



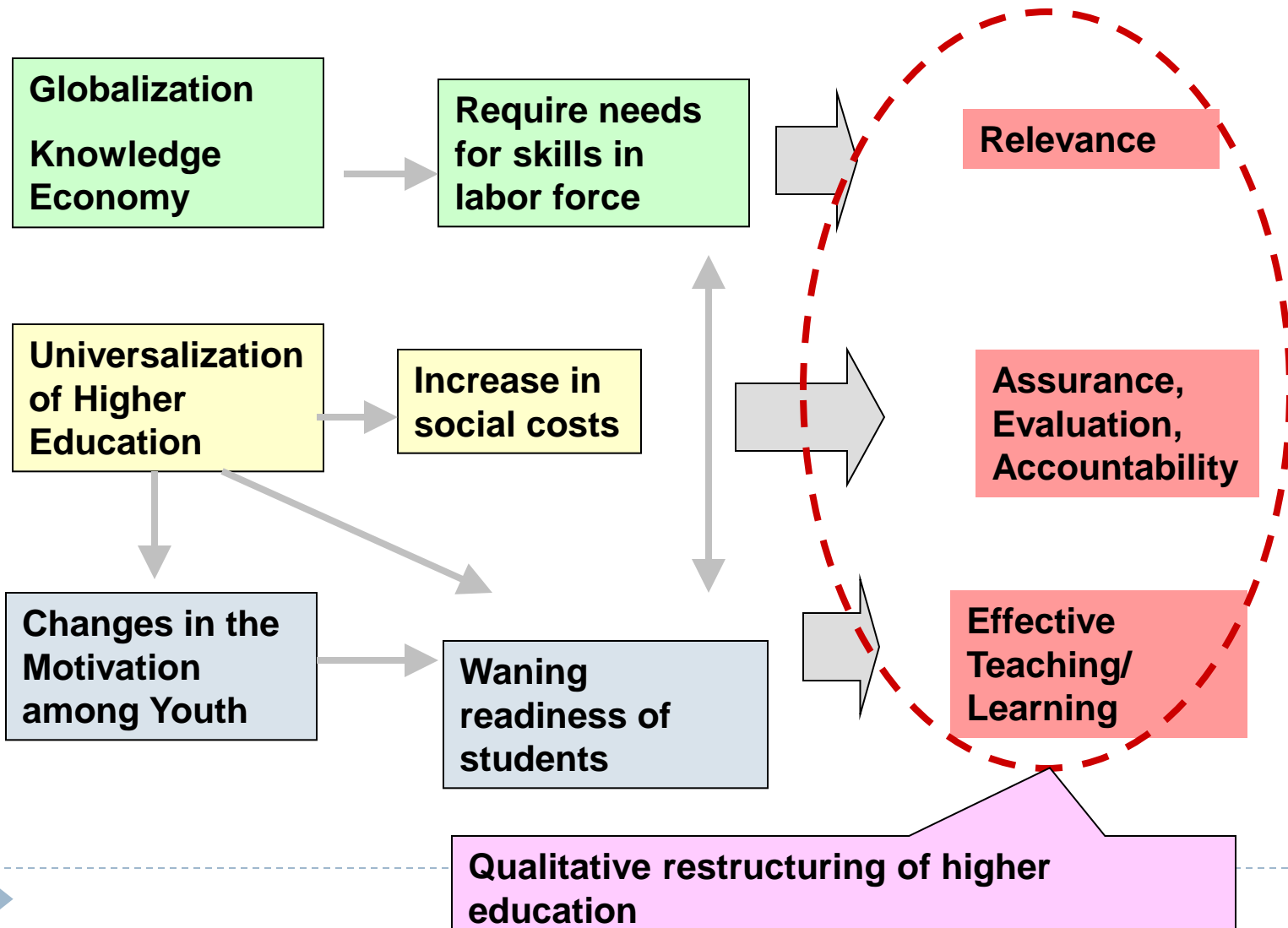
Higher Education Assessment and Quality Assurance

Motohisa KANEKO, The University of Tokyo

What Works Conference on
Quality of Teaching in Higher Education

OECD-IMHE 12-13 October 2009 Istanbul Technical University

Why is Quality the Issue?



Quality Assurance and Improvement

- ▶ What to “assure” ?
 - ▶ Minimum level outcome
 - ▶ Feasible?
 - ▶ Minimum level of value added
 - ▶ Feasible?
- ▶ What can be assured
 - ▶ University tries best to improve education
 - ▶ The effort is based on evidence
 - ▶ Clear Objective
 - ▶ Instruments to assess the effectiveness

Elements of Assurance/improvement

▶ Shift in Perspective

- ▶ Teaching → Learning
- ▶ Idea/Efforts → Results
- ▶ Autonomy → Systematic Control/Accountability

▶ Means of Quality Enhancement

- ▶ Assessment
- ▶ Control / Management

▶ Regimes of Assessment and Control

- ▶ Assessment - Object
 - ▶ Input, Process, Outcome
- ▶ Control - Agent
 - ▶ HE institution, Government, Intermediary Bodies
- ▶ Combination of the two axis

Contents



1. Mechanisms for Quality Assurance/Enhancement
2. Problems in Undergraduate Education
3. Teaching Practices and Their Effectiveness

Models of Quality Assurance

- ▶ **Feedback**

- ▶ Assessment
- ▶ Control

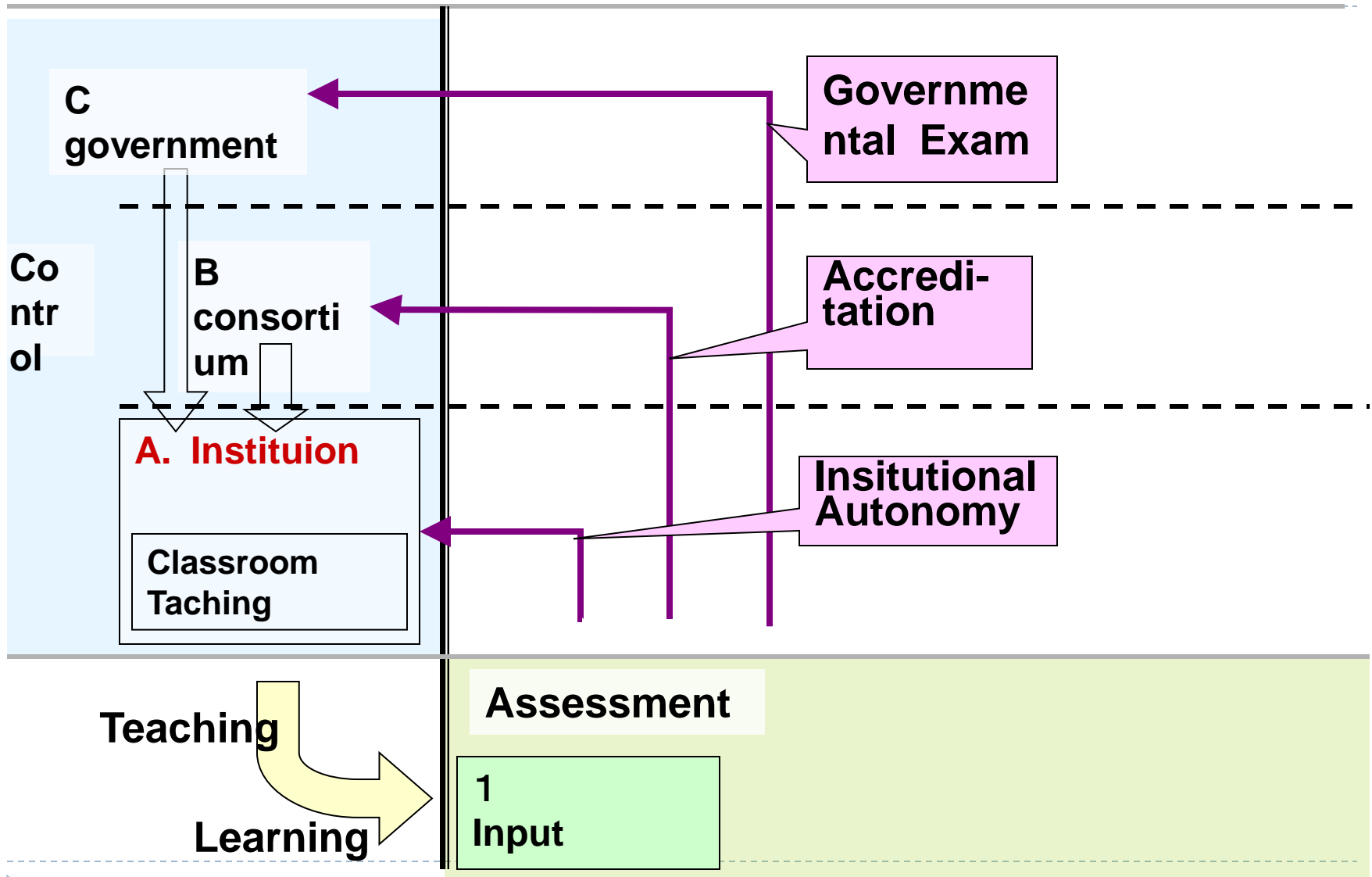
- ▶ **Assessment**

- ▶ Input — Process — Outcome

- ▶ **Control**

- ▶ Macro – Government, Market
- ▶ Mezo - HE Institution, Associations
- ▶ Schools, Curriculum, Teaching Practices

