

A Paradigm Shift in Teaching and Learning for The 21st Century:

Social Constructivism

Outcome Based Education: Why, What, and How for Effective Teaching

Sudaporn Luksaneeyanawin

Sudaporn.L@chula.ac.th

Chulalongkorn University

www.crsip.chula.ac.th, www.eil.grad.chula.ac.th

ThailandPOD ควอที

www.thailandpod.net

Outline

Why paradigm shift?

What is Constructivism

How: Constructivism the Great
Shift in Learning towards
Autonomy of Learning for 21st C

Why Paradigm Shift for Outcome Based Education?

The Changing World Community

- The ICT Scenarios
- The Knowledge Explosion
- The Knowledge Obsolescence
(short shelf life knowledge)
- The Changing Students
- The Changing Job Markets
- The Changing Technology

ICT Profile of Thailand and Other Asian Countries 2011 vs 2013

Country	Population (ml)	Telephone Mainline (ml)	Telephone Mobile (ml)	Internet Hosts(ml)	Internet Users (ml)
China	1,330.045	365.400	547.380	1.431	253.000
	1,349.585	285.115	986.253	20.602	389.000
Japan	127.288	51.232	107.339	39.910	88.110
	127.253	64.668	132.760	64.453	99.182
South Korea	48.380	23.905	43.500	0.334	35.590
	48.955	29.469	52.507	0.315	39.400
Thailand	65.490	7.024	51.377	1.116	13.416
	67.448	6.661	77.605	3.399	17.483
Malaysia	25.270	4.350	23.347	0.378	15.868
	29.628	4.243	36.661	0.422	15.355
Singapore	4.610	1.859	5.619	0.838	3.105
	5.460	2.017	7.794	1.960	3.235
Vietnam	86.120	10.800	33.200	0.842	17.870
	92.477	10.175	127.318	0.189	23.382

(Data from the World Factbook, www.odci.gov/publications/factbook/, Vietnam Data only 2009)

Internet Users in the World Growth 1995 - 2010



Key Words

- **Change**
- **Mobility**
- **Flexibility**
- **Collaboration and Competition**

Student Centered

21st Century

Outcome Based Situation

Bringing out the Best of

the Students

What is Outcome Based Education?

The education where the focus of education is shifted:

- From the content to the students**
- From the outputs or products to the process and the outcomes**
- From custom fit the students to the school to custom fit the school to the students**

