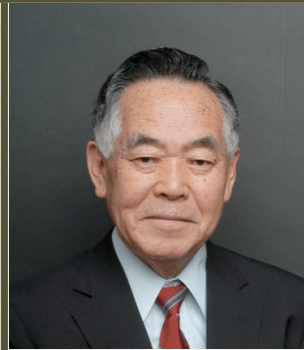# Big Problems

- **Global Warming**

- **Global Peace**

These are confrontation prone, and deeply rooted in cultures, traditions and religions.

# Human Brain



**Right Hemisphere**

**Left Hemisphere**

**Intuition, passion, dream, image and qualitative analysis**

**Logic, language and quantitative analysis**

**Both are connected with a corpus callosum for communication.**

# Global Brain

| Oriental (or Eastern) Culture | Occidental (or Western) Culture |
|---|---|
| Polytheism with Buddhism, Confucianism, and Shintoism, i.e,, Comparison of Gods. | Monotheism with Judeo-Christianity, Islam, i.e., Absolute. |
| Synthesis, literature and art with a subjective and emotional thinking | Analytical, scientific, objective, rational and critical thinking |
| Truth, Goodness and Beauty | Justice, Equality and Freedom |
| Both are to be connected with "Rainbow Bridge Across the Pacific" and with 信, 望, 愛 (belief, hope and love). | |
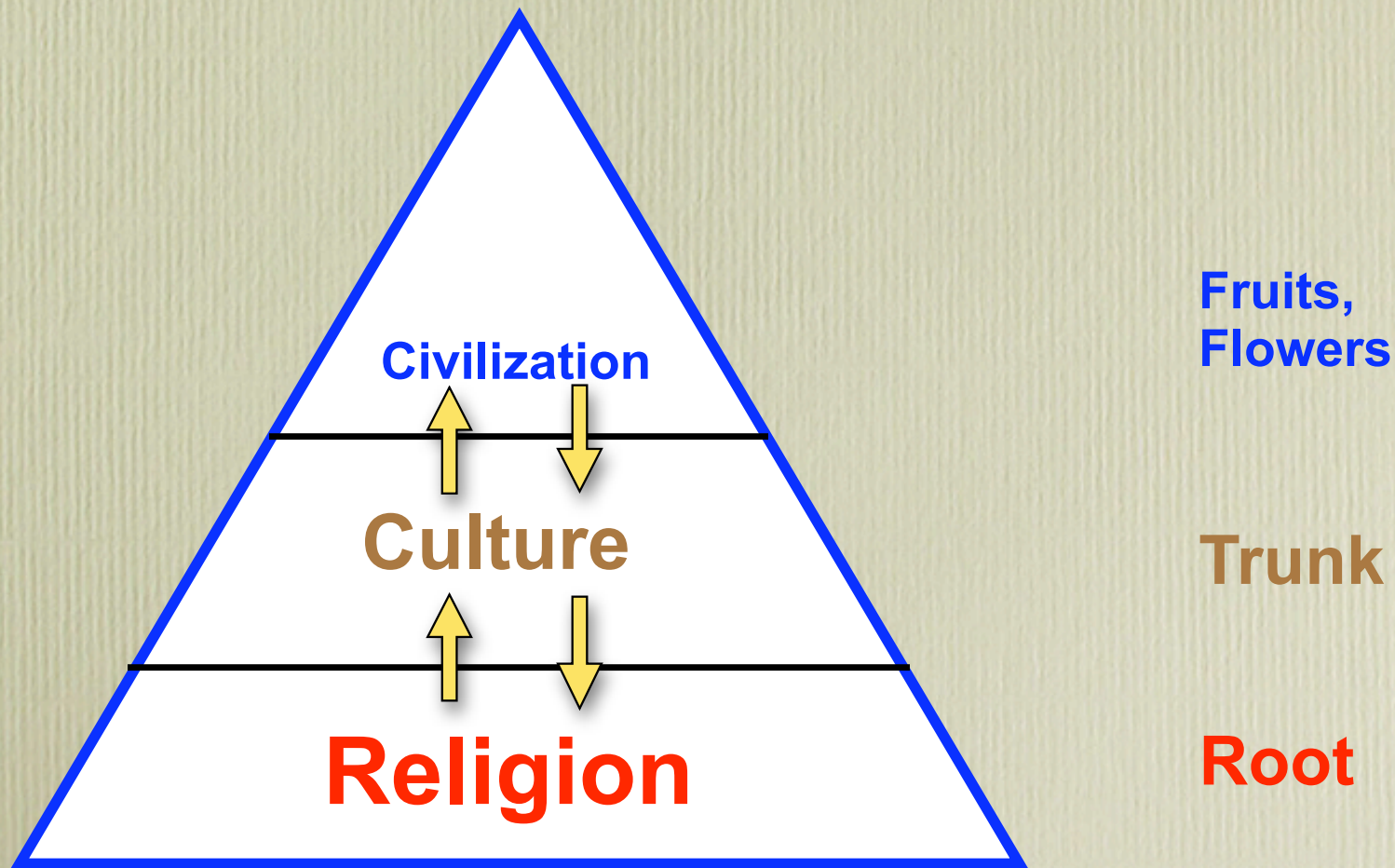
# What is peace through culture?

