

How to best measure performance in teaching and learning?

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早稲田大学 大学総合研究センター
Center for Higher Education Studies, Waseda University

Quantity × Quality

Quantifiable and unquantifiable evaluations



**Quality of an Oriental carpet measured by its knot density (number of knots), material and pigment
= quantifiable elements**

Quantity × Quality



But also by design, weaving technique, and authenticity = unquantifiable elements

Quantity × Quality

Quality of teaching and learning are both quantifiable and unquantifiable



Tendencies to overemphasising quantifiable aspects of teaching and learning quality

Measuring Quality

What are measured

Who measures

**National &
Int'national
Comparison**



HE Institutions



**Ranking Agencies
Int'national
Organizations**

**Institutional
Assessment**



**HE Institutions
Faculties
Schools
Departments**



**Quality Assurance
Agencies
Public & Private
Organizations**

**Individual
Evaluation**

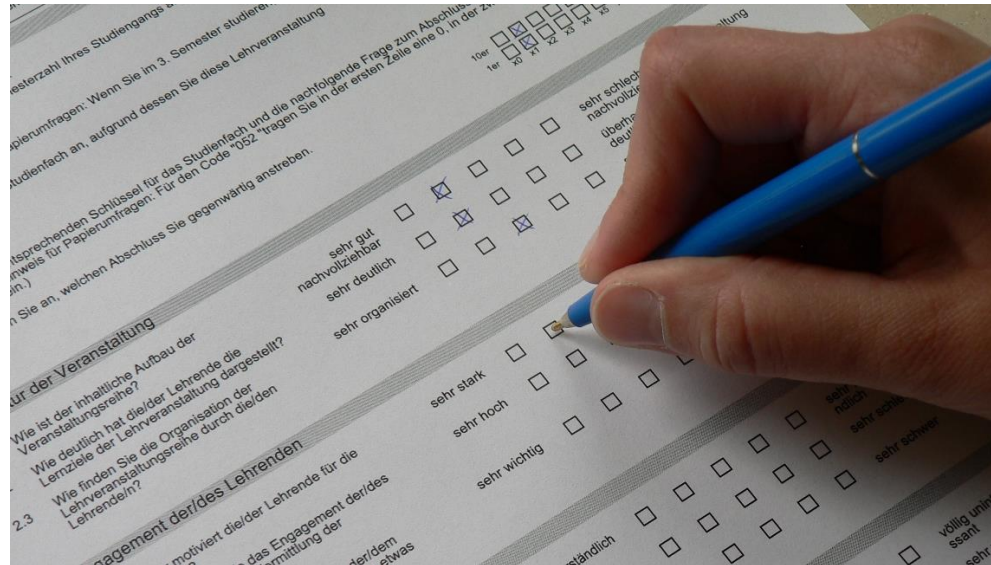


**Teaching
faculty**



**Students
Peers**

Students' Course Evaluation



Good direct way of measuring the quality of teaching with drawbacks.

- * Low turn-out and statistical accuracy**
- * Students incapable of knowing quality teaching**

Peer Reviewing & Faculty Development



***Peer observation**

***Peer assessing of the information about syllabi, assignments, grading, and self-evaluative statement**

Limitations: Personal bias; collegiality; time and effort

Institutional Assessment

Assessing the teaching and learning standard at national and regional levels



TEF (Teaching Excellence or Student Outcomes Framework) - UK government assessment of the quality of undergraduate teaching



QILT (Quality Indicators for Learning and Teaching) - Surveys of the quality of Australian higher education institutions



CALOHEE (Measuring and Comparing Achievement of Learning Outcomes in Higher Education in Europe) - Survey focusing on learning outcomes

Institutional Assessment



College Scorecard – US Department of Education links information about educational programme, price and employment



THE-Benesse Japanese University Rankings – Rankings of educational quality



AHELO (Assessment of Higher Education Learning Outcomes) – OECD direct evaluation of student learning outcomes

Institutional Assessment

Which metrics in assessing an institution?

