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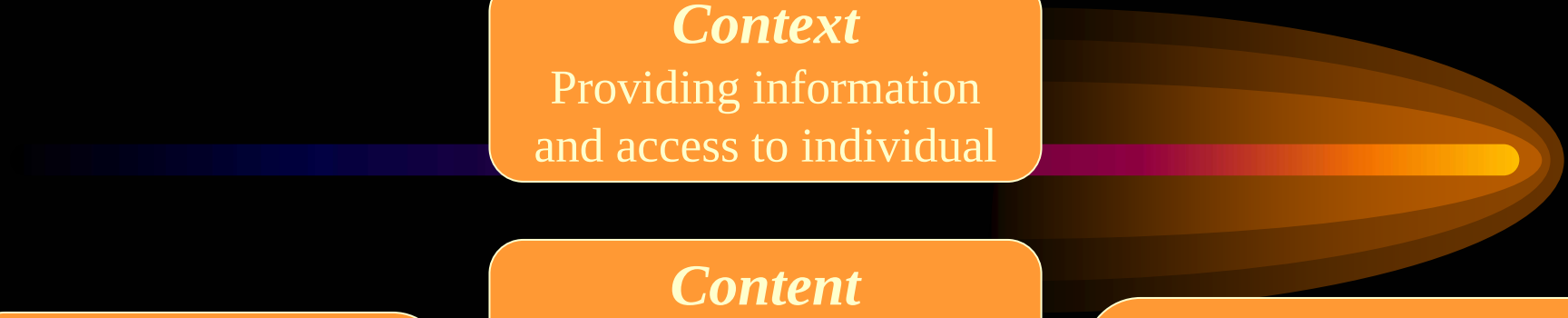
How e-Learning Changes Pedagogics

Toshio Okamoto
University of Electro-Communications, Tokyo

Why e-Learning appears?

- CCAI coming back?
- EEducational Application using Internet?
- CCommunication of Knowledge and Intelligence ?
- NNew Knowledge and Intelligence Creation and exchanging?
- LLearning opportunity, anytime, anywhere and anybody?

e-Learning System Architecture



Context
Providing information and access to individual

Content
Selecting and publishing material

Personalization
Collecting and applying knowledge about user

Infrastructure
Creating links with organizational ICT systems -particularly HR

Community
Determining who is involved and scope of interaction

Behavior and Usage analysis
Creation of site information and user profiles

Comparison between Traditional Classroom Teaching and e-Learning

- Constraints from time & place …Yes
- FACE to FACE
- Knowledge transfer based on texts and Drill learning
- Delay of Evaluation (Summative Evaluation)
- Passive course-pursueing
- Teacher Centered
- Observation Learning in class
- Developing to average students

- Constraints from time & place …No
- Net Communication (Sync.-Async.)
- Knowledge transfer based on Contents and Drill Learning….Simulation, Knowledge Exploring and Building with practice by ICT
- Immediate feedback and evaluation(Formative Evaluation and Remedial treatment)
- Self- Pace
- Mastering Learning
- Learner Centered
- Collaborative Learning by ICT
- One Top Access to data in Real World

Some theories of Socially oriented learning

Knowledge and Social constructivism

Vygotsky's socio-cultural theory (especially, the notion of Zone of Proximal Development