The word "culture" is deriven from the two words "cult" and "ur." "Cult," of course, means cultivation. "Ur" is an ancient Chaldean term meaning "light" -- the creative aspect of the universe. Hence, culture is literally the cultivation of creativity.

Peace is more than just the absence of war. Just as it takes acts of war to make war, it takes acts of peace to make peace. Peace, then, is a structure of positive acts of creativeness that are carried out in a spirit of high idealism.

"Genuine peace must be the product of many nations, the sum of many acts. It must be dynamic, not static, changing to meet the challenge of each new generation. For peace is a process -- a way of solving problems."

John F. Kennedy

# On Peace

**Peace** is a never-ending process, the work of many decisions by many people in many countries.

It is an attitude, a way of life, a way of **solving problems and resolving conflicts**... **It requires us to work and live together.**

Oscar Arias Sanchez; Nobel acceptance speech, 1987

# Moral of Civilization

*"Civilization consists not in the multiplication of wants but in the deliberate and voluntary reduction of wants."*
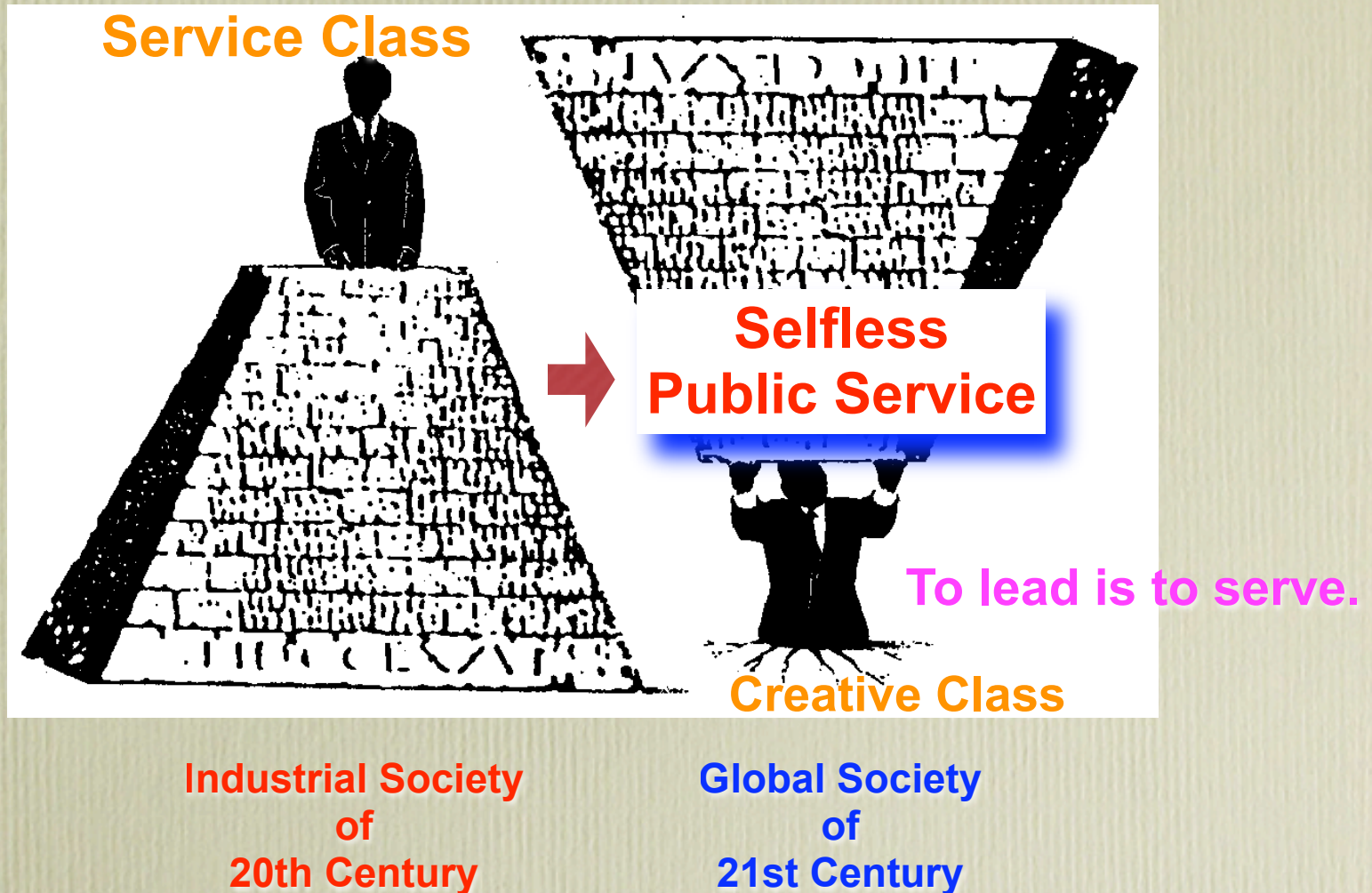
Mahatma Gandhi (1869-1948)

# 忘己利他
## (Forget Self and Benefit Others)

瀬戸内 晴美 (Harumi Setouchi)

2006年11月 文化勲章を受賞 (Laureate of the Order of Cultural Merit)

# Private vs Public Service

Service Class

Selfless
Public Service

To lead is to serve.

Creative Class

Industrial Society
of
20th Century

Global Society
of
21st Century

"Why Business Fail in Government," The New York Times, 1987