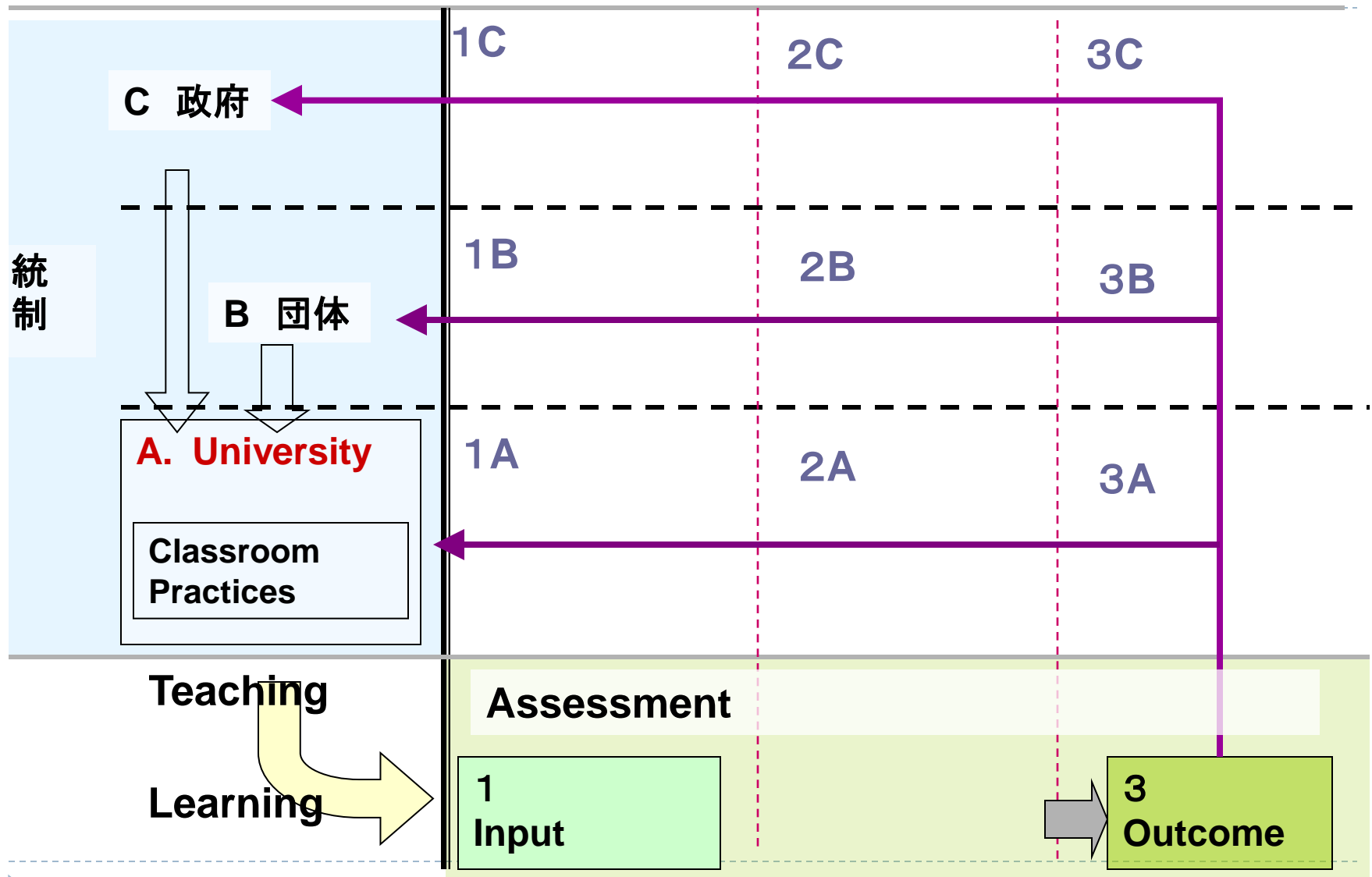
Classical Model



Classical Model to Outcome Assessment

- ▶ **Criticism against classical model**
 - ▶ Tends to protect HE institutions
 - ▶ Lack of concern on learning
- ▶ **Rising Interest on Outcome Assessment**
 - ▶ Concern about results
 - ▶ 1990s - Development of standardized tests
 - ▶ 2008 - OECD Assessment of Higher Education Learning Outcomes (AHELO)プロジェクト
 - ▶ Outcome assessment by fields
 - ▶ College Basic Academic Subjects Examination (College BASE)
 - ▶ Test of General Skill and Competence
 - ▶ Collegiate Learning Assessment (CLA),
 - ▶ College Assessment of Learning Proficiency (CALP),
 - ▶ Measure of Academic Proficiency and Progress (MAPP)

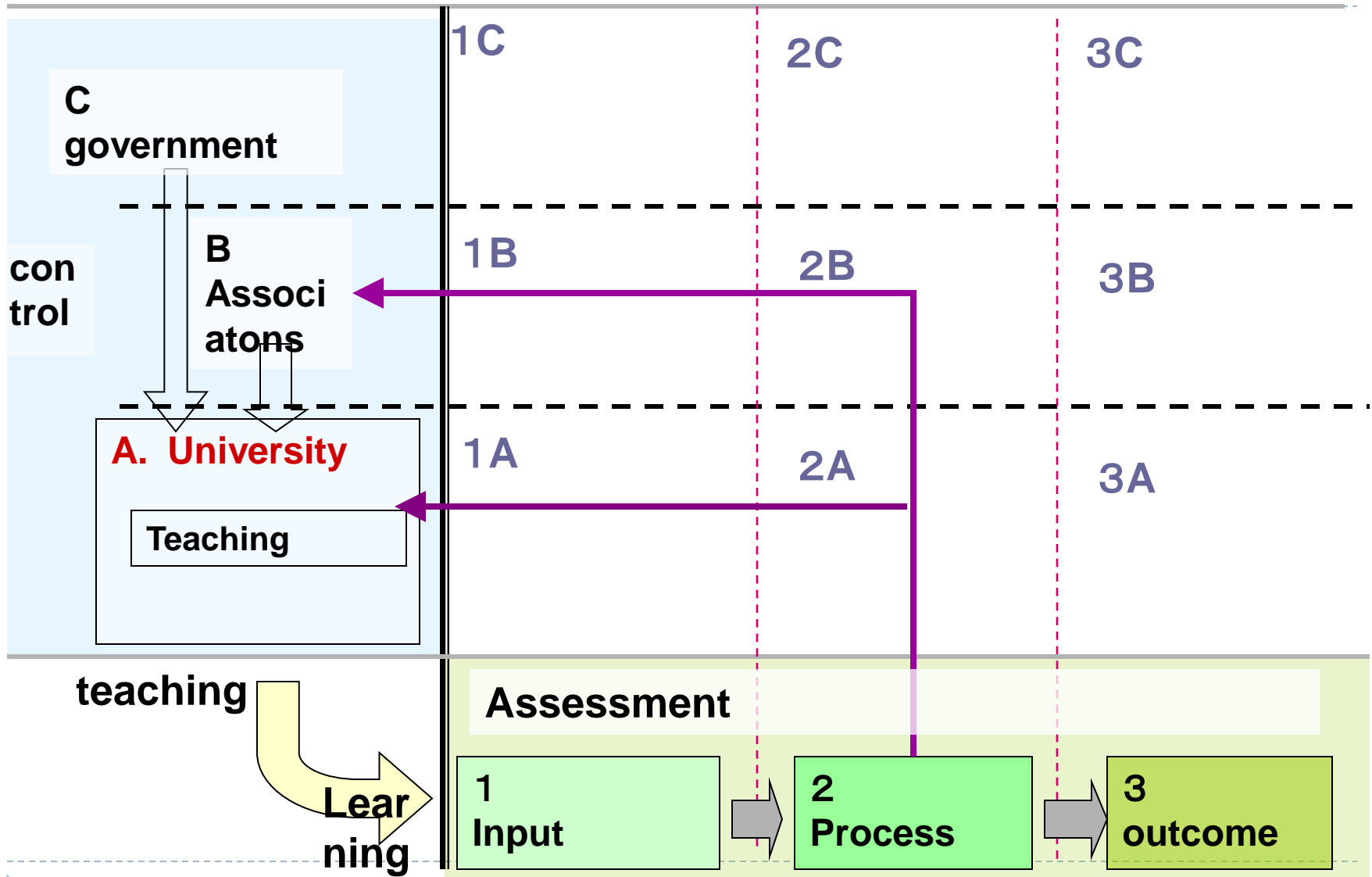
Outcome Assessment Model



Problemes of Outcome Assessment

- ▶ **Measurement**
 - ▶ Academic-Subject Test
 - ▶ Consensus among experts?
 - ▶ Can professional competence measurable?
 - ▶ Competence Test
 - ▶ Arbitrariness
 - ▶ Can not be separated from innate ability
- ▶ **Feasibility of measurement**
 - ▶ Lack of incentive to work on problems
- ▶ **Difficult to feed back on classroom teaching**