Situated cognition and distributed intelligence

Situated learning legitimate peripheral participation

The principles of e-Pedagogy from Social computing

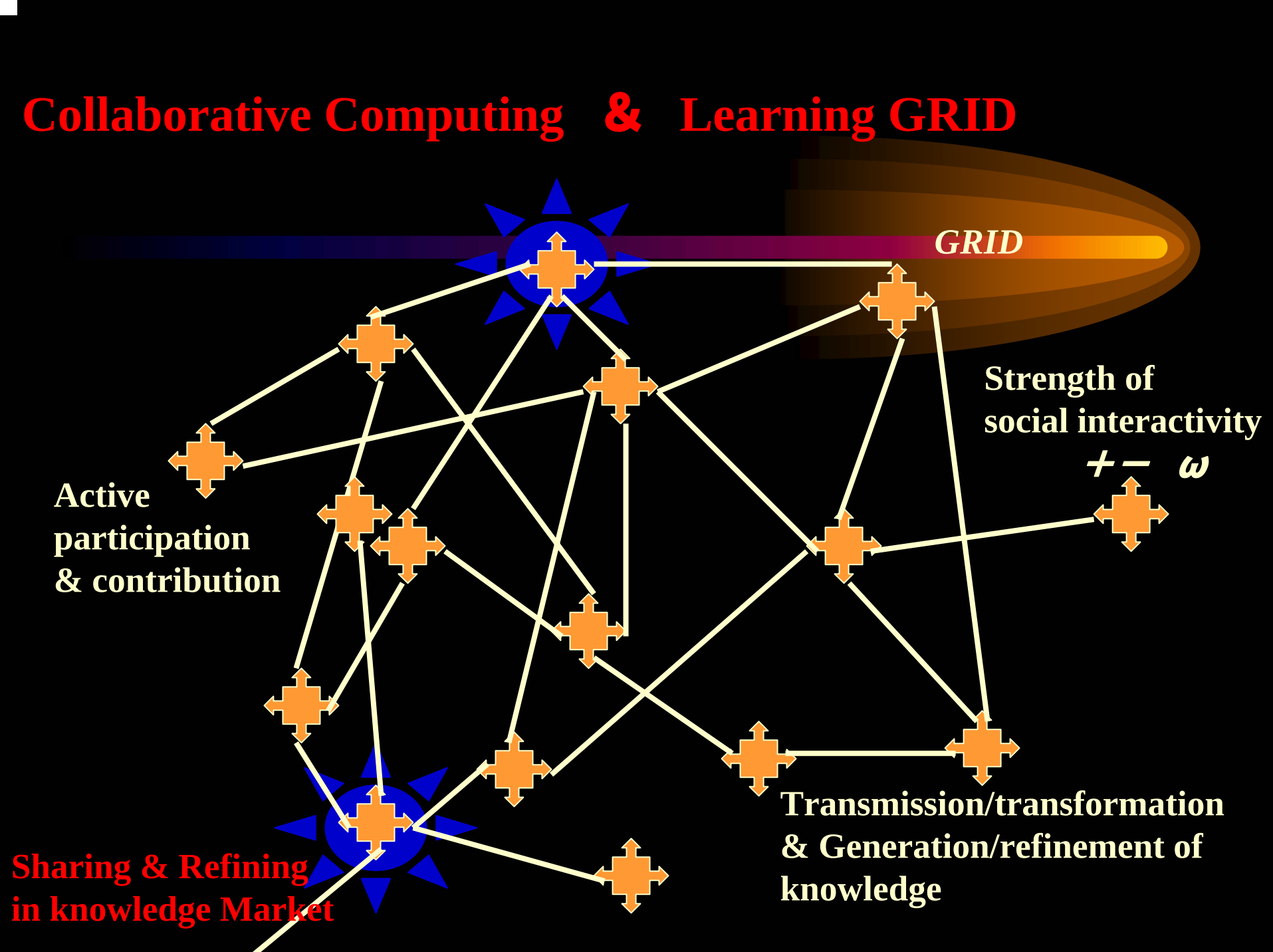
- DDemand Driven
- SSocial Activity and Identity
- OOne Top Access to Real World and Data
- CConstructional Conjunction for Semantics and Concept by Interactive activity