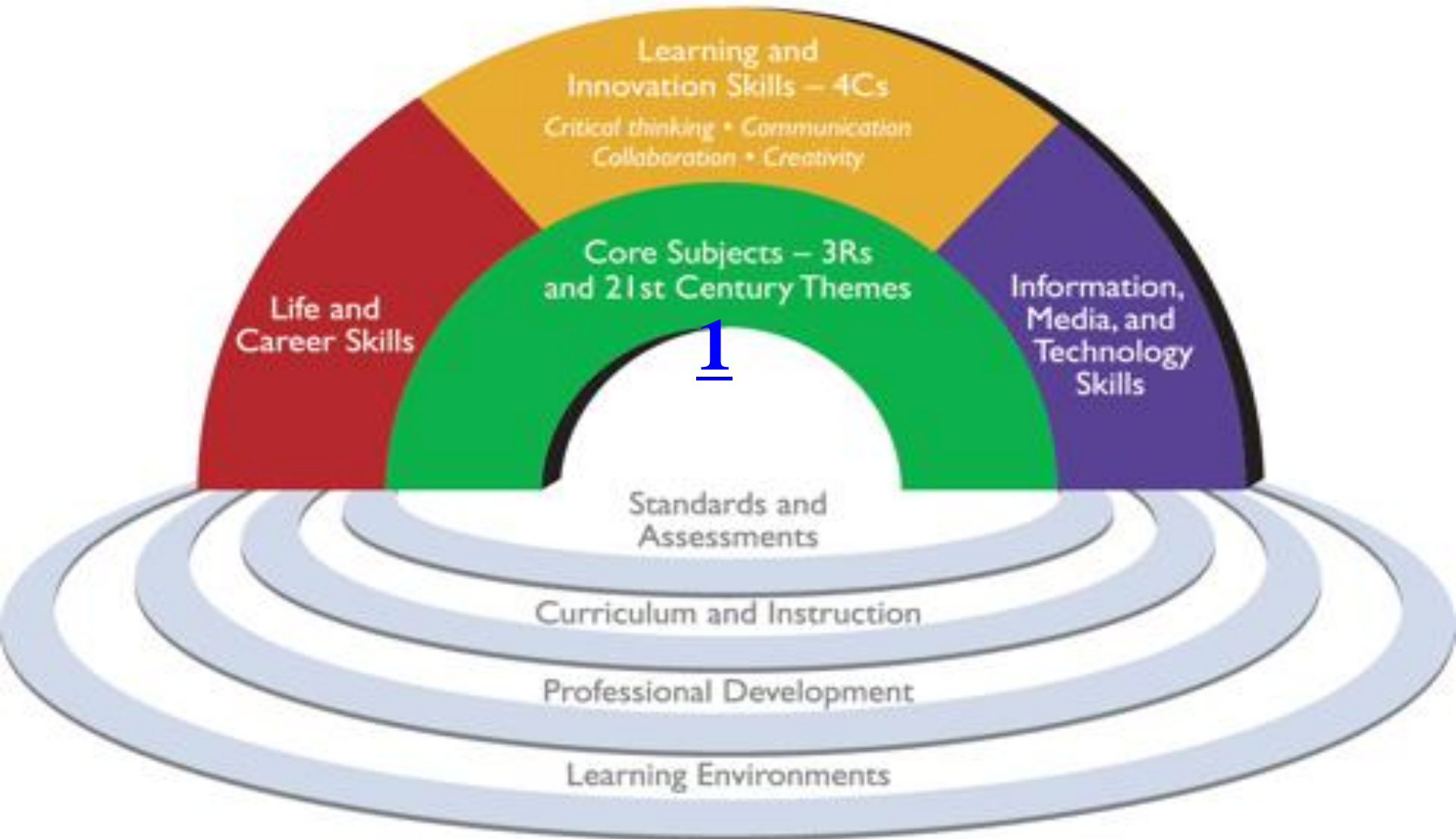
Goals in Outcome Based Education

- 1) All students can learn and succeed, but not on the same day or in the same way.
- 2) Each success by a student breeds more success.
- 3) Schools control the conditions of success by creating the right learning environment, and custom fitting the schools to each student's learning style and abilities.

William Spady*(1994, 1998, 2005,2007)

**** American Association of School Administrators (AASA)***

21st Century Student Outcomes and Support Systems



Partnership for 21st Century Skills, USA (www.p21.org)

21st Century Students Outcomes (USA)

- (I) Life and Career Skills**
- (II) Learning and Innovation Skills (4Cs)**
 - Critical Thinking
 - Communication
 - Collaboration
 - Creativity
- (III) Core Subjects—3Rs and 21st C Themes**
 - Reading
 - (w)Riting
 - (a)Rithmetic
- (IV) Information, media, and Technology Skills**

Support Systems

- (I) Standards and Assessments**
- (II) Curriculum and Instruction**
- (III) Professional Development**
- (IV) Learning Environments**

กรอบมาตรฐานคุณวุฒิระดับอุดมศึกษาแห่งชาติ

Thailand Qualifications Framework for Higher Education - TQF

มคอ. ที่ กกอ. กำหนดครอบคลุมอย่างน้อย ๕ ด้าน คือ

(๑) ด้านคุณธรรม จริยธรรม

(๒) ด้านความรู้

(๓) ด้านทักษะทางปัญญา

(๔) ด้านทักษะความสัมพันธ์ระหว่างบุคคลและความรับผิดชอบ

(๕) ด้านทักษะการวิเคราะห์เชิงตัวเลข การสื่อสารและการใช้เทคโนโลยีสารสนเทศ

Thailand Qualifications Framework for Higher Education -TQF

The 5 strands

(1) Ethics and Values

(2) Knowledge

(3) Thinking Skills

(4) Interpersonal Skills and Responsibility

**(5) Numeral Analytic Skills, Communication
and ICT Skills**

(Royal Thai Government Gazette, 31 August, 2009)

Chulalongkorn University

Students' Learning Outcomes



The How towards Autonomy of Learning

In Outcome Based Education

What should Professional Teachers Acquire?

