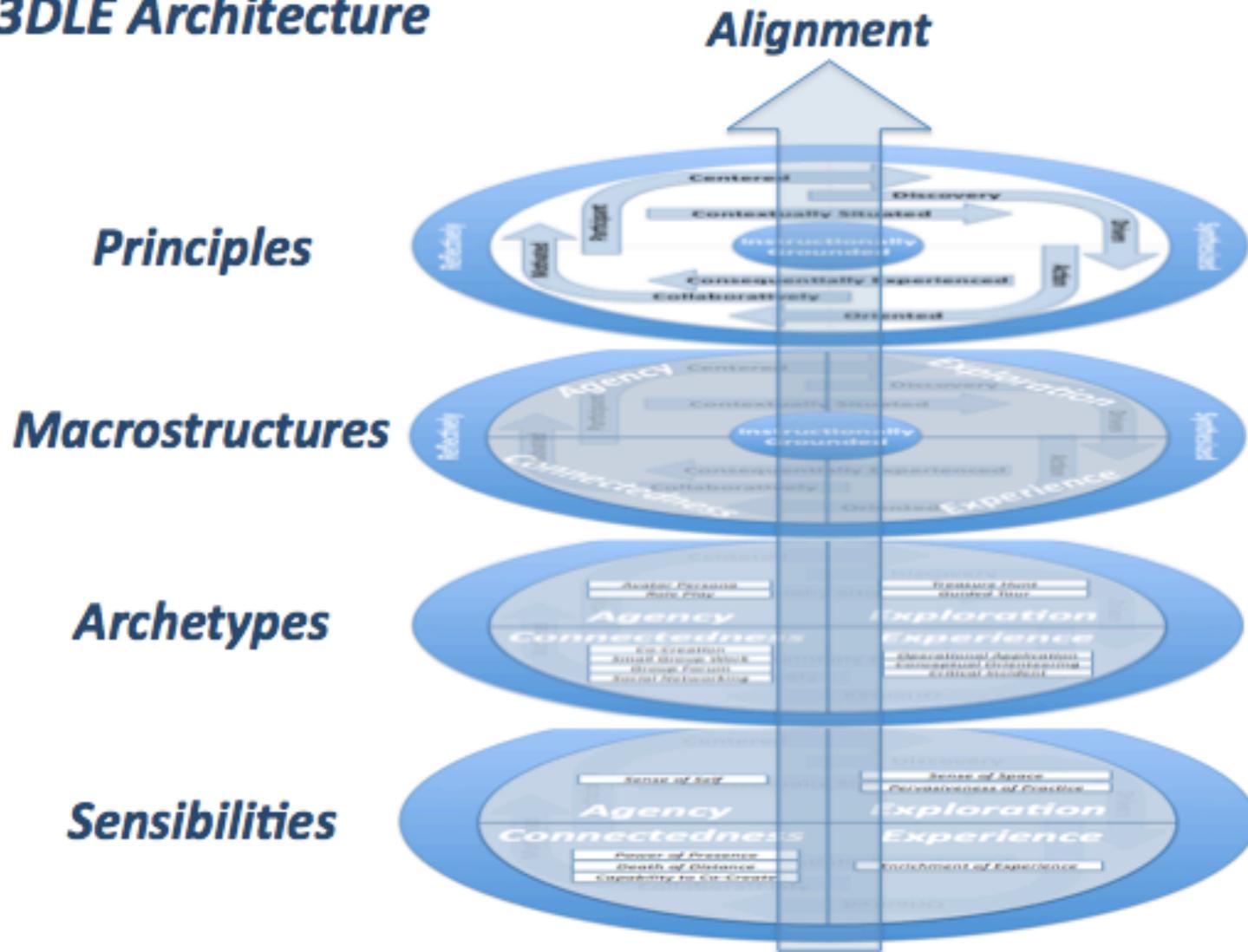
Interactivity * **Immersion** = **ENGAGEMENT**