# Global Leader

**"The great leaders of tomorrow will be the ones who understand how to get everyone to participate."**

FORTUNE, January 25, 1993, Page 69

# Culture of America
## (Unique crucible for innovation)

- **Freedom of thought**

- **Independent thinking**

- **Immigration of new minds**

- **Risk-taking**

- **Non-corrupt bureaucracy**

- **Financial market and venture capital**

**These institutions, which nurture innovation, are the real crown jewels of American culture.**

Friedman, T. L., "The Secret of Our Sauce," The New York Times, March 7, 2004

# How to Fire Up The Innovation Machine

BusinessWeek, October 11, 2004, Page 240

At a time of intense division, with deep political and religious fault lines splitting the world, innovation stands out as a powerful integrative force.

It ties countries, companies, and consumers together in creating value, solving problems, and generating wealth.

An innovation economy demands that society be open, dynamic, educated, international, and risk-taking. Given a chance, innovation can improve all our lives.

Financial risk-taking is the fuel that powers the process of change.

Worldwide innovation networks are the new keys to R&D vitality -- and competitiveness.

# On Creativity

There is nothing higher than creativeness, and there is no greater joy. Therefore – create and rejoice! Be daring in creative flight. "Create courageously!"

Let thought undistorted and unrestricted be impressed in your being. Let it be free from the shadow of the censor's scalpel.

Be true to yourself because there is nothing higher than creativeness.