- Body of Knowledge**
- Pedagogical Skills**
- Attitude towards students, and their career as Professional Teachers**

What is the requirement in good teaching?

- **Instruction / seminars**
- **Inter-vision / mini lessons**
- **Student-centered**
 - **Coaching**
 - **Group work**
 - **Simulated “on the job training”**
 - **Problem-orientated education**
 - **Demand-driven education**

What needs to be done?

Understanding Learning– Didactic Approaches and Classroom management

- Lesson plans: ways to **activate/engage/ inspire** students to learn.
- Coaching and feedback
- Examination and assessment
- Curriculum Development
- Quality Assurance

How?

Social Constructivism

**Approach
(Theory)**

**Methods and Techniques
(The Family)**

Tools



Approach

Methods and Techniques *(The Family)*

Tools

Social Constructivism

Project Based
Research Based
Theme Based
Activity and Task Based
Team Based
Jigsaw Technique
Emergent Problems
Authentic Assessment
Focus on Formative Assessment
etc.

Comp Aided
Net Linkage
Web-Based
Learning Blog
Corpus Based
Data Driven
etc.

Next

Language

Inter communication 1

and intra

Thinking

communication 2

Next

Vygotsky
(1896-1934)

3

Dialectic

Learning

development

proximal

Zone of

4

Thinking Skills

Levels of Thinking

- **Absolute Thinking**
- **Transitional Thinking**
- **Independent Thinking**
- **Critical Thinking**
- **Creative Thinking**

Adapted from Magolda, Baxter (1992)

Express your level of thinking whether you agree or disagree with the statement and why?

1. The sun rises in the east?

2. Men are born free and are in chains everywhere.

Answer as if you are a :

- Absolute thinker**
- Transitional thinker**
- Independent thinker**
- Critical thinker**
- Creative thinker**

[Back](#)

Inter Communication

Experientialism: The Learner and the Mediation

(TALKs, TASKs, TEXTs: Donato 2005)

- Teachers and Teaching Assistants
- Peers in the team, the class, the learning community, Special Interest Group-SIG
- Media: books, journals, websites, e-communication

[Back](#)

Intra Communication

Reflection: The process to react or reflect the student's thoughts and attitudes on something.

- Reaction to pictures, photos, maps, charts, tables, facts and figures by writing or speaking.

- What do you see that is interesting?**
- Describe or discuss about it?**
- Describe it as you see.**
- Why is it so or why is it not as expected?**
- What are the problems, and how can we solve the problems?**

Metalearning

- **Awareness of what learned**
- **Go meta to understand one's own understanding and to solve the problems**
- **Explicit teaching and learning
(Emergent Problem)**

How would metalearning help?

- The Perception and Recognition Process
(Understanding and Interpretation)
- The Production Process

Development of Metalearning

- Teacher Monitoring (Feedback)
- Peer Monitoring (Using Classroom Activities)
- Self Monitoring System (Being Able to Identify Errors and Fix Them)

[Back](#)

Dialectic

[Back](#)

Diversity makes perfect. To be mixing with people of different experiences, attitudes.

Real World Situation: You cannot choose your partners or members of the team. We are not always compatible, but we can always work it out.

- Learning to work as a dialectic dynamic team.
- Bringing out the best of your team members.
- Playing the Devil Role.
- Thinking more thoroughly, making decision more cautiously. There is always a BUT about it.

Zone of Proximal Development – ZPD

(From ASD to PSD)

Every being is a potential learner. One starts from the *Actual Stage of Development-ASD* and moves towards the *Potential Stage of Development-PSD*.