Process evaluation



Process Monitoring

▶ **Monitoring of learning process**

▶ Monitoring

- ▶ Learning experiences,

▶ US

- ▶ National Survey on Student Engagement (NSSE), California Consortium

▶ Japan

- ▶ U. Tokyo (CRUMP) survey
- ▶ 120 institutions, 48 thousand students

▶ **As evidence to support primary and secondary education**

- ▶ Comparison across institutions can be very useful

Contents



1. Mechanisms for Quality



Assurance/Enhancement

2. Problems in Undergraduate Education

3. Teaching Practices and Their Effectiveness

Pedagogies of Undergraduate Education

▶ Humboldtian

- ▶ Student as an independent researcher
- ▶ Freedom of Learning
- ▶ Spontaneous Exploration

▶ American

- ▶ Students should be taught
- ▶ Explicit goals of teaching

- ▶ Mastery of the contents



Assumption

- students know what they want
- highly motivated

Becoming less realistic



Strategies for Consolidation

▶ Shift in Perspective

- ▶ Teaching → Learning
- ▶ Idea/Efforts → Results
- ▶ Autonomy → Systematic Control/Accountability

▶ Means of Quality Enhancement

- ▶ Assessment
- ▶ Control / Management

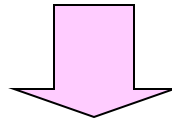
▶ Regimes of Assessment and Control

- ▶ Assessment - Object
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Classical Models

▶ Humboldtian Idea

- ▶ Academic Freedom - *Lehrfreiheit*
- ▶ Freedom of Learning – *Lernfreiheit*
- ▶ No explicit assessment or control

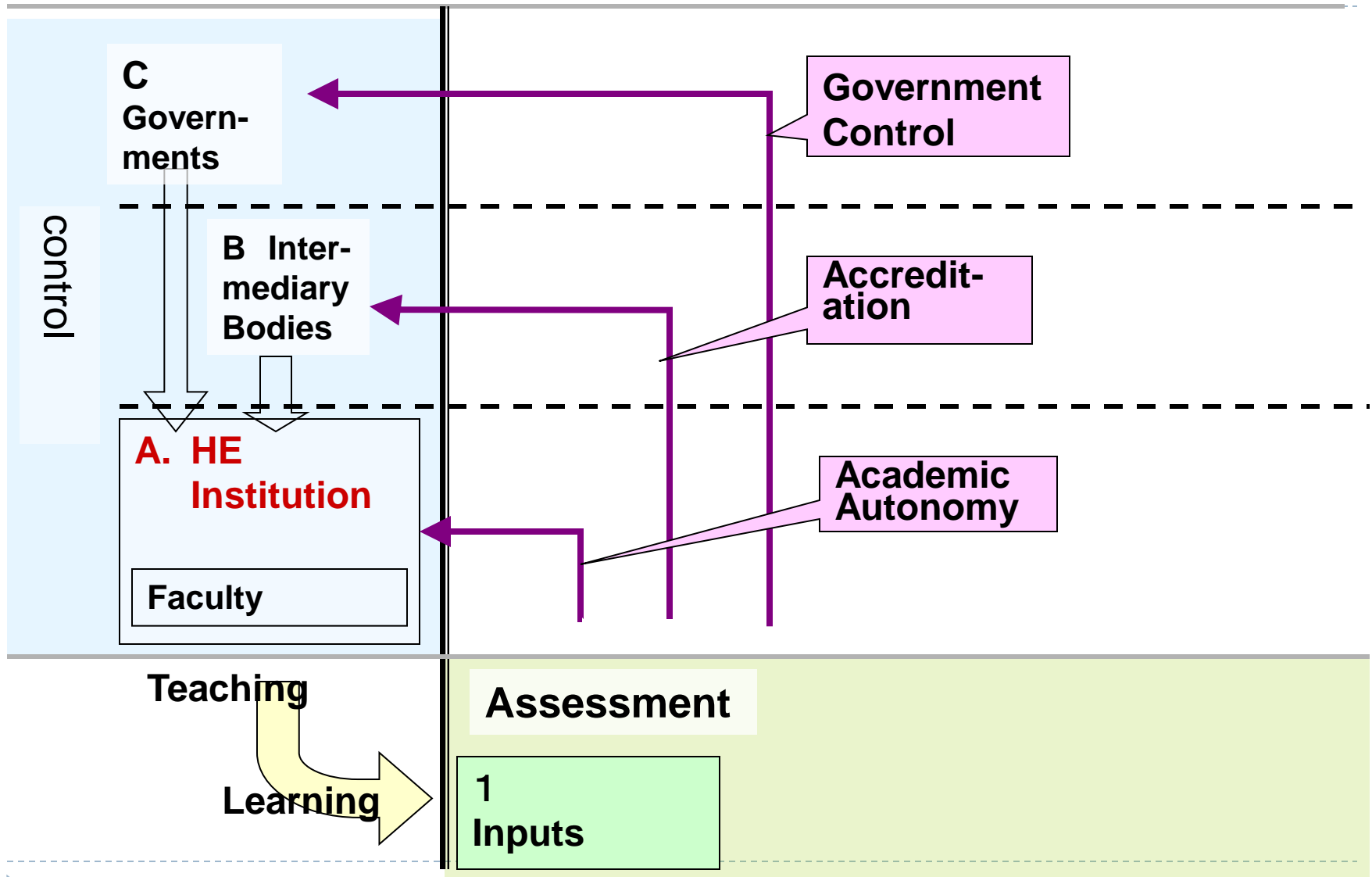


Modern University

Institutional Autonomy

- **Assessment and control through academic governance**
- Government Control
 - **Control through Budget Allocation, Inspection**
- Accreditation
 - **Assessment and Control through Intermediary Bodies**

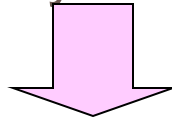
Classical Models



Outcome Assessment

▶ Criticisms against Classical Models

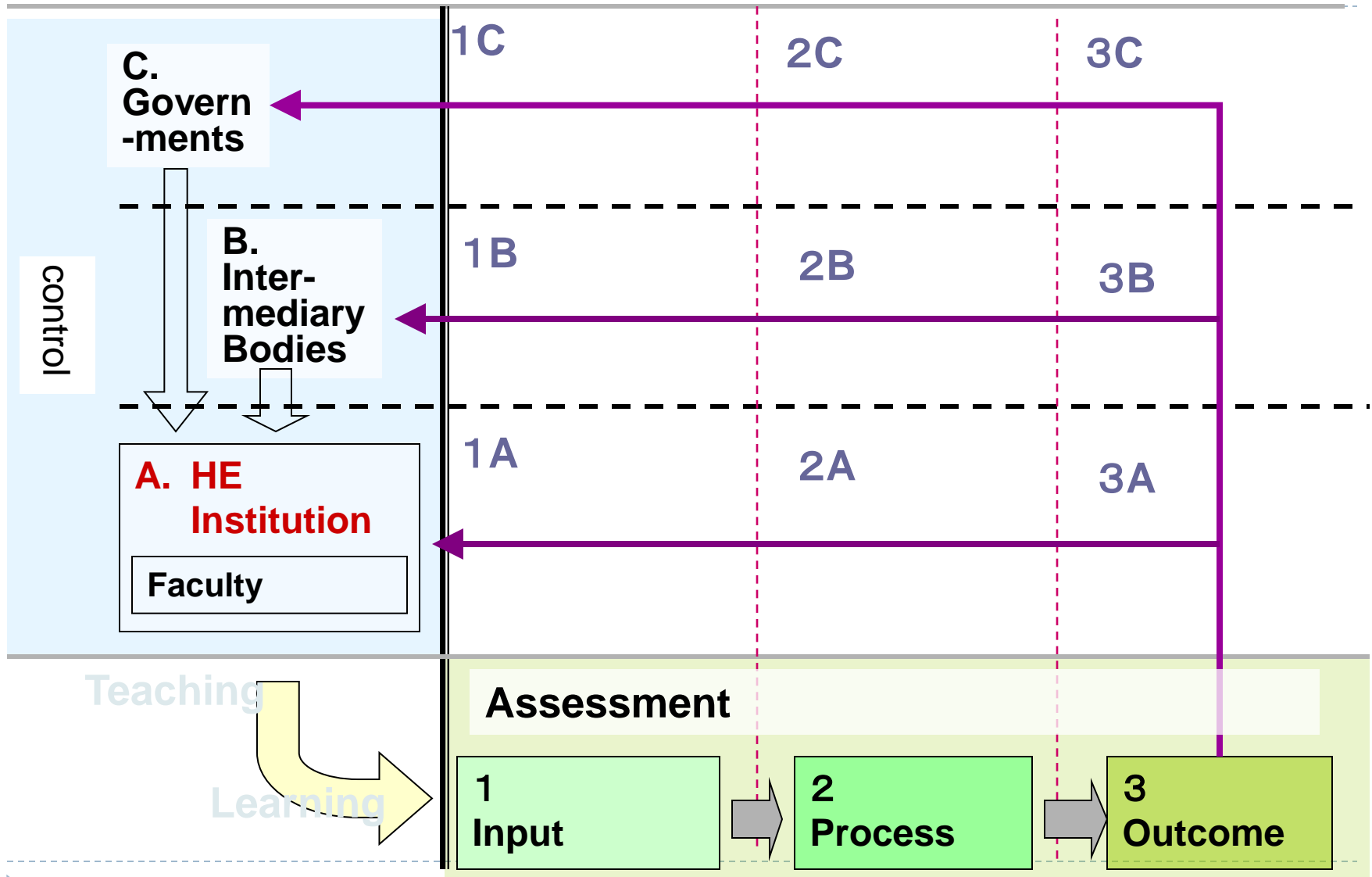
- ▶ Lack of information on outcomes
- ▶ Insufficient information and incentive for change
- ▶ Can not achieve efficiency