Slide taken from World Island Project

# Change the World

*"Never doubt that a small group of dedicated individuals can change the world.  In fact, it is the only thing that ever has."*

American anthropologist, Margaret Mead (1901-1978)

# Principle of Global E-Learning

- **Collaborative** Learning

- **Experiential** Learning

- **Objective** Learning

- **Autonomous** Learning

# Chinese Proverb

When I hear, I forget.

When I see, I remember.

When I do, I know.

Knowledge applies with interaction becomes wisdom.

# Global University System

- **GUS aims to create a worldwide consortium and healthcare institutions and NGOs, partic benefiting those in remote/rural areas of dev countries for the eradication of poverty and**

- **Learners in those countries will be able to take their courses, via advanced broadband Internet, from member institutions around the world to receive a GUS degree.**

- **Learns, instructors and reserchers of partner institutions will also form a global forum to exchange ideas and information and to collaborate in research and development with the emerging global GRID computer network technology.**

- **Thus, the higher education institutions will close the digital divide, act as the knowledge center of their community and lead their development.**

1. Wordwide consortium

2. 21st century version of Fulbright exchange program

3. Globally collaborative Research and Development

# University: Leader of Community in the Knowledge Society in the 21st Century

E-Learning
E-Healthcare

University
Knowledge
Center

Global
Partnership

Community
Development
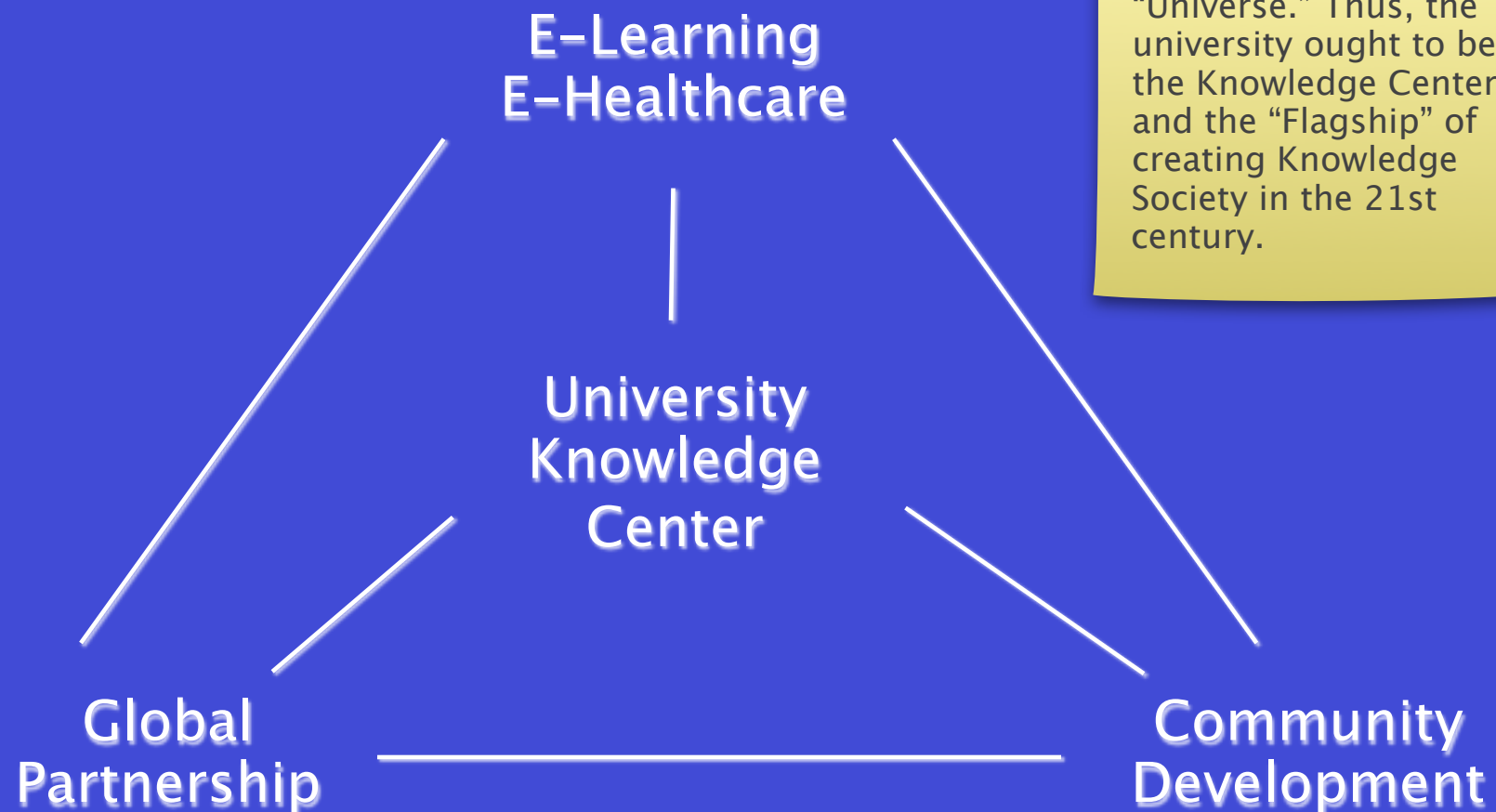
Connotation of "University" is "Universe." Thus, the university ought to be the Knowledge Center and the "Flagship" of creating Knowledge Society in the 21st century.