- From ASD to PSD, one can monitor and be monitored to develop.**
- If the beings learn to learn. They will seek for nourishing learning environments helping them sustain and retain the ability to learn.**
- Learning to learn leads to autonomy of learning. Learning retention helps the learner to reach the ideal stage of development.**

[Back](#)

OUTCOMES

- **Learned men with learning abilities.**
- **The passion to learn and to seek for knowledge.**
- **The work and the social skills.**
- **The communicative skills both in speaking and writing'**
- **etc.**

Characteristics of Autonomous Learners

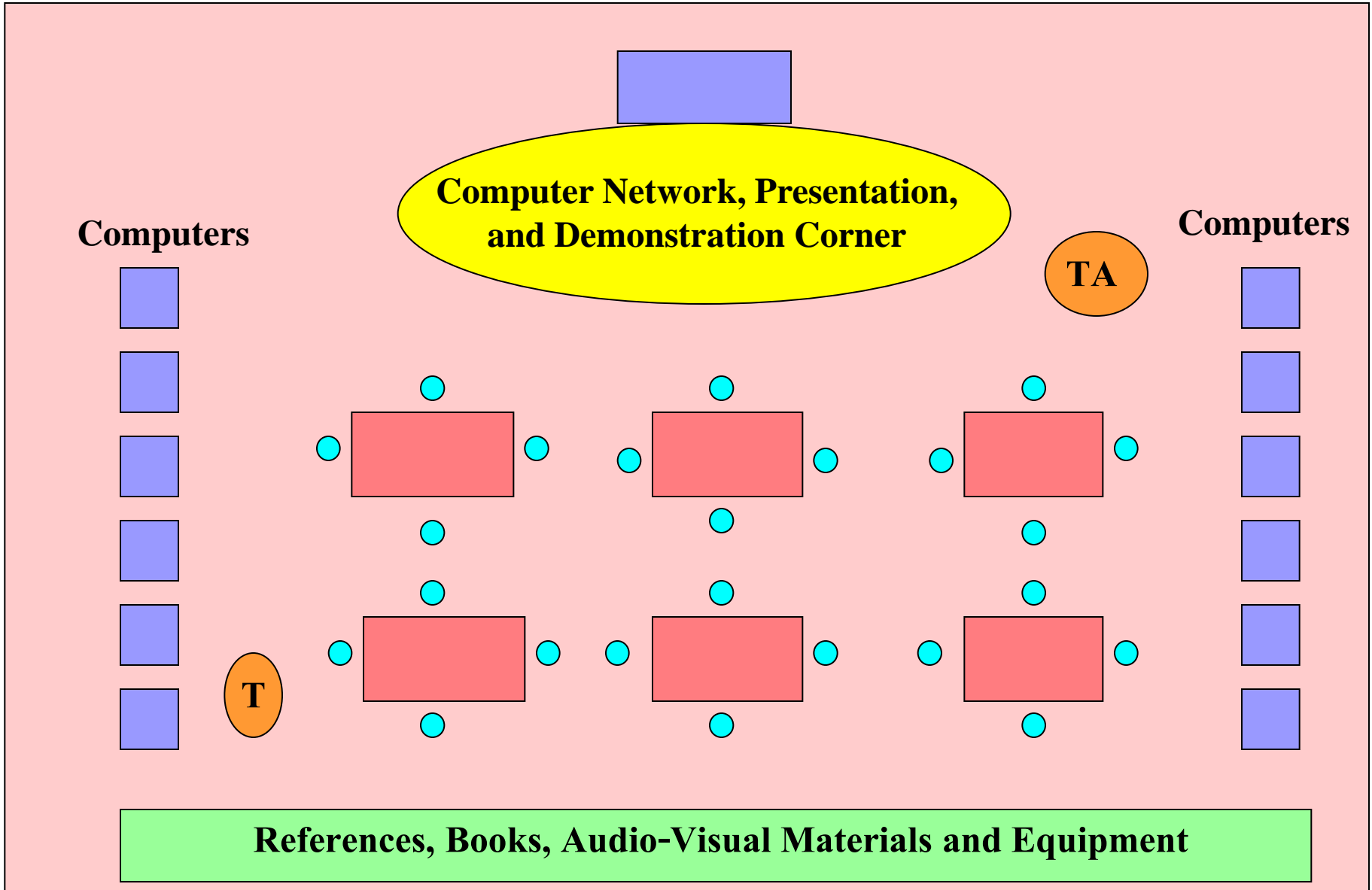
- **Knowing one own needs**
- **Sharp observation**
- **Ability to ask good questions**
- **Ability to seek for good answers**
- **Ability to communicate**