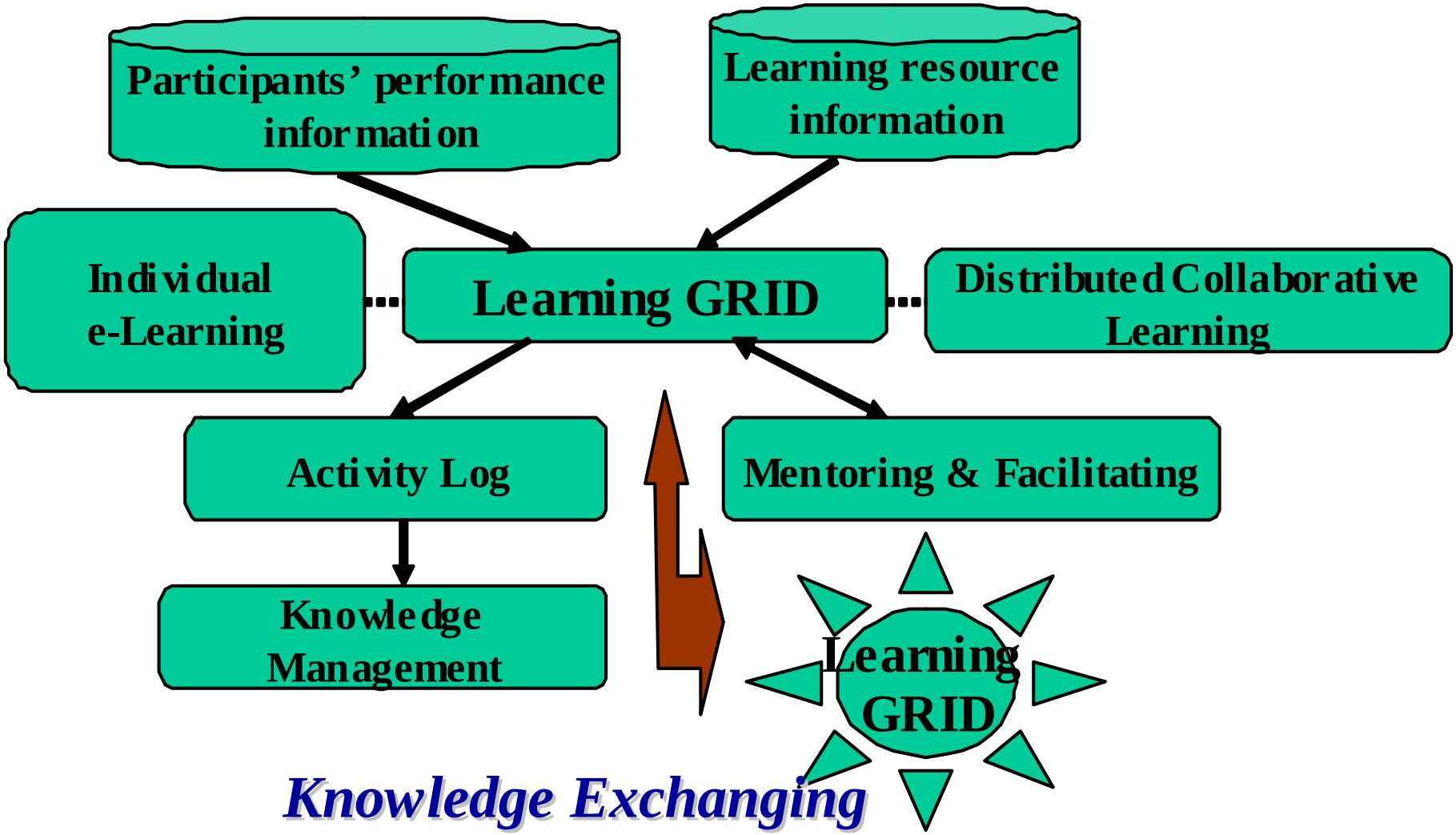
Knowledge Transfer and Transformation through Learning GRID as Knowledge Market