# Global Broadband Internet (GBI)
## Virtual Private Network with QoS



Global Broadband Wireless and Satellite Internet Virtual Private Network (11-9-02)
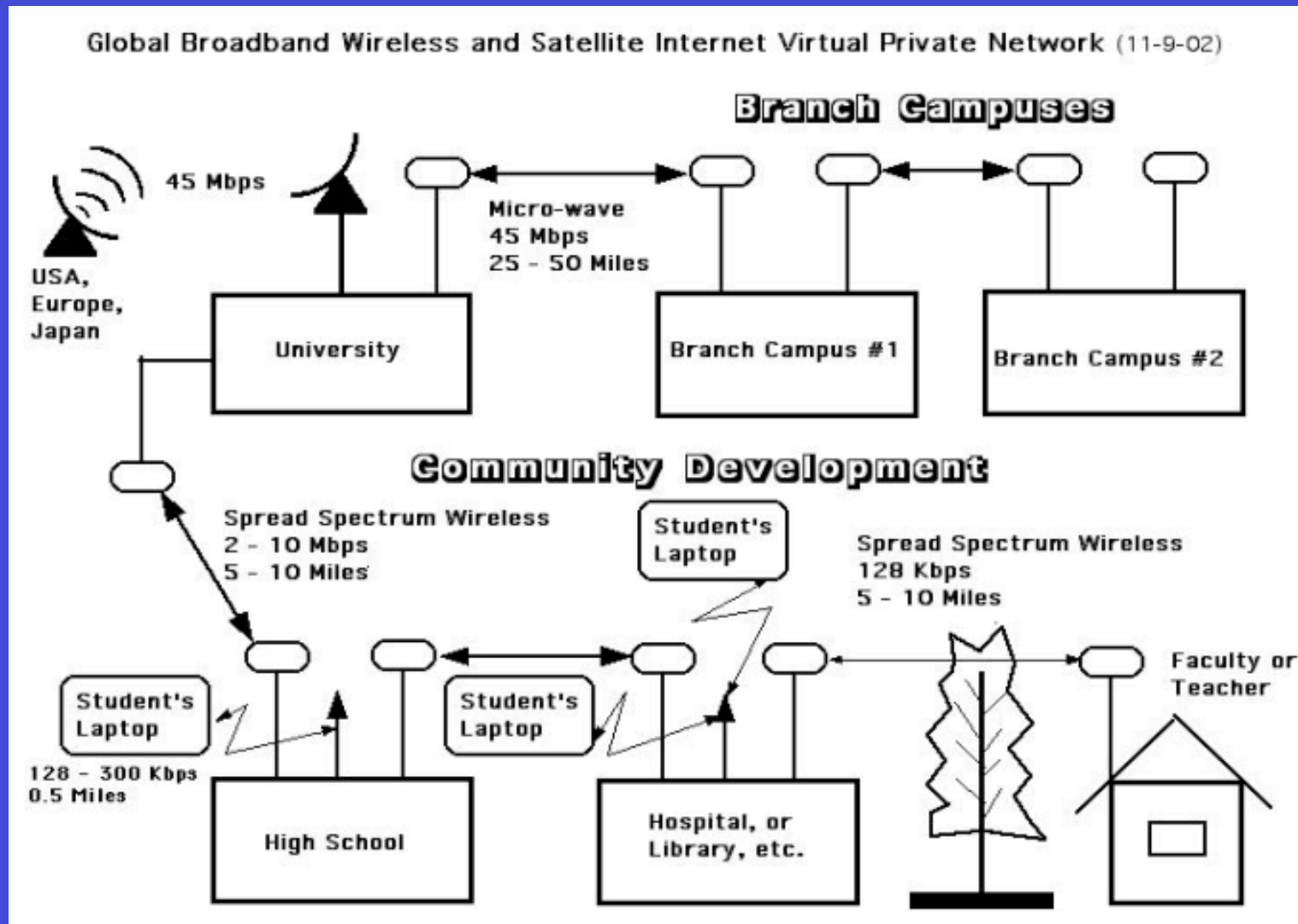
# Expected Benefits