[Back](#)



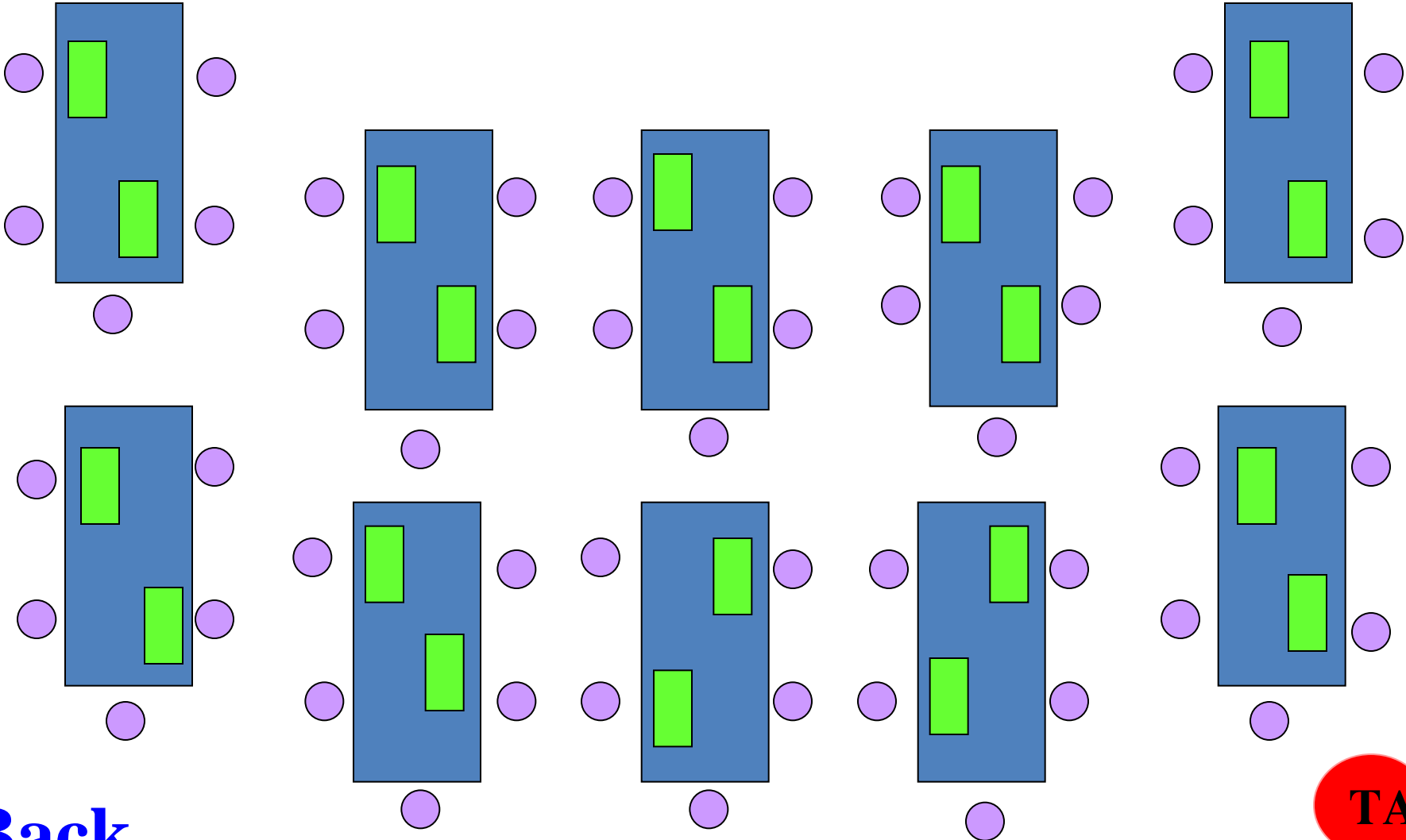
[Back](#)