Alternative – Outcome Assessment and Control

- Assessment of Outcomes
 - **Standardized instruments for measurement**
 - **Academic Disciplines, Generic Skills**
- Control
 - **Government through budget allocation**
 - **Intermediary organization**
 - **Institution**

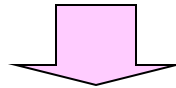
Outcome Assessment and Control



Process Monitoring and Control

▶ **Problems of Process Monitoring**

- ▶ Relevance of Instruments
- ▶ Cost and Reliability of Measurement
- ▶ Information for Effective Control and Management

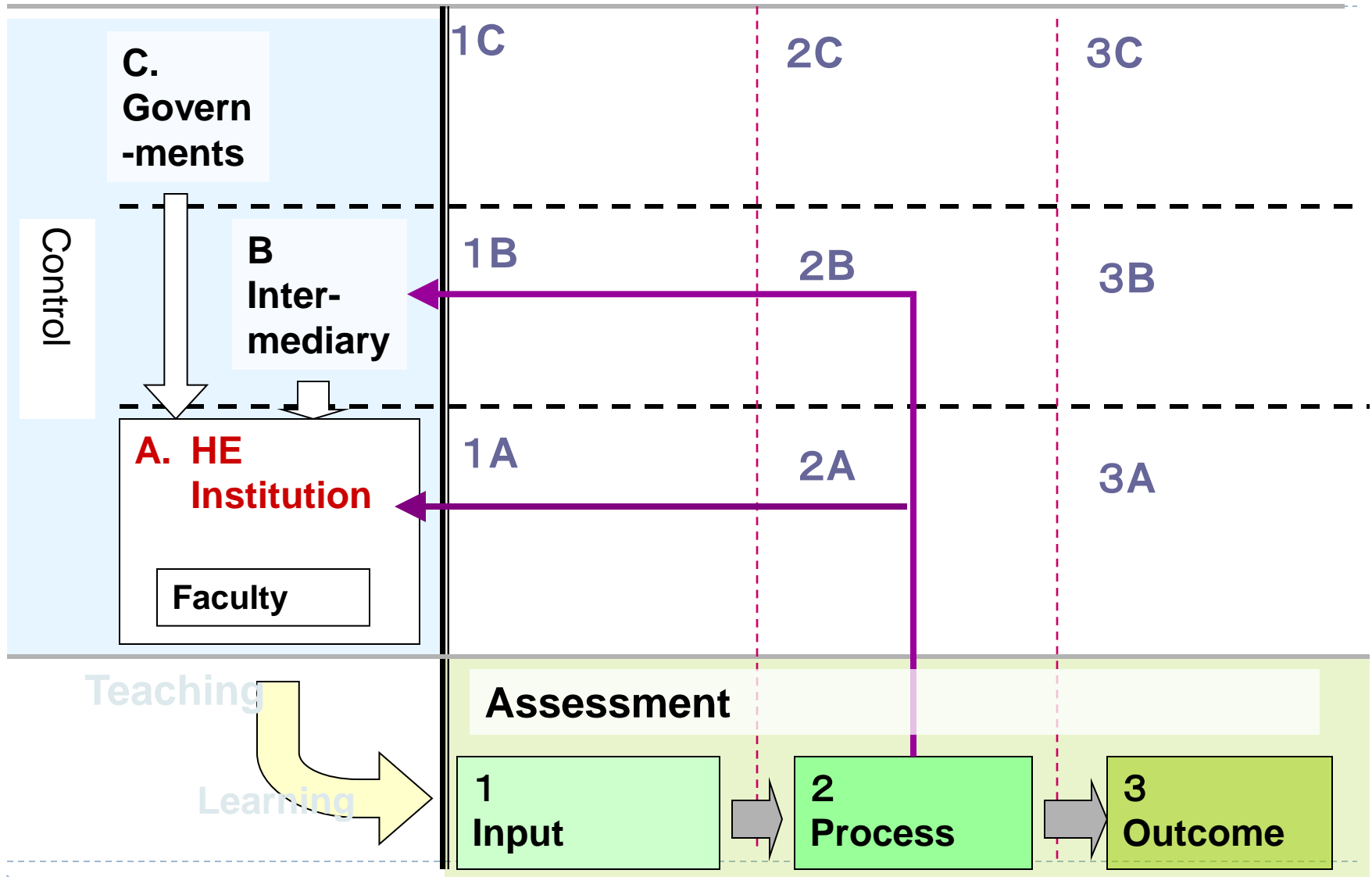


Missing Link

Process Monitoring

- **Assessment of Learning Processes**
 - Students' perception and motivation
 - Behavioral patterns, time spent for studying, behaviors outside class
 - Reactions to different types of teaching

Process Evaluation and Control



Why Process Monitoring is important

- ▶ Learning as matching between teaching and learning
- ▶ Students
 - ▶ Increasing diversity
 - ▶ Unclear motivation to learn
 - ▶ Increasing uncertainty in building career perspective before admission
- ▶ Teaching
 - ▶ Still based on Traditional Academic Disciplines
 - ▶ Remaining influences of Humboldtian Idea
 - ▶ Target of teaching is narrowly defined

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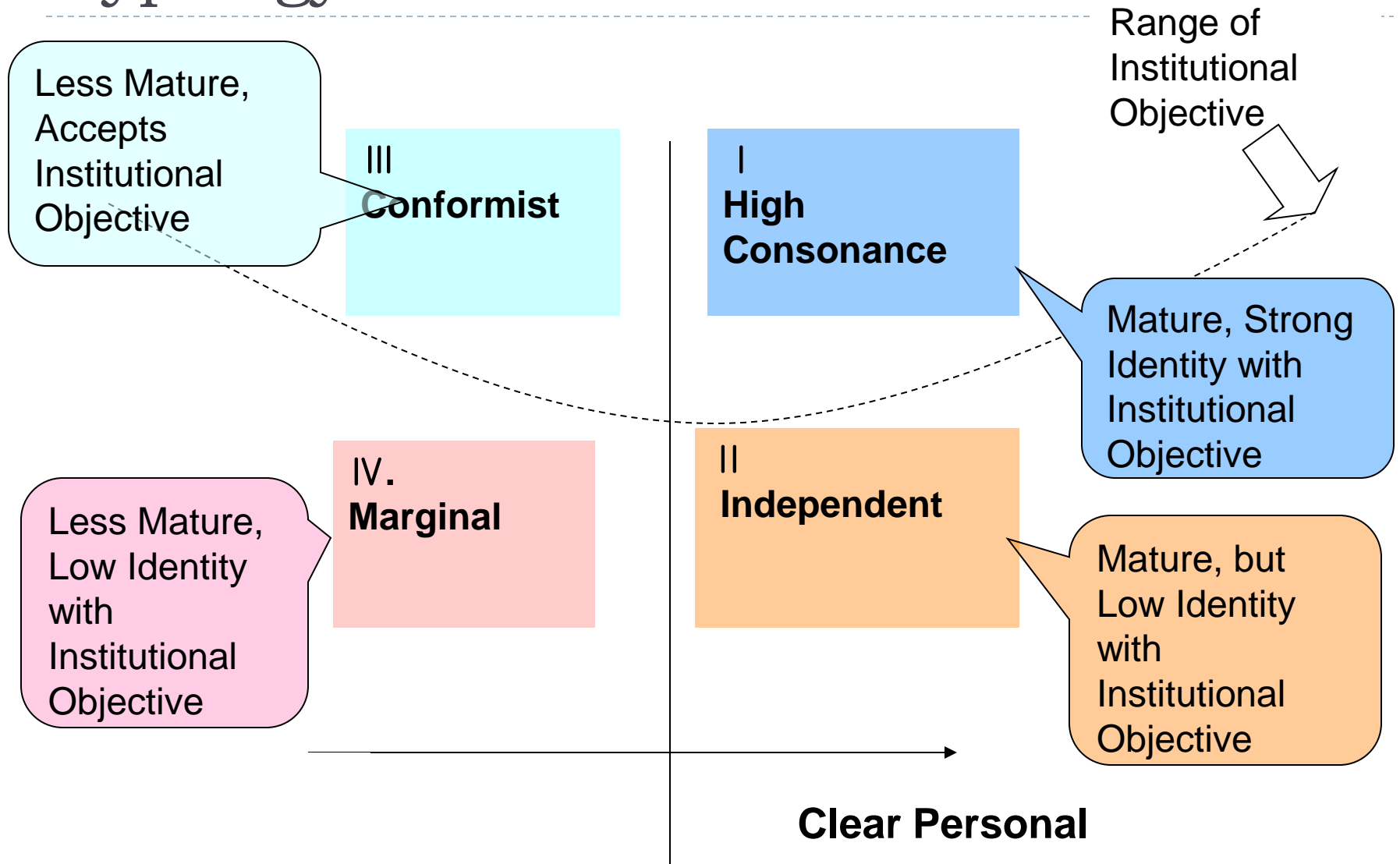