- Support of e-learners and e-healthcare

- Freedom from geographical limitations

- Global dialogues for global peace

- Exchange of ideas, information, knowledge

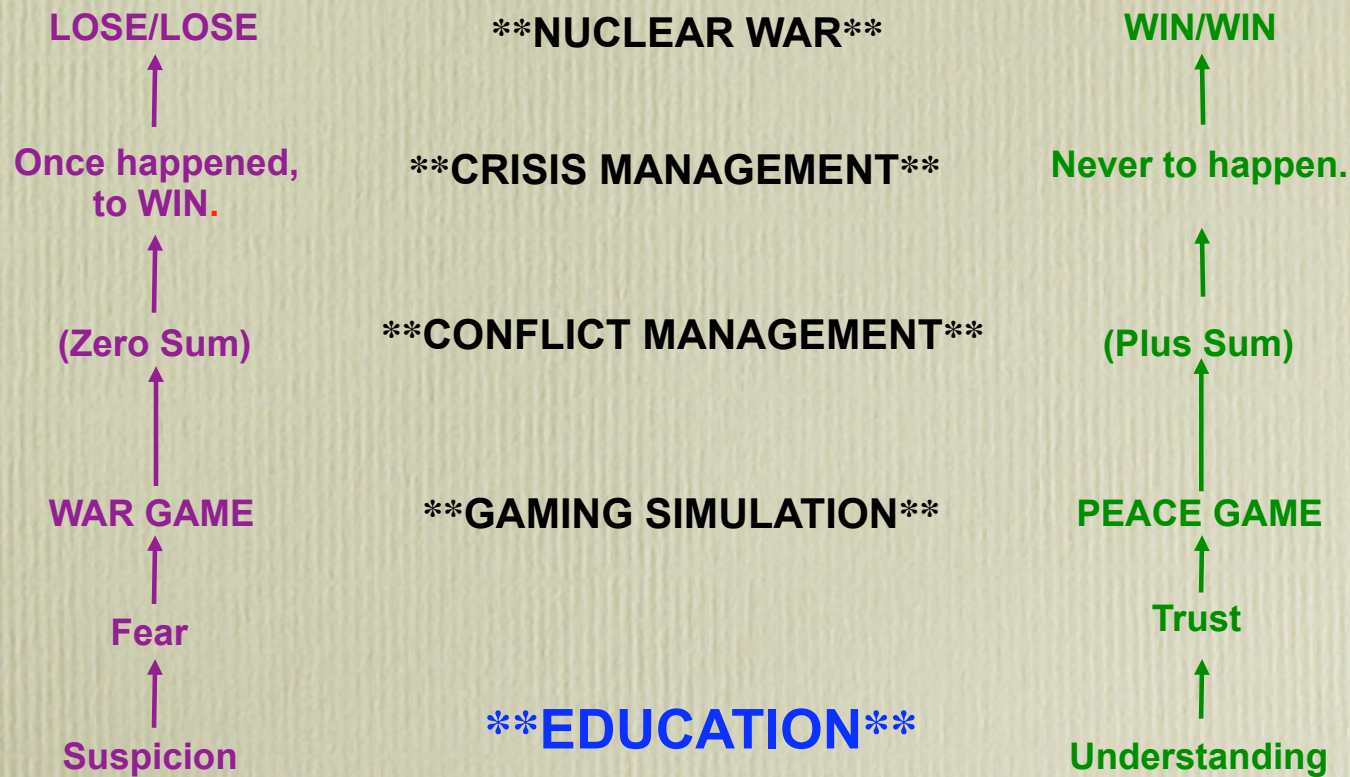- Joint colloborative Hi-Tech research and development