$$(I * I) + (C * C) = E$$

Architectural Alignment

3DLE Architecture



Grounded in Experience



Organization	Case Title
<i>FutureWork Institute</i>	Virtual Global Inclusion Summit (Microsoft/Sodexo)
<i>FutureWork Institute</i>	Experiencing Diversity and Inclusion Virtually (Cisco)
<i>Ernst & Young</i>	Experiencing Inventory Observation for the First Time
<i>United States Holocaust Memorial Museum</i>	Recreating the Kristallnacht Experience in Second Life
<i>CATT Laboratory</i>	Creating a Virtual First Responder Learning Experience
<i>Virtual World Design Centre</i>	Virtual Border Service Officer Training
<i>Ball State University</i>	Teaching Rhetoric in a Virtual Environment
<i>Penn State Berks</i>	Teaching Environmental Science in a Virtual Green Home
<i>BP</i>	Creating a Virtual Challenge for Global Graduates
<i>IBM</i>	Hosting Virtual Academy of Technology Events



Microsoft/Sodexo Case

Challenge/Objectives

- Develop executive understanding of their firms' diversity and inclusion strategy
- Educate participants on micro inequities in the workplace
- Increase participant knowledge on how to communicate effectively about diversity
- Foster networking and best practice sharing

Why 3D?

- Diversity and Inclusion rely heavily on synthesis of personal experience
- Use of carefully crafted activities in which participants play specific roles is core to pedagogy
- Need to simultaneously accommodate 1500+ virtual participants at the summit in a compelling way

Solution



Benefit/Result

- Travel and Lodging Cost Avoidance: \$1,617,000
- Negative Productivity Avoidance: 900 Days
- Environmental Impact Avoidance: 450,000 pounds of Carbon Dioxide Equivalent

Ernst & Young Case

Challenge/Objectives

- On average a new hire will take in excess of 130 hours of formal learning in the first year
- From time-of-hire to first Inventory Observation can be as little as 4 months
- Wanted to find out if 3DLE design might be more efficient in transferring IO knowledge and more effective in preparing participants to successfully execute an IO

Why 3D?

- Inventory Observations are situational and contextual in nature
- Application of theory varies significantly based on the situation on the ground
- Unanticipated situations on the ground require quick decisions that ensure the IO is completed accurately and expediently

Solution

Benefit/Result

- 3DLE participants learned and retained as much as their ILT counterparts.
- Cost and Time requirement for 3DLE was less than ILT for same knowledge retention outcome
- 3DLE participants felt less confident in their ability to perform an inventory observation than their ILT counterparts

USHMM Case

Challenge/Objectives

- Experiment with 3D installation design to avoid having to make costly physical mock ups
- Engage people outside the museum in a co-create installation design process
- Explore feasibility of leveraging 3D technologies to stage virtual exhibitions

Why 3D?

- The Museum's narrative exhibition must affect visitors not only intellectually, but also emotionally
- Wanted to explore whether or not virtual installations could create visceral experiences for participants

Solution



Benefit/Result

- The Kristallnacht exhibition succeeded in delivering a kinetic, intellectual and visceral learning experience for participants.
- Experience drove participants to ask how they should go about donating to the museum

CATT Case

Challenge/Objectives

- 117 people die each day in motor vehicle crashes
- For every minute that a lane is closed, the chance of a second collision goes up 3%
- Achieving quick clearance reduces fatalities and pollution and increases productivity via the efficient flow of goods

Why 3D?

- First responder decisions and actions are very situational and contextual in nature.
- Cost of traditional learning approach is very high (Hollywood style role play).
- Cost to scale and align training practices across functions (Police, EMS, Fire) and States/Counties was prohibitive

Solution



Benefit/Result

- Able to situate first responders from states up and down the east coast within authentic 3DLE experiences drives alignment around best practices for quick clearance at a cost that is significantly less than conducting physical training

Challenge/Objectives

- 750 Global Graduates traditionally engaged in a physical Global Graduate Forum in London
- Increased economic pressures required a different graduate development opportunity that still addressed the objectives of GGF
- Existing technological alternatives were deemed insufficient to ensure a positive experience for GGF participants

Why 3D?