1. Mechanisms for Quality
Assurance/Enhancement

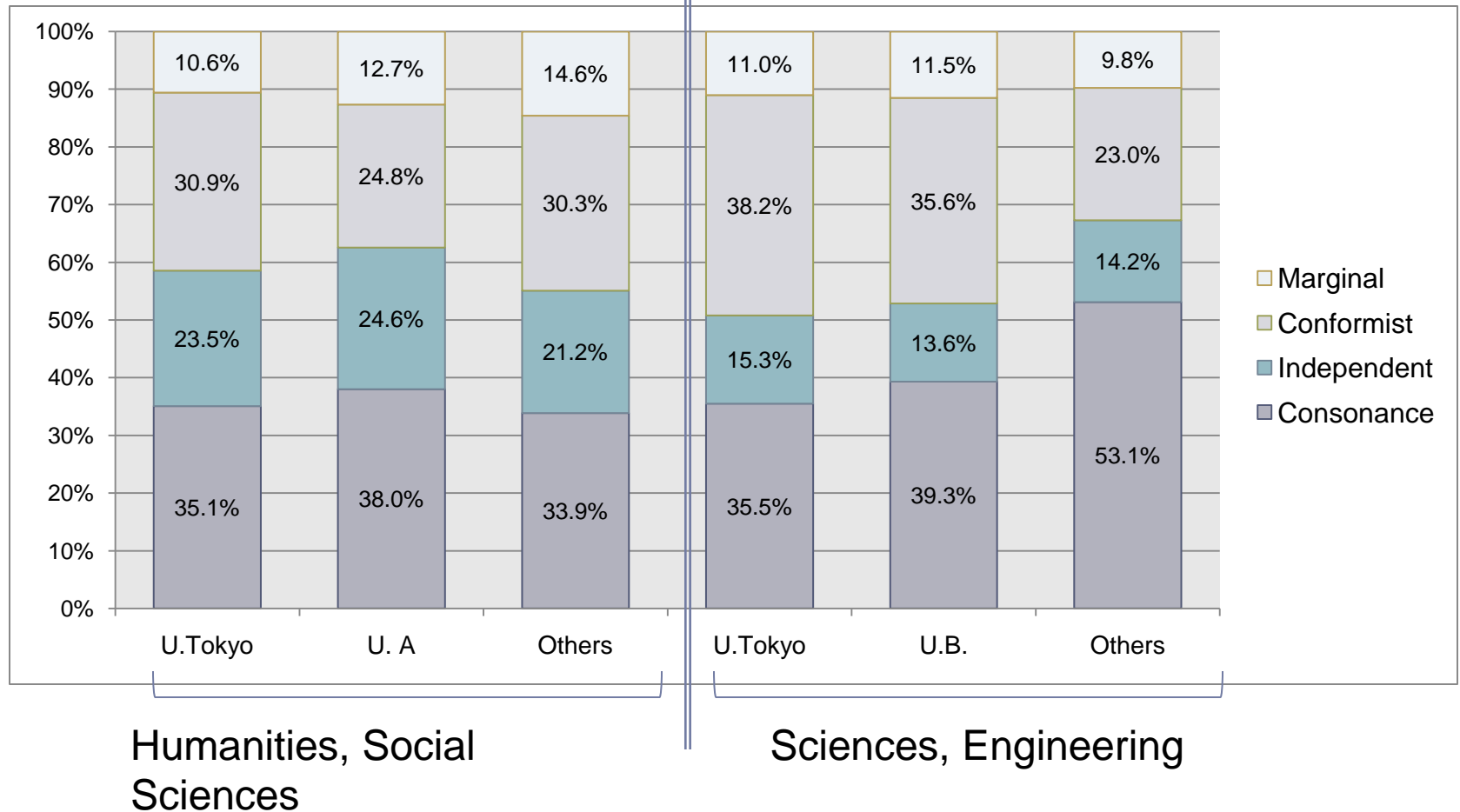
▶ 2. Problems in Undergraduate Education

3. Teaching Practices and Their Effectiveness

Typology of Students



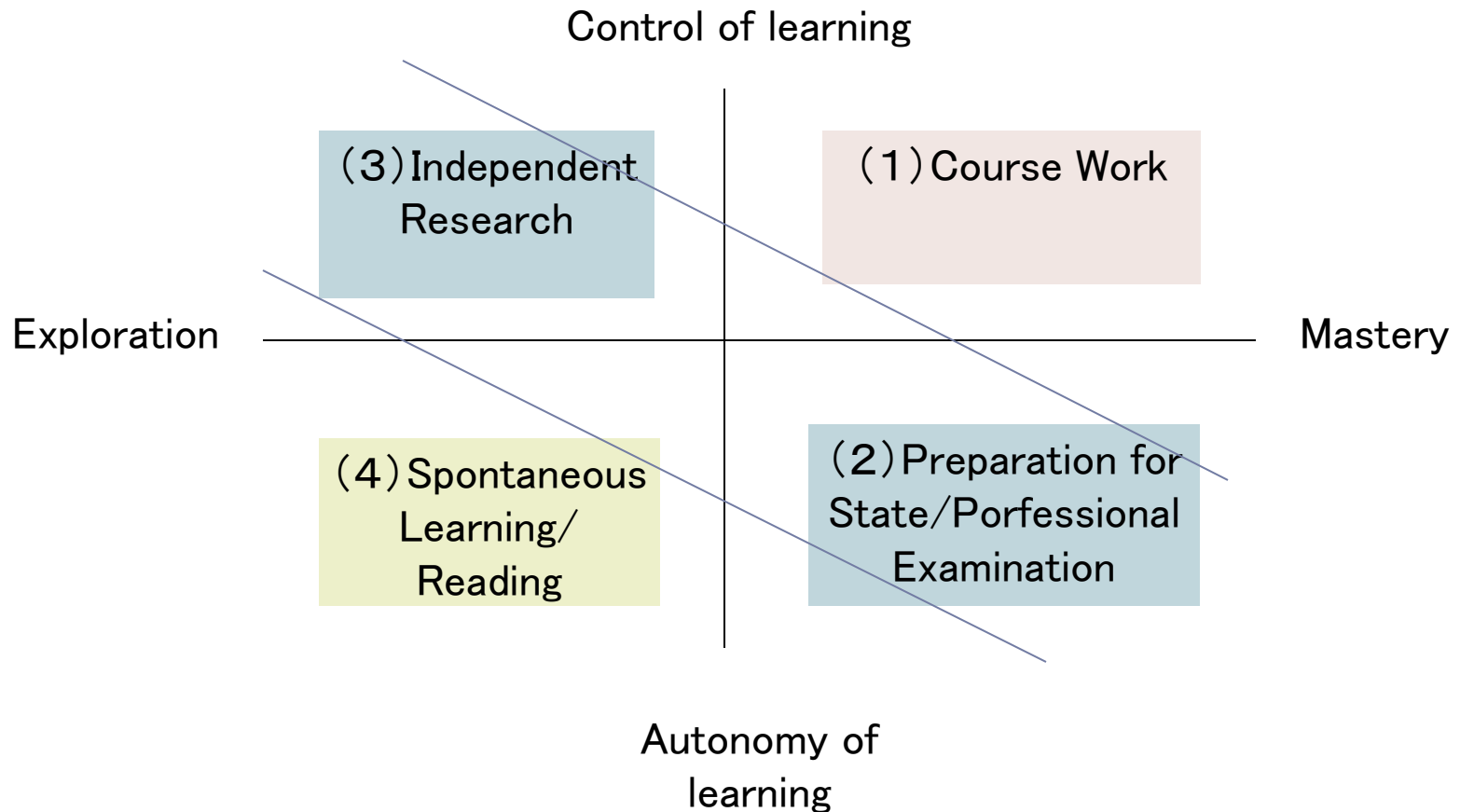
High consonance is minority regardless selectivity