Classroom Layout



Presentation Corner

T



Back

Materials

TA

**The Great Paradigm Shift in
Teaching and Learning
towards
The 21st Century**

Changes in the 21st Century Effecting Education

- The students**
- The vast and fast accessibility of the materials and media**
- The culture of learning**
- The schools**
- The needs and demands of the societies**

The Great Shift



Teaching

Learning

Transferring

Co Constructing

Giving

Sharing

Passive

Active

Given

New

FLIPPED CLASSROOM

The Process of Flipping

Changing the Classroom to a Learning Room.

Focusing on Students.

No Spoon Feeding.

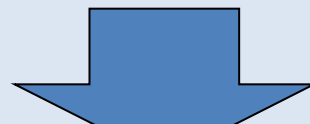
Engaging Students with Class Tasks.

Letting the Students Plan, Do, and Assess.

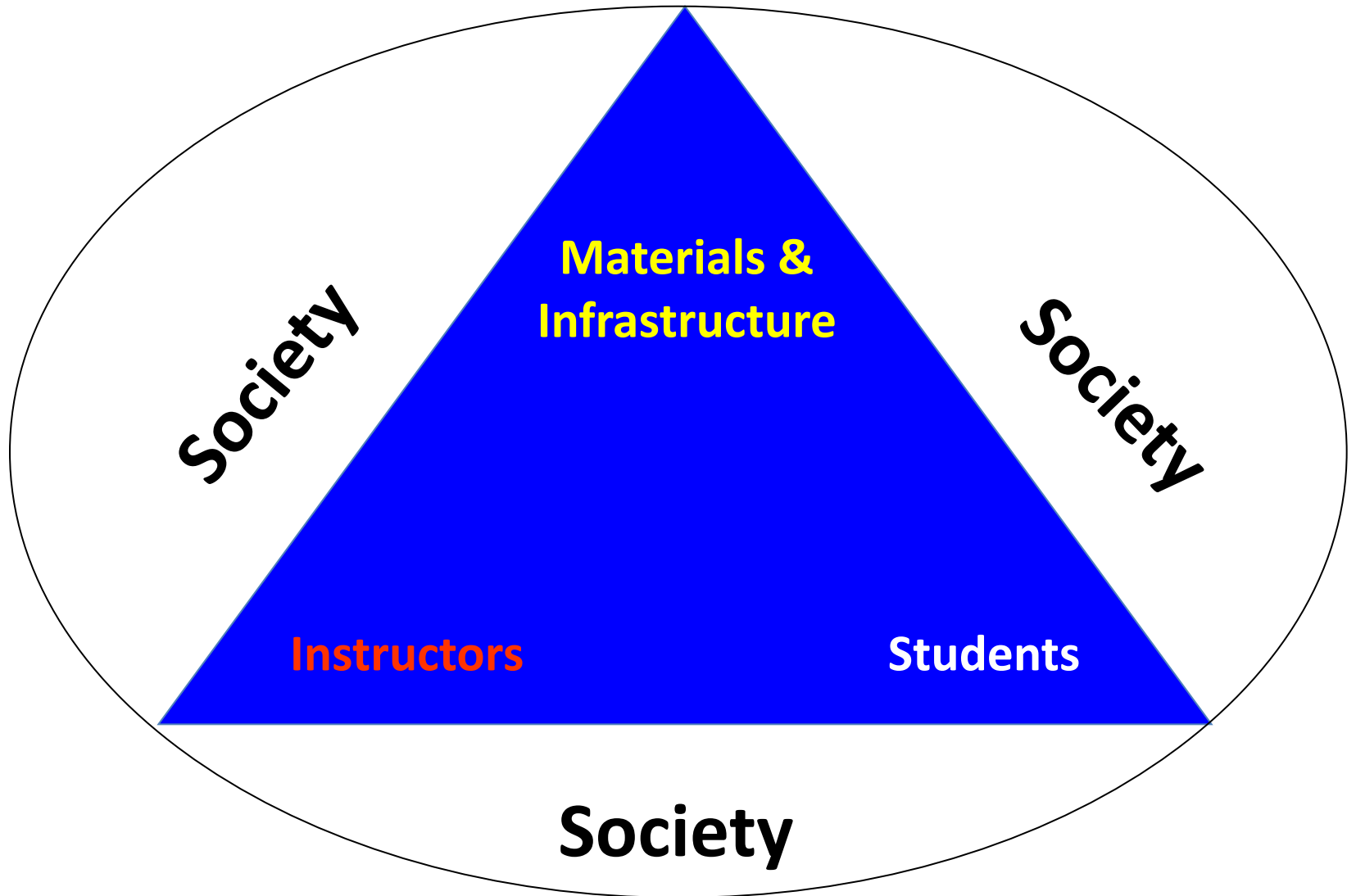
Having Students' Q&A Session.