Recent shift from measuring inputs to outcomes



**Performance
Metrics**



User Metrics



**Engagement
Metrics**



**Business
Metrics**

Institutional Assessment

Quality of Teaching & Learning



Inputs



Outcomes

***Faculty/student ratio**

***Credit hours**

***Class teaching**

***Entry grades**

***Investment**

***Improvement**

***Skill expansion**

***Employment**

Institutional Assessment (Japan)

The Second THE-Benesse Japanese University (Educational) Rankings



Educational Resources	Monetary resource per student	8%
	Student/Faculty ratio	8%
	Publication per faculty	7%
	Entrance examination results	6 %
	Competitive research funds earned	5 %

Institutional Assessment (Japan)

Educational Engagement	Evaluation by high-school teachers: ‘How much a university is committed to nurture globally minded workforce?’	13 %
	Evaluation by high-school teachers: ‘How much students develop their academic capability?’	13 %
Educational Outcomes	Evaluation of graduates by personnel officers of corporates	10%
	Evaluation of graduates by academic researchers	10%

Institutional Assessment (Japan)

Educational Environment (International- ity)	Rates of international students	5%
	Rates of international faculty	5%
	Japanese/international students ratio	5%
	Ratio of courses taught in non- Japanese languages	5%

**One of the worst examples of institutional
assessment**

Comparison and Rankings

1	Kyoto University	87.7
1	The University of Tokyo	87.7
3	Tohoku University	86.3
4	Tokyo Institute of Technology	85.6
5	Kyushu University	85.0
6	Hokkaido University	83.4
7	Nagoya University	82.6
8	Osaka University	81.1
9	Tsukuba University	80.8
10	Keio University	77.7
11	Waseda University	77.5

Institutional Assessment (UK)



TEF (Teaching Excellence and Student Outcomes Framework)

Core Metrics

Evaluation	Teaching quality: teaching on my course
	Teaching quality: Assessment & Feedback
Learning environment	Academic support
	Continuation
Student outcomes & learning gain	Employment or further study
	Highly skilled employment or further study

Institutional Assessment (UK)

Supplementary metrics

Evaluation	Grade inflation
Student outcomes & Learning gain	Sustained employment or further study
	Above median earnings threshold or further study

134 Higher education providers ratings

 Gold	45 Institutions: Oxford, Cambridge & 6 Russell Group Universities
 Silver	67 Institutions: Bristol, Durham, Kings College, Manchester
 Bronze	25 Institutions: Southampton, Liverpool, London School of Economics

Institutional Assessment (UK)

Flaws



Statistics and points cannot be proxy for what goes on in classroom.



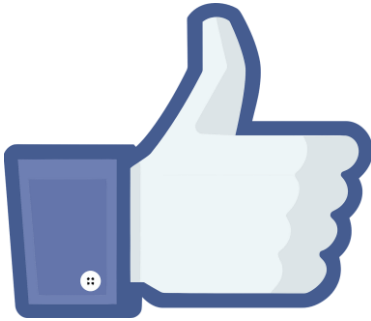
Institutional – departmental or classroom discrepancies

Measuring quality

How to better measure the quality of education



- * Better and fairer metrics and criteria**



- * More emphasis on student outcomes and learning gain**



- * To come up with a measure to measure the unmeasurable**

Measuring Quality

Student outcomes:

Employment

Further study

Highly skilled employment

Better salary

Promotion



Measurable

Learning gain:

Grades

Qualifications

Tests

Measuring Quality



Indicators (tangible):

***Alumni Outcomes**

***Employer/Student
connection**

Indicator (intangible)

***Employer reputation**

Limitation:

*** The accuracy of reputation**

Measuring Quality

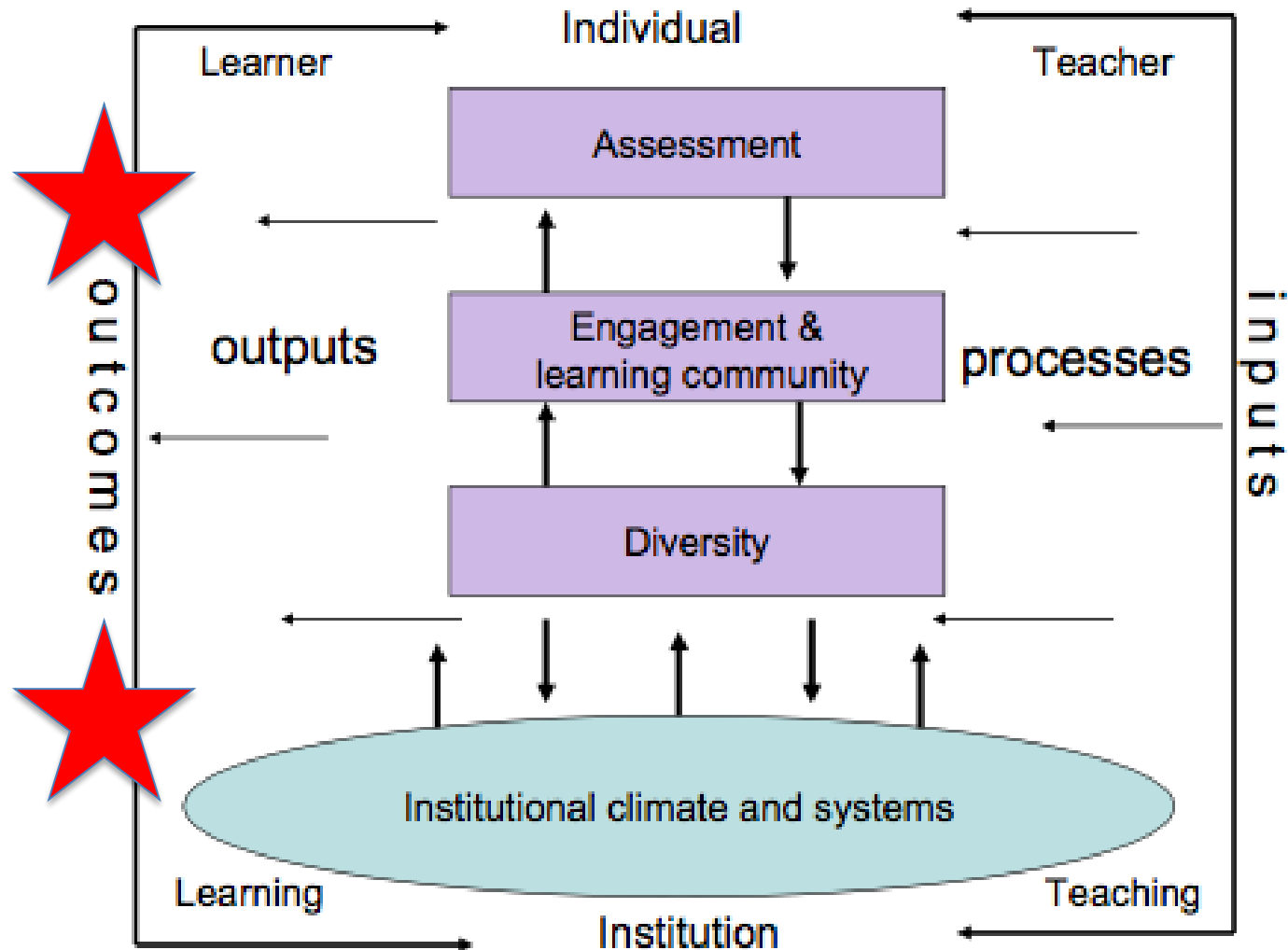
What are the unmeasurable?

Students learn from other students and by themselves. Not everything can be taught.

University education is not only for the sake of students' employers. Learning for students themselves and learning for learning's sake.

Unmeasurable outcomes

Measuring Quality



Teaching Quality Indicator