~ Plan-Do-See-Deliver, Share~

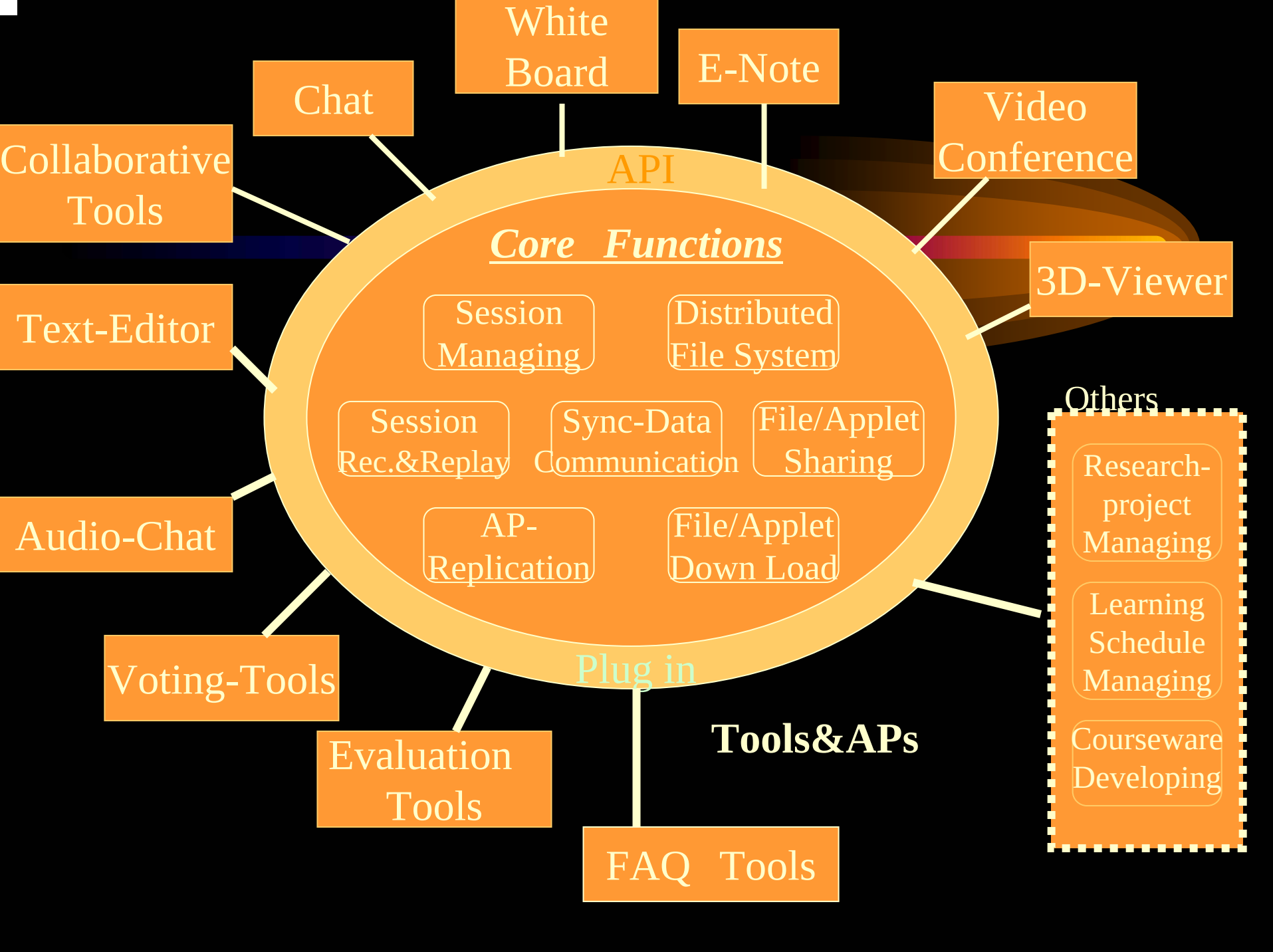
- KKnowledge Transformation & Delivering
- KKnowledge Generation and Creation by Interaction
- KKnowledge Catalyst
- KKnowledge Market

Collaborative Computing & Learning GRID





The Scheme & function of Learning GRID Technology


White Board
E-Note
Chat
Video Conference
Collaborative Tools
API
Core Functions
3D-Viewer
Text-Editor
Session Managing
Distributed File System
Session Rec.&Replay
Sync-Data Communication
File/Applet Sharing
Others
Audio-Chat
AP-Replication
File/Applet Down Load
Research-project Managing
Learning Schedule Managing
Courseware Developing
Voting-Tools
Plug in
Tools&APs
Evaluation Tools
FAQ Tools

Why we need collaboration?

- **EEvaluate self through others**
- **DDeep understanding**
- **BBroad awareness and appreciation**
- **MMeta-cognition through Distributed cognition**
- **Representation & verbal-nonverbal communication**
- **……**

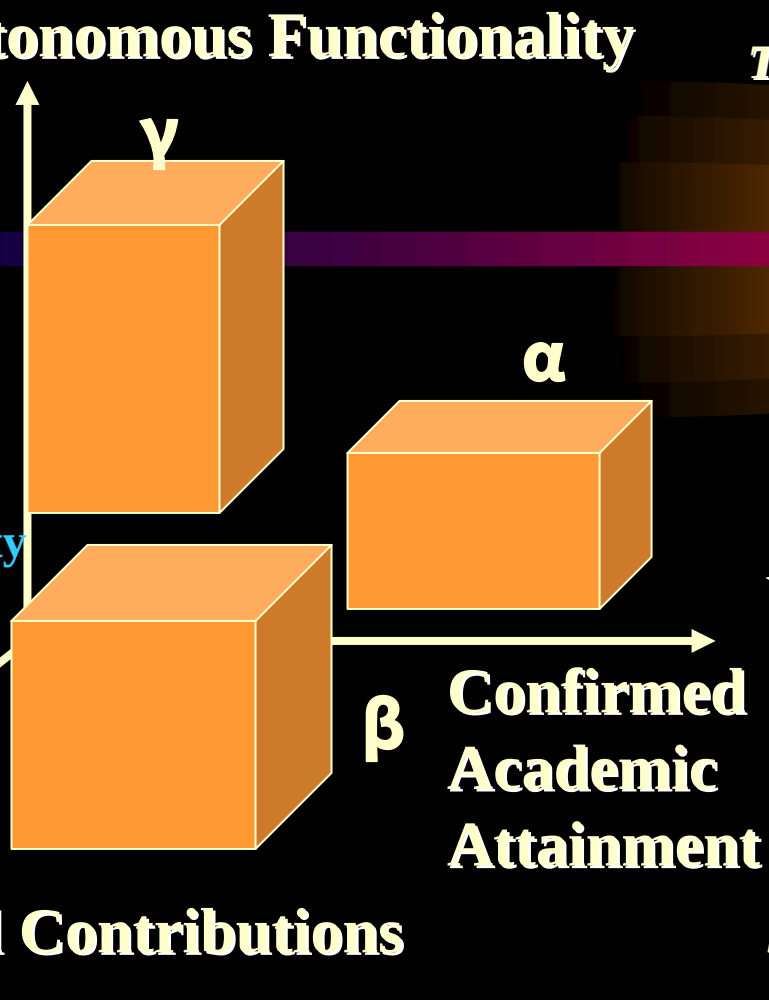
Dimensions(parameters) of Collaborative Learning