# Globally Collaborative Environmental Peace Gaming

Globally Collaborative Environmental Peace Gaming (GCEPG) with a globally distributed computer simulation system, focusing on the issue of environment and sustainable development in developing countries, is to train would-be decision makers in crisis management, conflict resolution, and negotiation techniques basing on "facts and figures."

With global GRID computer networking technology and Beowulf mini-super computers of cluster computing technology, we plan to develop a socio-economic-environmental simulation system and a climate simulation system in parallel fashion, both of which are to be interconnected in global scale.

# War and Peace Games
## Peace Game is for Global Understanding

| | | |
|---|---|---|
| LOSE/LOSE | **NUCLEAR WAR** | WIN/WIN |
| ↑ | | ↑ |
| Once happened, to WIN. | **CRISIS MANAGEMENT** | Never to happen. |
| ↑ | | ↑ |
| (Zero Sum) | **CONFLICT MANAGEMENT** | (Plus Sum) |
| ↑ | | ↑ |
| WAR GAME | **GAMING SIMULATION** | PEACE GAME |
| ↑ | | ↑ |
| Fear | | Trust |
| ↑ | | ↑ |
| Suspicion | **EDUCATION** | Understanding |

# War Game vs Peace Gaming

The purpose of the War Game is to win the war once it happened, and the purpose of the Peace Gaming is to avoid the occurrence of the war.

Avoiding war is cheaper than winning war.