- Needed a technology solution that created an immersive experience for participants
- Wanted to move instructional design to a problem-based model
- Needed an environment that enabled spontaneous networking between graduates and company executives

Solution



Benefit/Result

- Participant evaluation scores were favorable for business relevance, learning transfer and networking
- Cost was less than 10% of that the previous physical GGF (\$5M)
- Virtual format allowed for increased participation from those at a distance

Maps

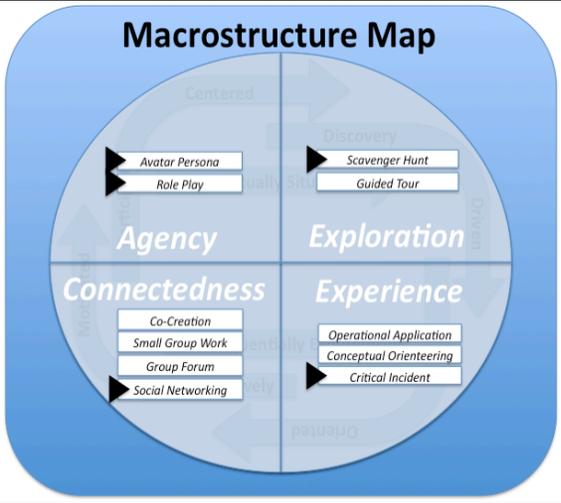
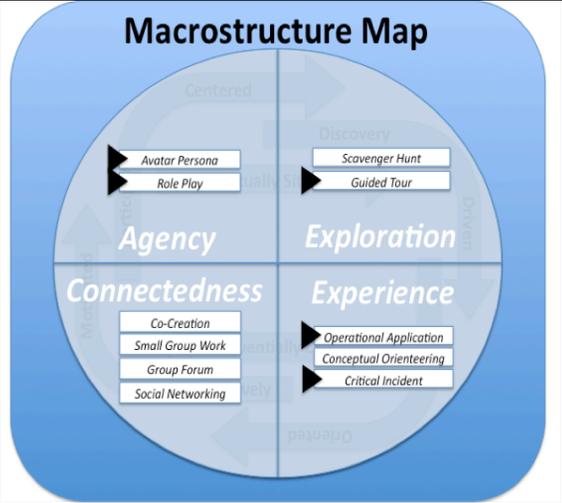
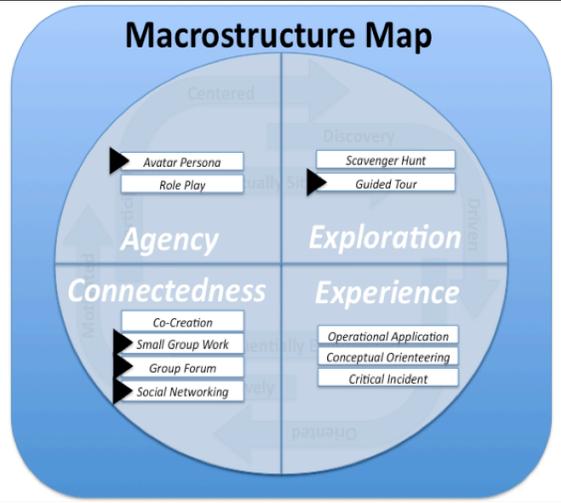
FWI