Highly structured	**Structure**	No structure
high	**Teacher control**	low
external	**Moderation of learning**	internal
external	**Learner motivation**	internal
Curriculum based	**Learning content**	Learner based
Unilateral by teacher	**Assessment**	Unilateral by learner

As design & operational factors

Cubic Model of Pedagogic Power

Shape：Teaching Style and Belief
Capacity：Degree of Expertise and Learning Resources
Coordinates：Social Identity



Teacher's Eye

ICT utilization
Investigation
Analysis
Design & Integration
Evaluating
Documenting & Reporting

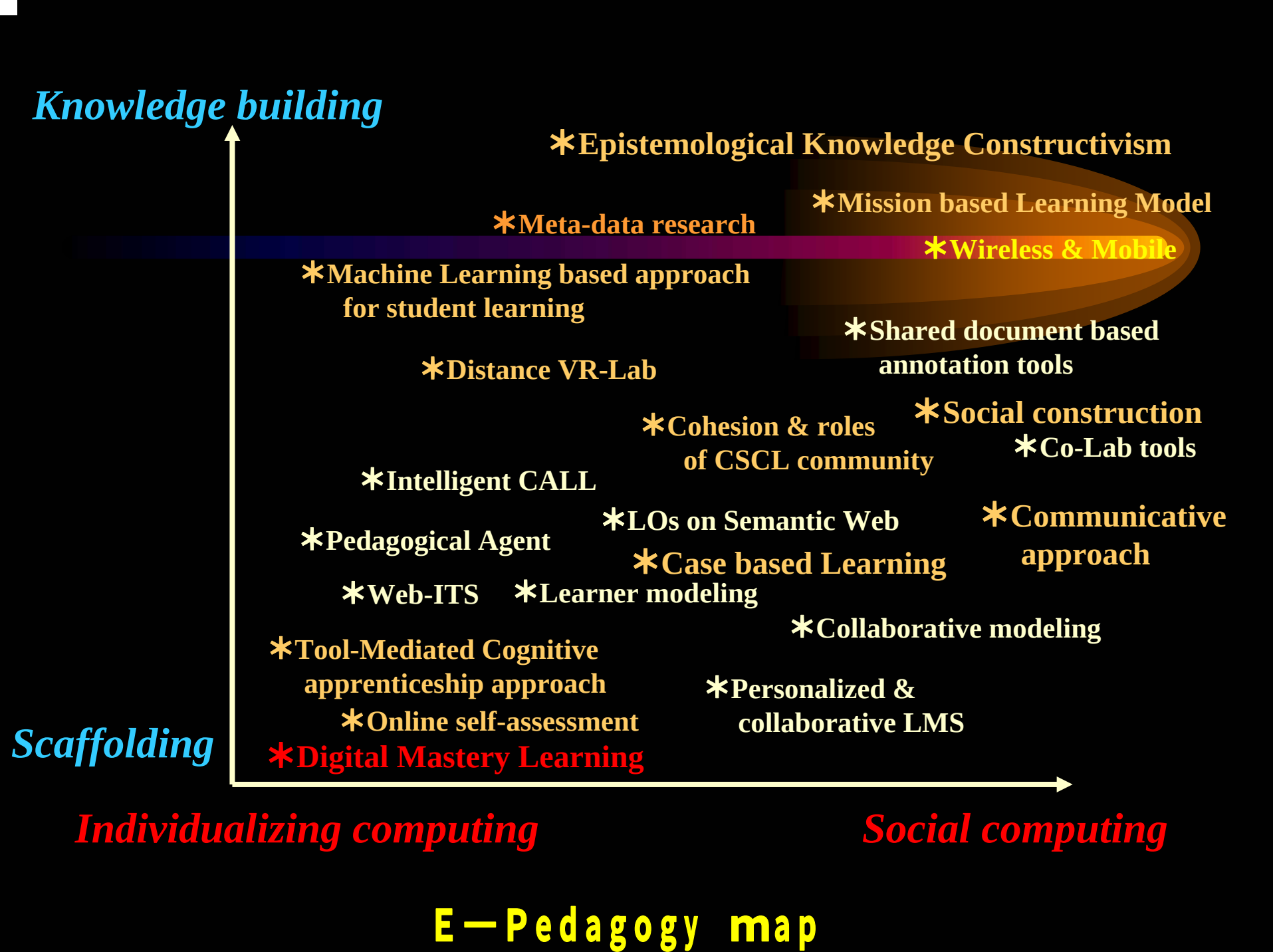
Learner's Eye

Significance of Learning
Readiness
Needs & Motivation
Learning Style

Situational Eye

Respect, Pride & Shame
Contributions & Responsibility
Social Context

α：Basic Competency
β：Balance