T. Utsumi coined the word "Peace Gaming" in early 1970s.

# Three Necessary Components for Peace Gaming

1.  **Telecommunication Infrastructure**

    **Packet-Switching Telecommunication**

    **Internet**

2.  **Communication Means**
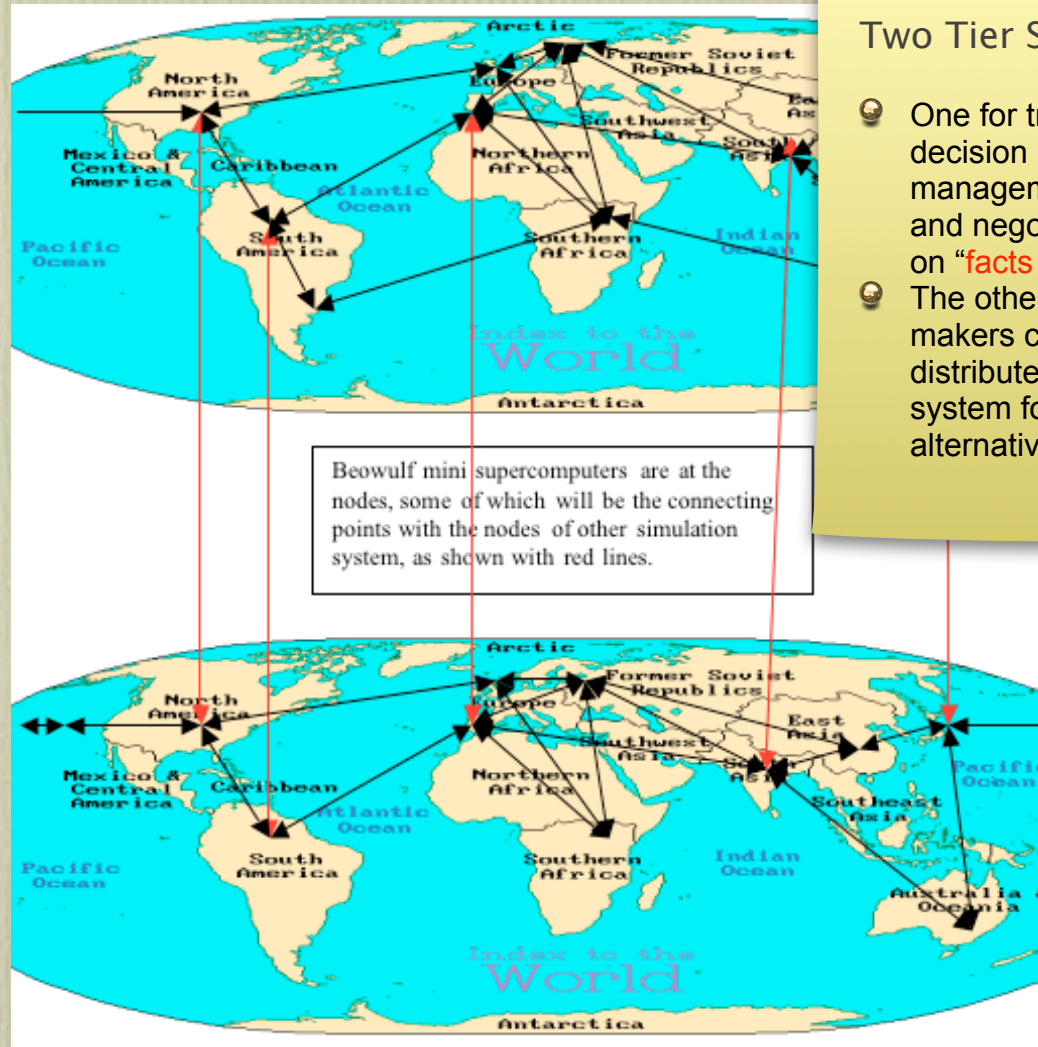
    **E-mail**

    **Multimedia**

3.  **Game Players**

    **Global University System**

# Globally Collaborative Environmental Peace Gaming (GCEPG)

**Globally Distributed Climate Simulation System**



Beowulf mini supercomputers are at the nodes, some of which will be the connecting points with the nodes of other simulation system, as shown with red lines.

## Two Tier System

- One for training young would-be decision makers in crisis management, conflict resolution, and negotiation techniques basing on "facts and figures,"
- The other for helping decision makers construct a globally distributed decision-support system for positive sum/win-win alternatives to conflict and war.

**Globally Distributed Socio-Economic-Environmental Simulation System**

# Two Tier System

- One for **training young would-be decision makers** in crisis management, conflict resolution, and negotiation techniques basing on "**facts and figures**"

- The other for **helping decision makers** construct a globally distributed decision-support system for **positive sum/win-win alternatives** to conflict and war

# Funding

- GUS projects will combine (1) the Japanese government's Official Development Assistance (ODA) funds and (2) Japanese electronic equipment with
- (a) the Internet technology and (b) content development of North America and Europe,
- to help underserved people in rural and remote areas of developing countries by closing the digital divide.

# GLOSAS Projects

**(GLObal Systems Analysis and Simulation Association in the U.S.A.)**

**http://www.friends-partners.org/GLOSAS/**

Click "**Current Reference Websites**" in this home page.

**Takeshi Utsumi, Ph.D., P.E.**

- **Chairman, GLOSAS/USA**

- **Laureate of Lord Perry Award for Excellence in Distance Education**

- **Founder and V.P. for Technology and Coordination of Global University System (GUS)**

# Four Arts

武術:

Art of **Peace-Making**
To attain global peace

武: 戈 (sword) + 止
(stop) = Peace
士: Samurai =
Chivalry

武士: Takeshi =
Chivalry of Peace

学術:

Art of **Learning**
To cherish old and
learn new

仁術:

Art of **Wisdom/Virtue**

To heal illness of nation
and globe

医術:

Art of **Medicine**
To heal illness of
individual human