Problems are put forward and solved by students.

Etc.



Factors Involved in Instruction



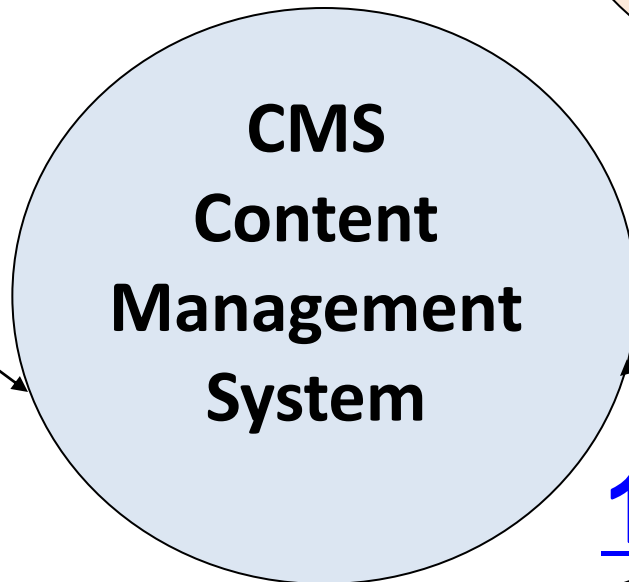
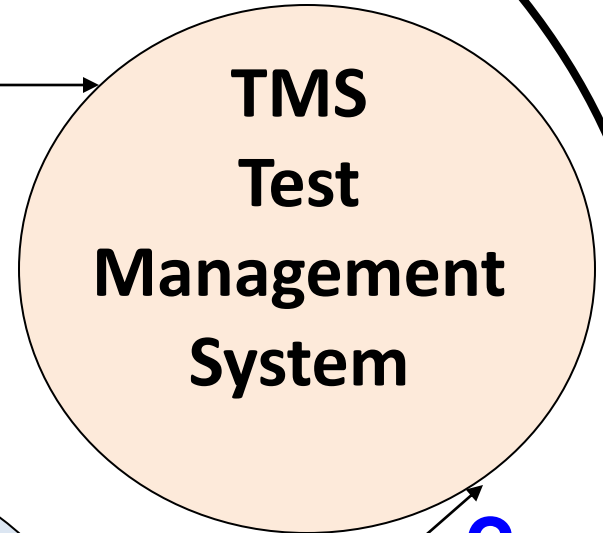
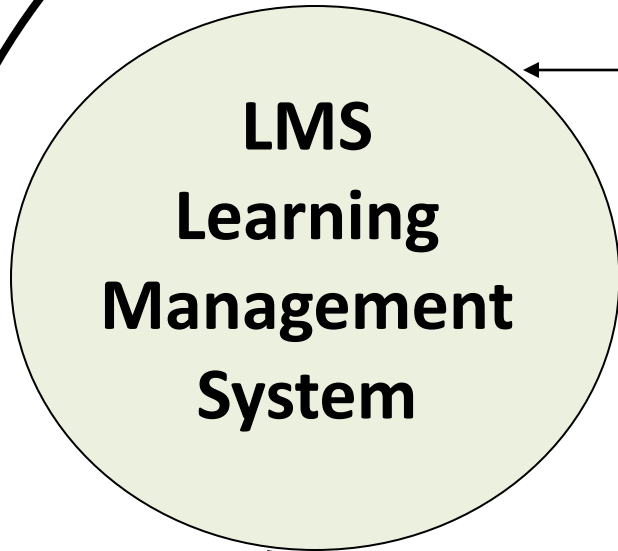
**The Area of
Versatilist
Creative Thinker**