E&Y



USHMM



Maps

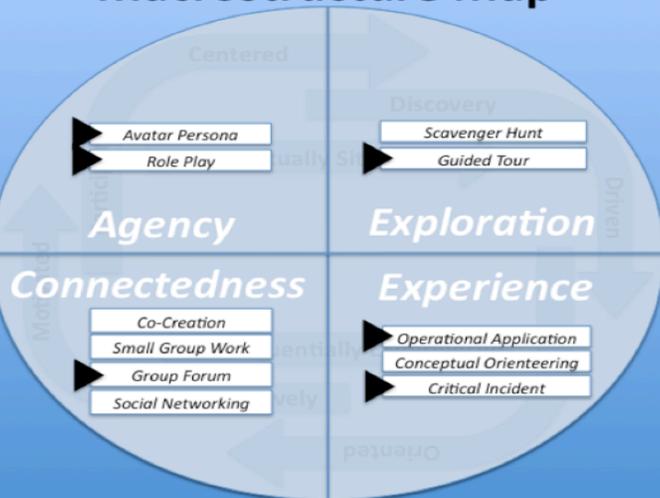
CATT



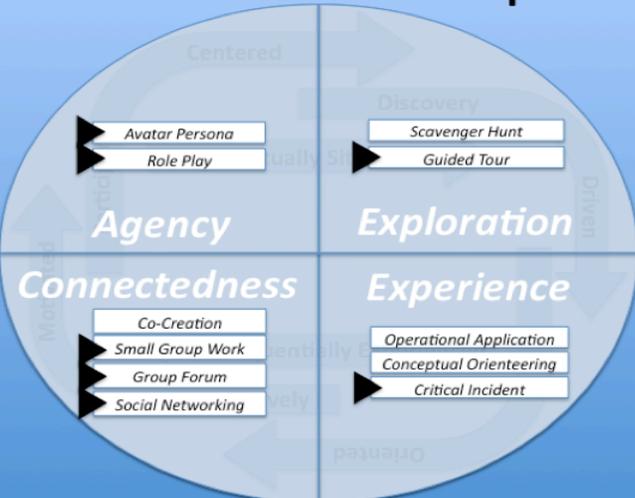
BP



Macrostructure Map



Macrostructure Map



New Rules!

- RULE 1: Change the NAME Game
- RULE 2: Build a Grass Roots Community
- RULE 3: Begin with Business Issues
- RULE 4: Connect to Core Motivation
- RULE 5: Select the Right Pilots
- RULE 6: Pilot Early and Often
- RULE 7: Focus on the First Hour
- RULE 8: Begin with the Familiar
- RULE 9: Build an Evidence Base
- RULE 10: Prime the Scale Pump

Get Fired Up!



Embrace NetWORKed Learning NOW!

Connect

Tony's Blog

The screenshot shows a WordPress blog post titled "Learning Matters!". The main content is a paragraph discussing "The overarching differentiating sensibility that avatar-mediated inter-action brings to the learning equation is engaging embodied interaction." It mentions a virtual representation and a digital extension of a physical self. There are two small images of avatars at the top right. The page includes a search bar, a calendar for January 2010, and a "My Archives" section.

<http://wadatripp.wordpress.com>

Karl's Blog

The screenshot shows the homepage of Karl's Blog, which is a Blogger site. The title is "Kapp Notes". The main content area features a "Fall Reading List" with a list of books and a description: "Here are some books that I think would be good to read in front of a fireplace on those cool fall days." There is also an "About Me" section with a photo of Karl Kapp and a brief bio: "Karl is a consultant, speaker, scholar, and expert in the convergence of learning, technology and business operations." The page has a dark blue header and a light green sidebar.

<http://www.karlkapp.blogspot.com>

Facebook Fan Page

The screenshot shows a Facebook fan page for "Learning in 3D". The page has a cover photo of the book cover. The main content area shows a post titled "Learning in 3D: Adding a New Dimension to Enterprise Learning and Collaboration". The post includes a video player and text: "WHAT'S ON YOUR MIND? Learning in 3D: Adding a New Dimension to Enterprise Learning and Collaboration". There are several comments and shares visible. The page also has a "Like" button and a "Share" button.

Book Home Page

The screenshot shows the home page of the "Learning in 3D" website. The page has a dark green header with navigation links: "Home", "About the Book", "About the Authors", "Learn More", "Speaking", and "Contribute". The main content area features a large "Learning in 3D" title and a "Buy It Now!" button. There is a "Click Here to Visit a Virtual World Now!" button and a "Welcome to the Learning in 3D web site!" message. The page also includes a "Links and Resources" section with links to Karl's Blog, Tony's Blog, and KarlKapp.com. There is a 3D avatar of a man in a blue shirt and jeans.

<http://www.learningin3d.info/>