γ：Establishing Independence



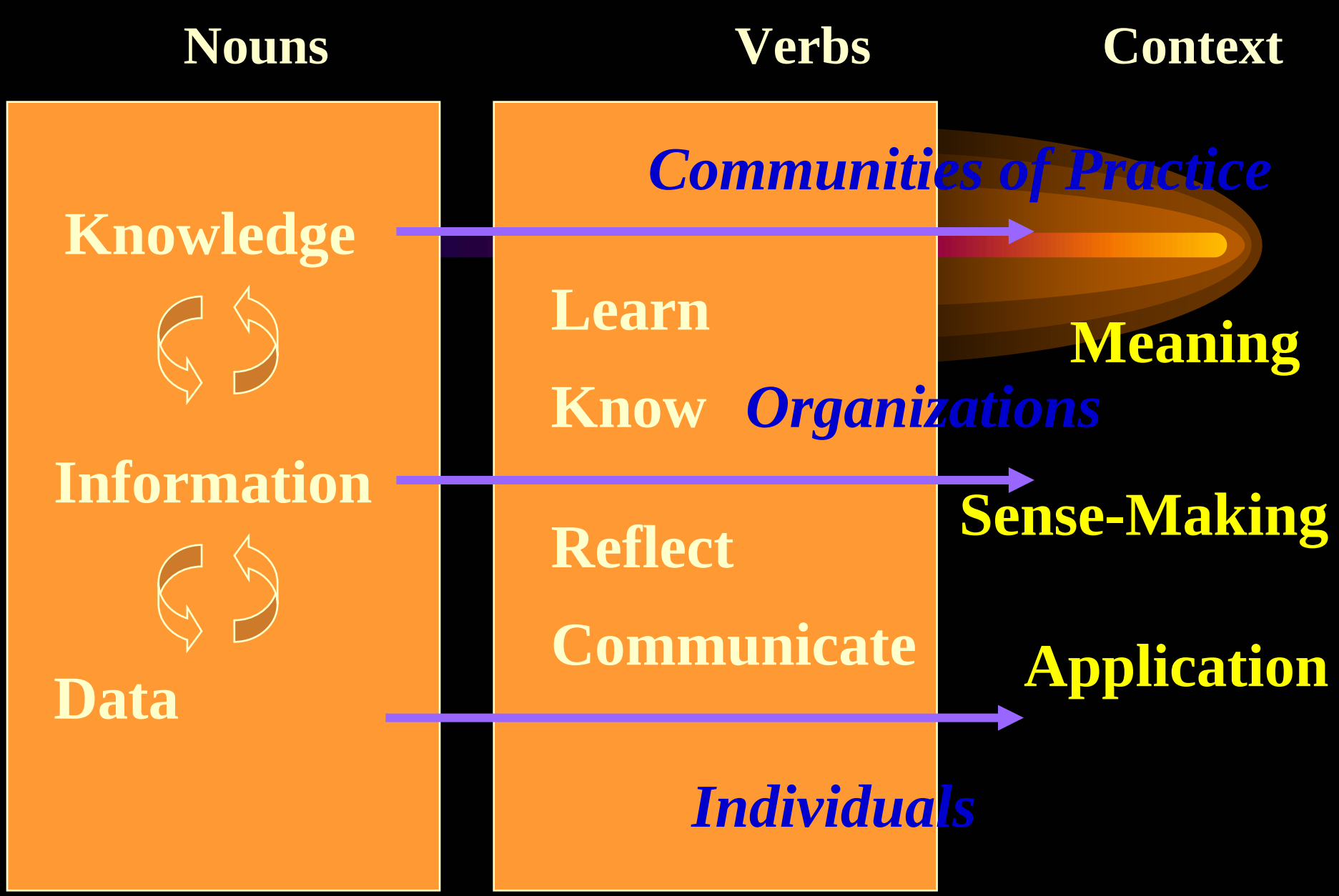
E—Pedagogy map

Critical Issues to Succeeding way

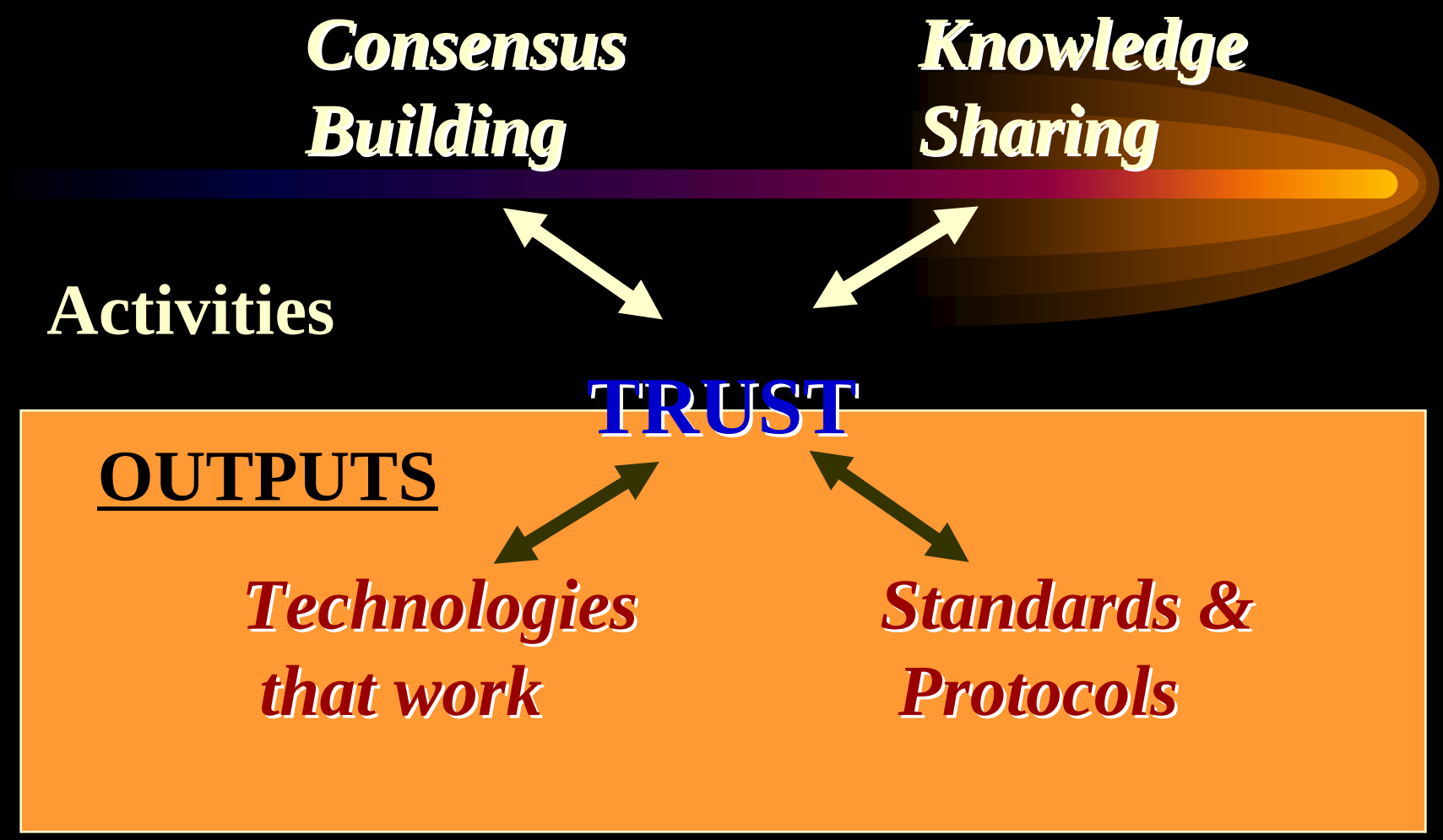
- **Covering assets**
- **Standardization and re-use**
- **Mobile & Wireless**
- Designing Discussion Questions for Online
- e-Collaboration and e-Learning in Organizations
- Educational Knowledge Management
- Virtual Gaming & simulation for real learning