Learning Time

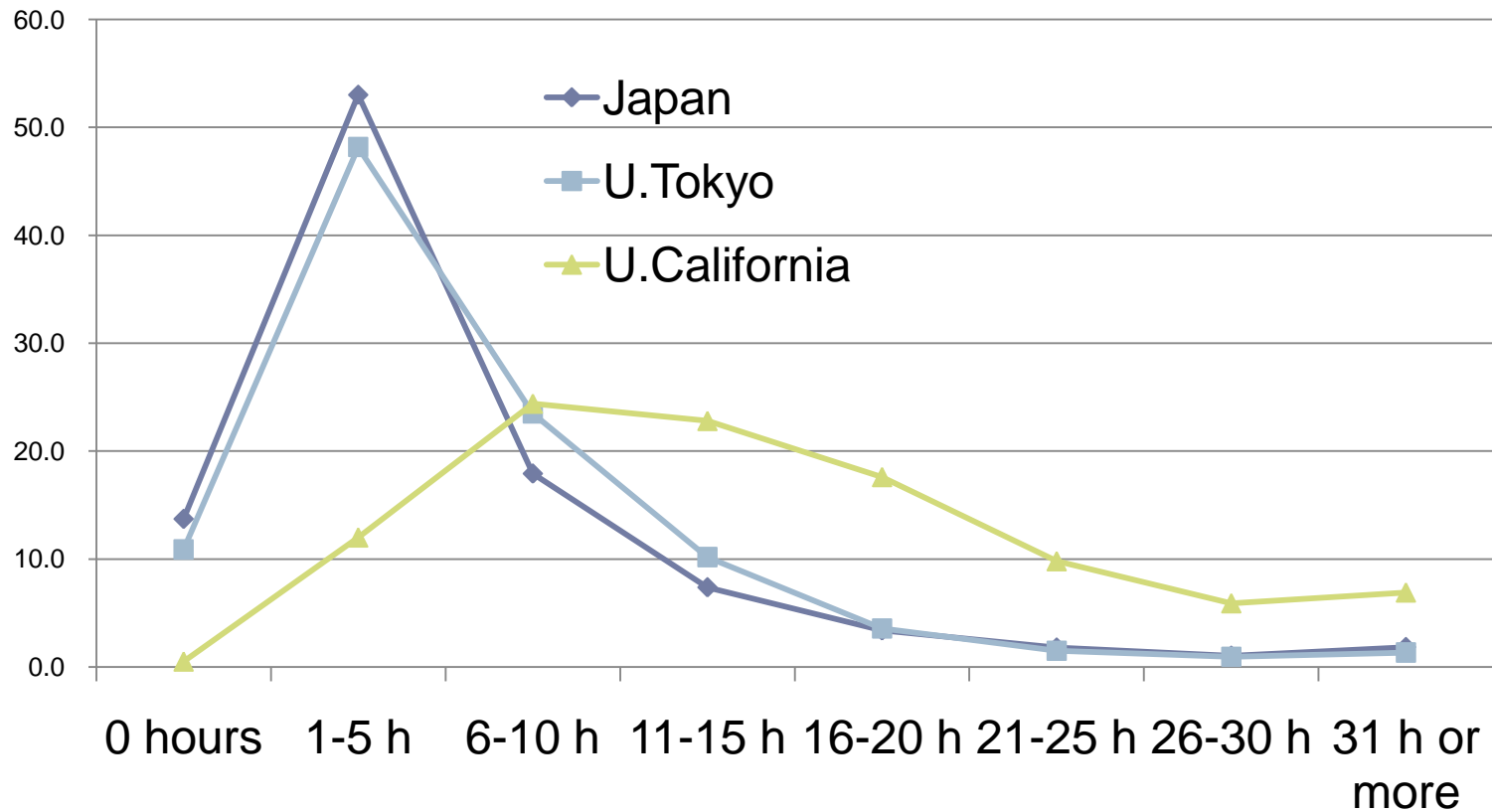
U.S. : emphasis on (1)

Japan: Emphasis on (2)、(3)、(4)