Generalist

**S
p
e
c
i
a
l
i
s
t**

TECHNOLOGY MANAGEMENT

4



2

3

1

NEXT

Content Management System- CMS

What to Learn?

[Back](#)

- **Curricular Courses**
- **Extracurricular Courses**
- **Extramural Courses**
- **Programs for Emergency Needs or National Issues (SARS, Bird Flu H5N1, AIDS, etc.)**
- **Short programs to answer special training**

Learning Management System-LMS

How to Learn?

- **Social Constructivism**
- **Autonomy of Learning**
- **Programmed Learning on the Web**
- **Synchronous and Asynchronous Learning**
- **Consultancy**

[Back](#)

Test Management System-TMS

What Learned?

[Back](#)

- Assessment and Evaluation

Both Quantitatively and Qualitatively

- Formative Evaluation and Summative Evaluation

- Online Interactive Assessment

- Portfolio Assessment

- Standardized Test and Accreditation System

- Learning Outcome (students' development)

Innovative Technology to Answer the Needs and Challenges

- Wireless Technology/ no telephone line/ no optic fibre**
- Cheap/ Education Equity**
- Fast/ Interactive, Multimedia**
- Multilingual**
- Green technology (paperless) / Consume less energy**

[Back](#)

Conclusion for

21st Century

Teaching and Learning

Discovering the Treasure Within

Learning

The Treasure Within

(Jaques Delors, 1996)

- **Learning to know**
- **Learning to do**
- **Learning to live with others**
- **Learning to be**

(I) Learning to know

- 1. Not just acquiring information**
- 2. Learning (how) to learn**
 - broad general knowledge**
 - in-depth work on small number of subjects**
- 3. Concentration, memory, thought**

(II) Learning to do

- 1. From skills to competence**
- 2. The rise of service sector**
- 3. Information and communication**
- 4. Stable, effective relationship between individuals**

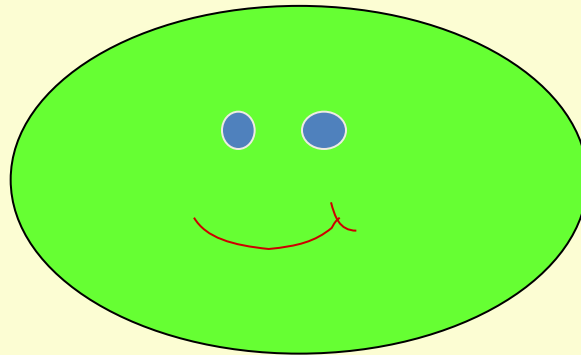
(III) Learning to live with others

- 1. Respect other people, their cultures, and spiritual values**
- 2. Gradual discovery**
 - Knowing oneself**
 - Understanding others**
 - Accurate view of the world**
 - Teachers as role models**

(IV) Learning to be

- 1. All-round development of each individual (mind and body)**
- 2. Individual development from birth throughout life**

**Thank you for your kind
attention.**



Enjoy your Teaching, LOL.