The Conditions of Learning Organization

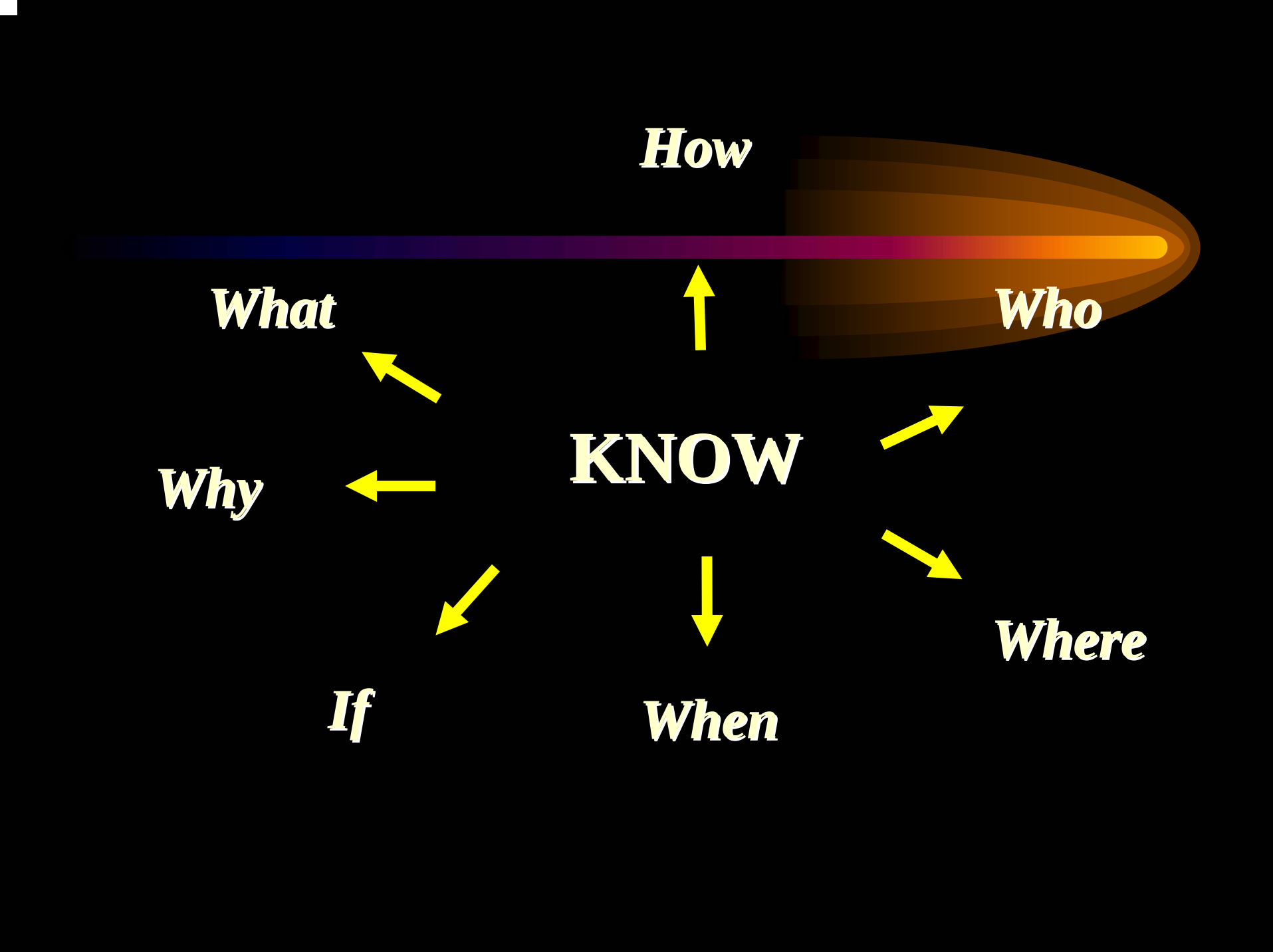
- Competitive
- Advantage
- Sustainable



A Model with Complex Nature of the Recursive Value-Chain of D.I.K



The key to achieving consensus


How
What
Who
KNOW
Why
Where
If
When

Thank you very much