Time Spent for Course Work

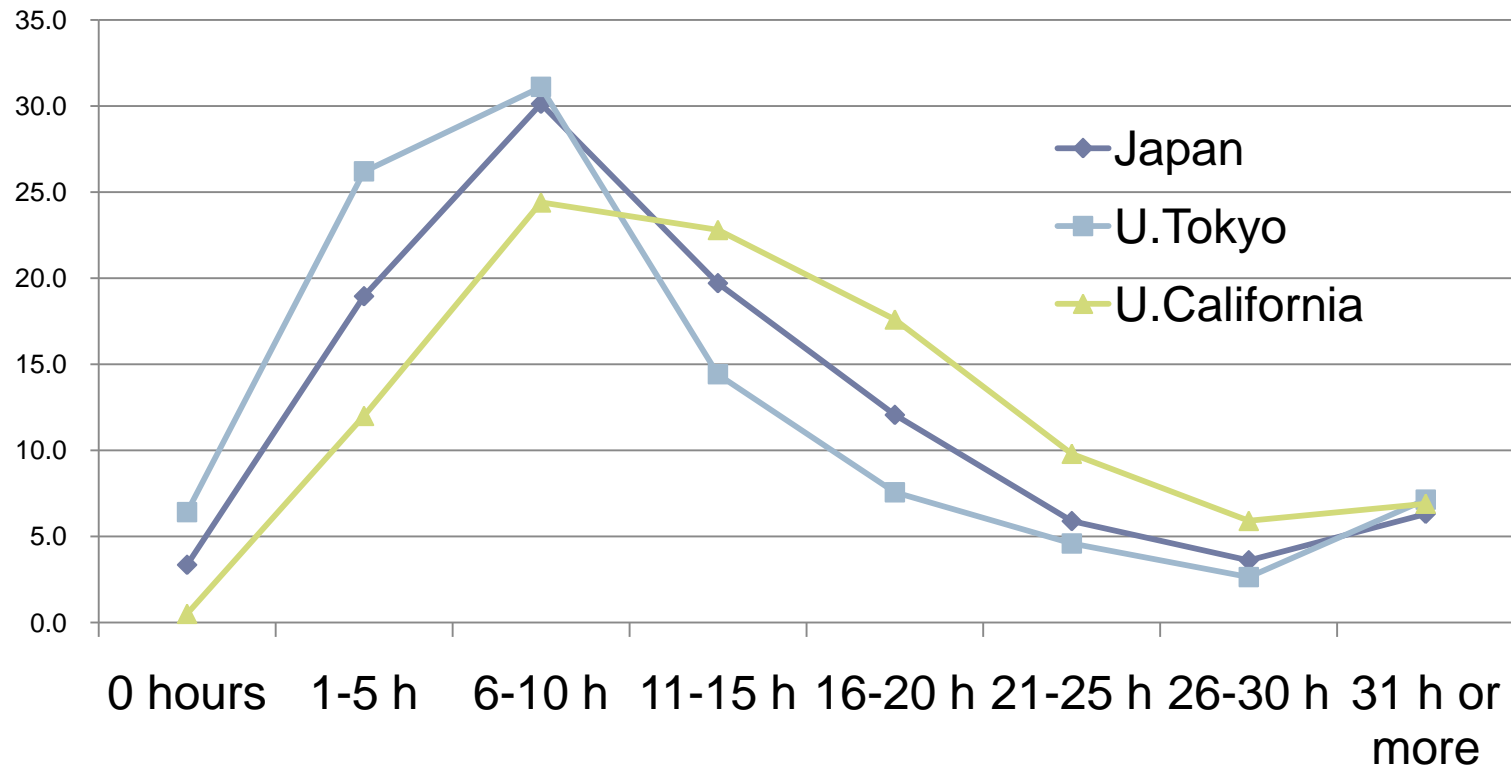
Distribution of Students



Total Time Spent for Learning

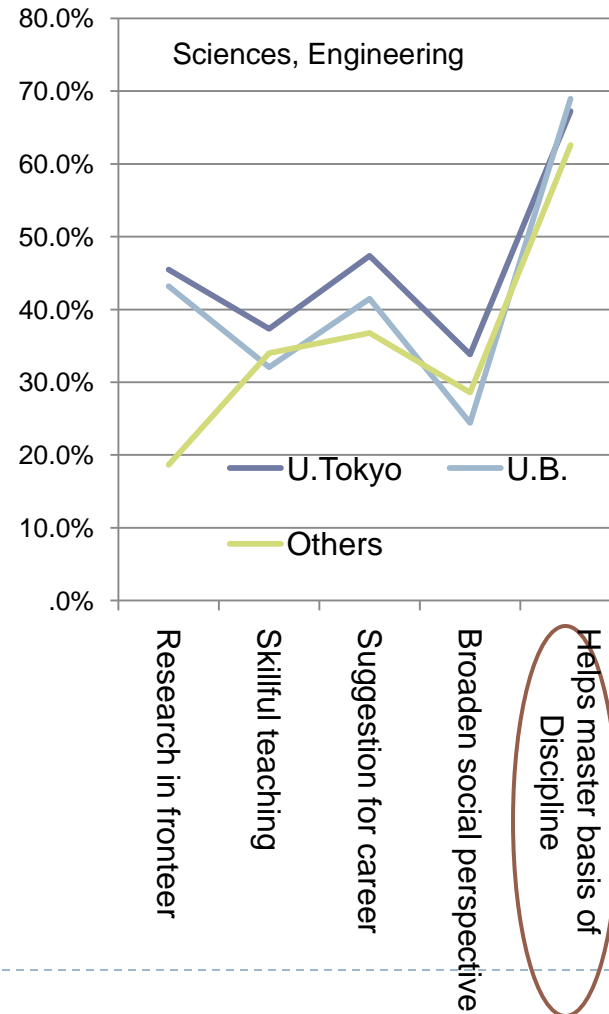
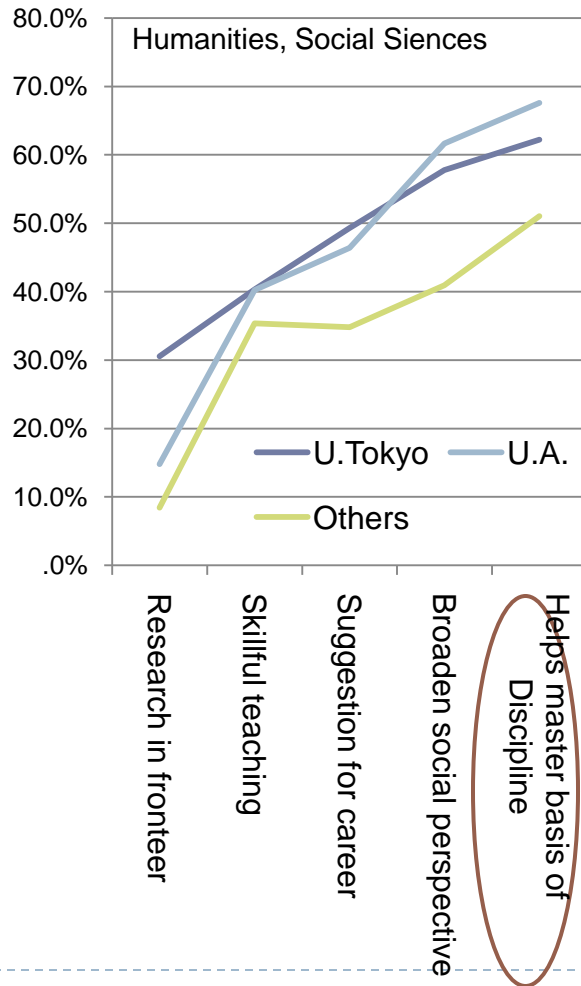
The differences are less pronounced
But, still differences

*Independent research at 4th year is not included



Courses that Students Appreciate

Mastering basics ranks the first in any type of institution



Contents



1. Mechanisms for Quality Assurance/Enhancement

▶ 2. Problems in Undergraduate Education

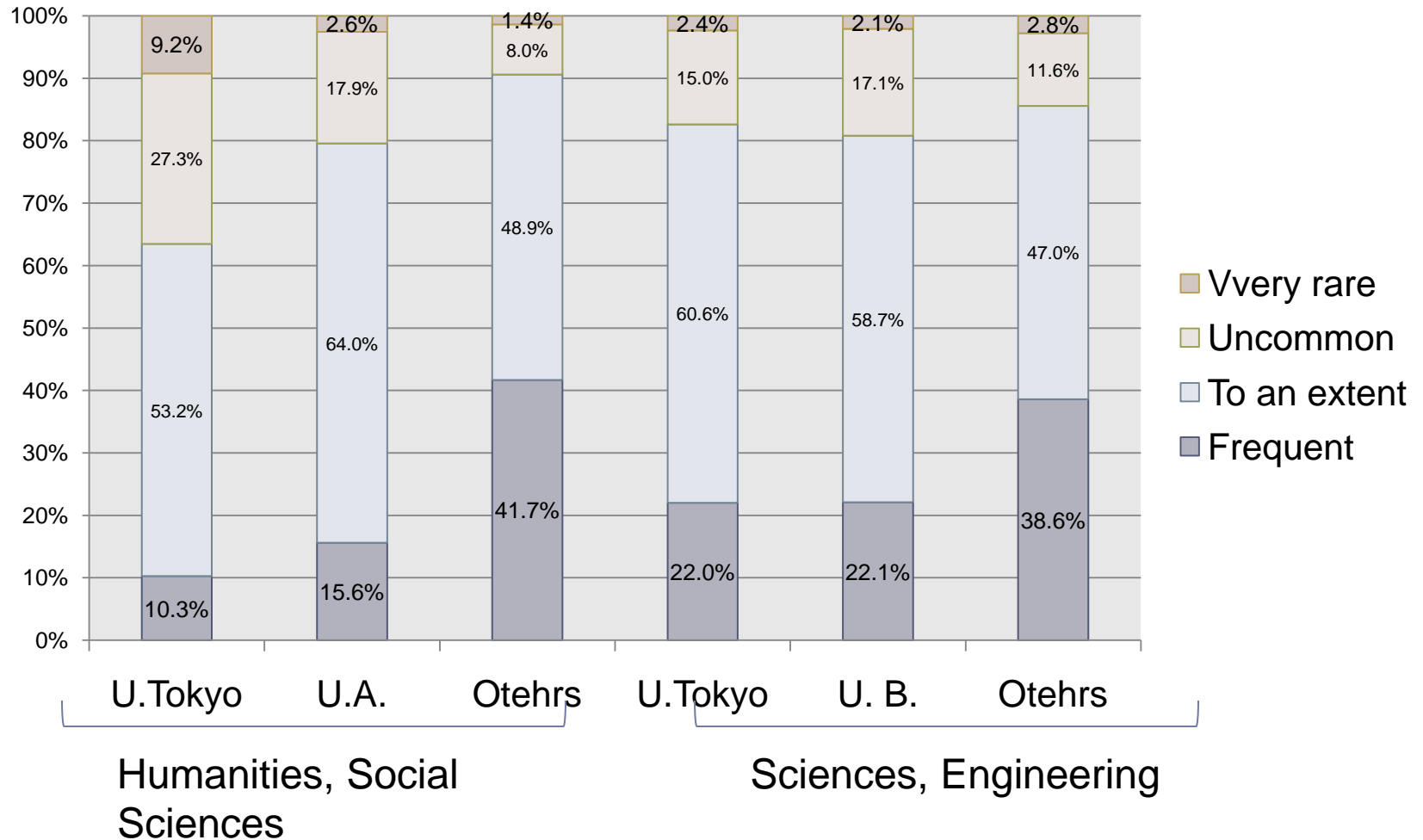
3. Teaching Practices and Their Effectiveness

Alternatives to enhance Learning

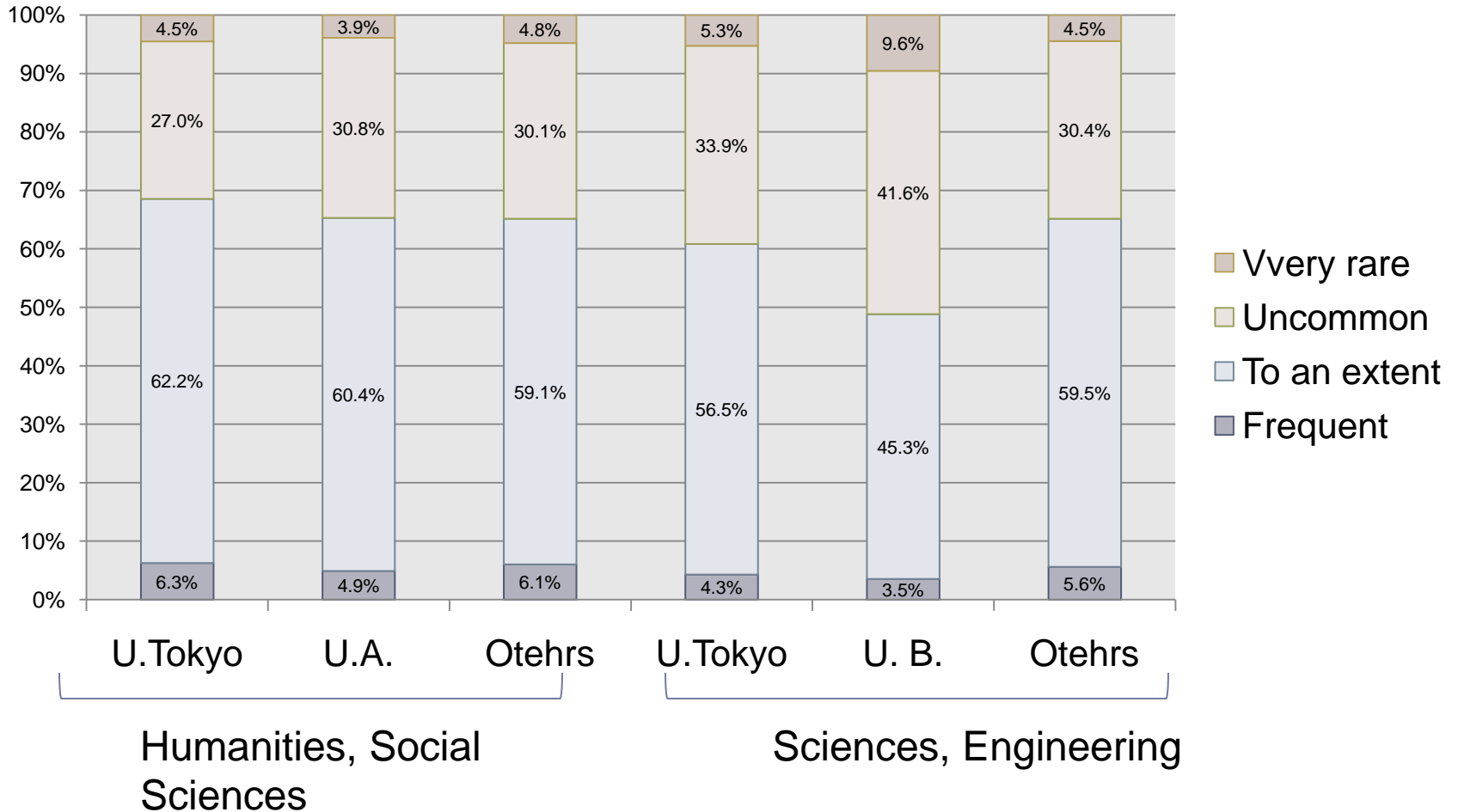
- ▶ **Control of Learning**
 - ▶ Strict enforcement of attendance
 - ▶ Rigorous examination
 - ▶ Frequent papers and quiz
- ▶ **Elaborate Teaching**
 - ▶ Contents to raise students interest
 - ▶ Explanations to help understanding
- ▶ **Participatory Teaching**
 - ▶ Students presentation
 - ▶ Written comments on papers
 - ▶ Group work

Strict Enforcement of Attendance

common

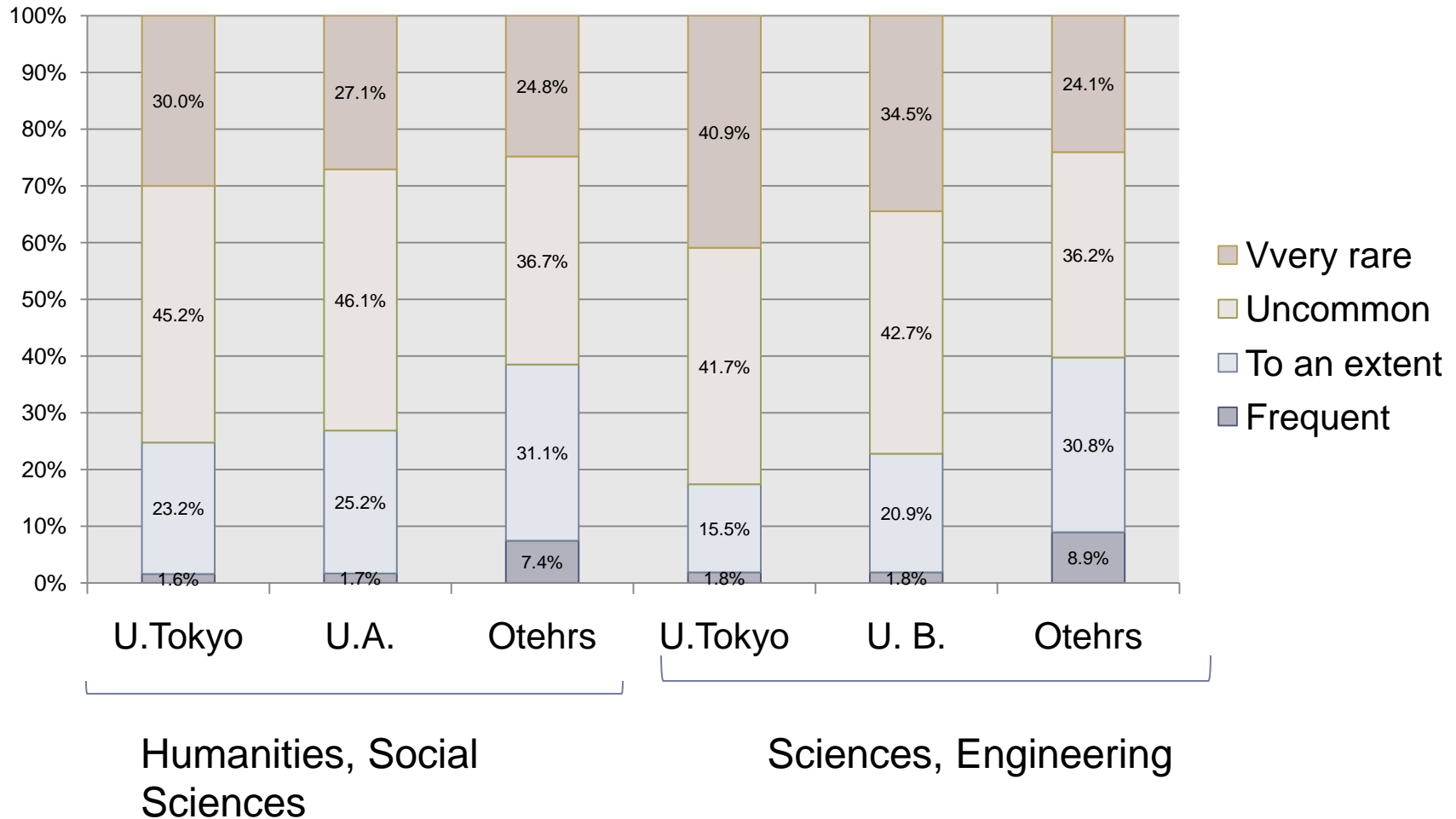


Efforts to help understanding



Group Work

意見を求められた — 少ない



What Augments Learning Time

Effects of teaching on learning time

*All figures significant at 99% Level

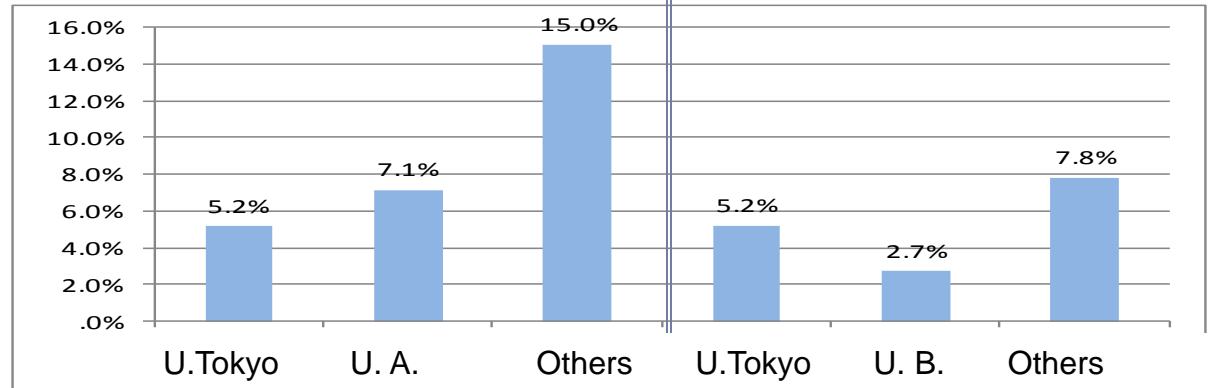
	Humanities / Social Sciences			Sciences/ Engineering		
	U.Tokyo	U.A.	Others	U.Tokyo	U.B.	Others
Require Attendance	-1.849	-3.587	-1.127			-1.015
Frequent Quiz	-2.522					
Raise Curiosity	1.907		1.976	2.793	1.958	
Helps Understanding	1.925		1.141	1.934	2.398	
Comments on Paper			3.995			2.002
Active Participation			3.174	2.429		3.622
Group Work			2.840	3.249		

Teaching approach effective

Participation effective

Study abroad

% Experienced Study Abroad



Effects of experience of abroad on learning time

	Humanities/Social Sciences			Sciences/ Engineering		
	U.Tokyo	U.A.	Others	U.Tokyo	U.B.	Othrs
Effectiveness missing			5.917	5.528		3.515

Effectiveness missing



What the Monitoring Data Tells

- ▶ Certain teaching practices are still not practiced widely
- ▶ Some practices are effective in inducing learning
 - ▶ But the effects vary among institutions
 - ▶ Needs further investigation
- ▶ Monitoring can be an effective instrument in the discussion of qualitative improvement



Your comments please
