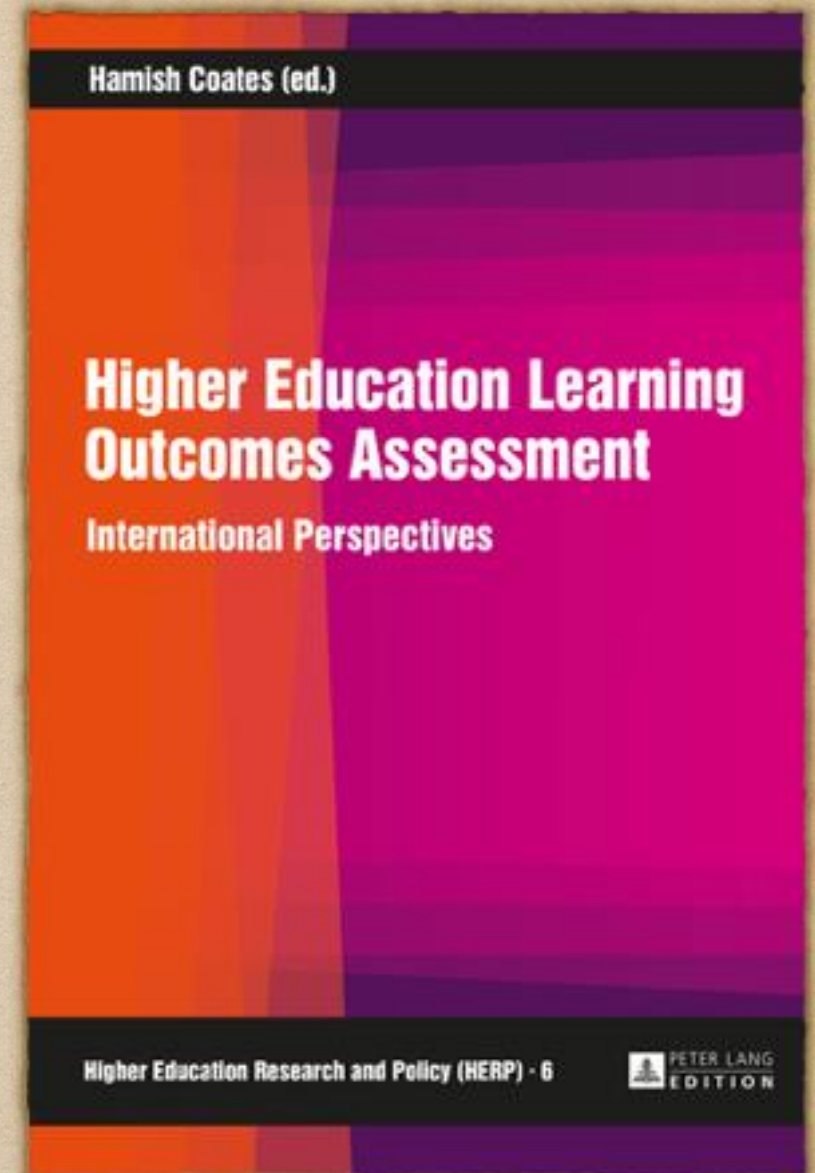Chapter 6

Student Learning Outcomes Assessment in China:

Primitive Foundations

Huanhuan Xia   Binglin Zhong

2015-2-16

Hamish Coates (ed.)

Higher Education Learning Outcomes Assessment

International Perspectives

Higher Education Research and Policy (HERP) · 6
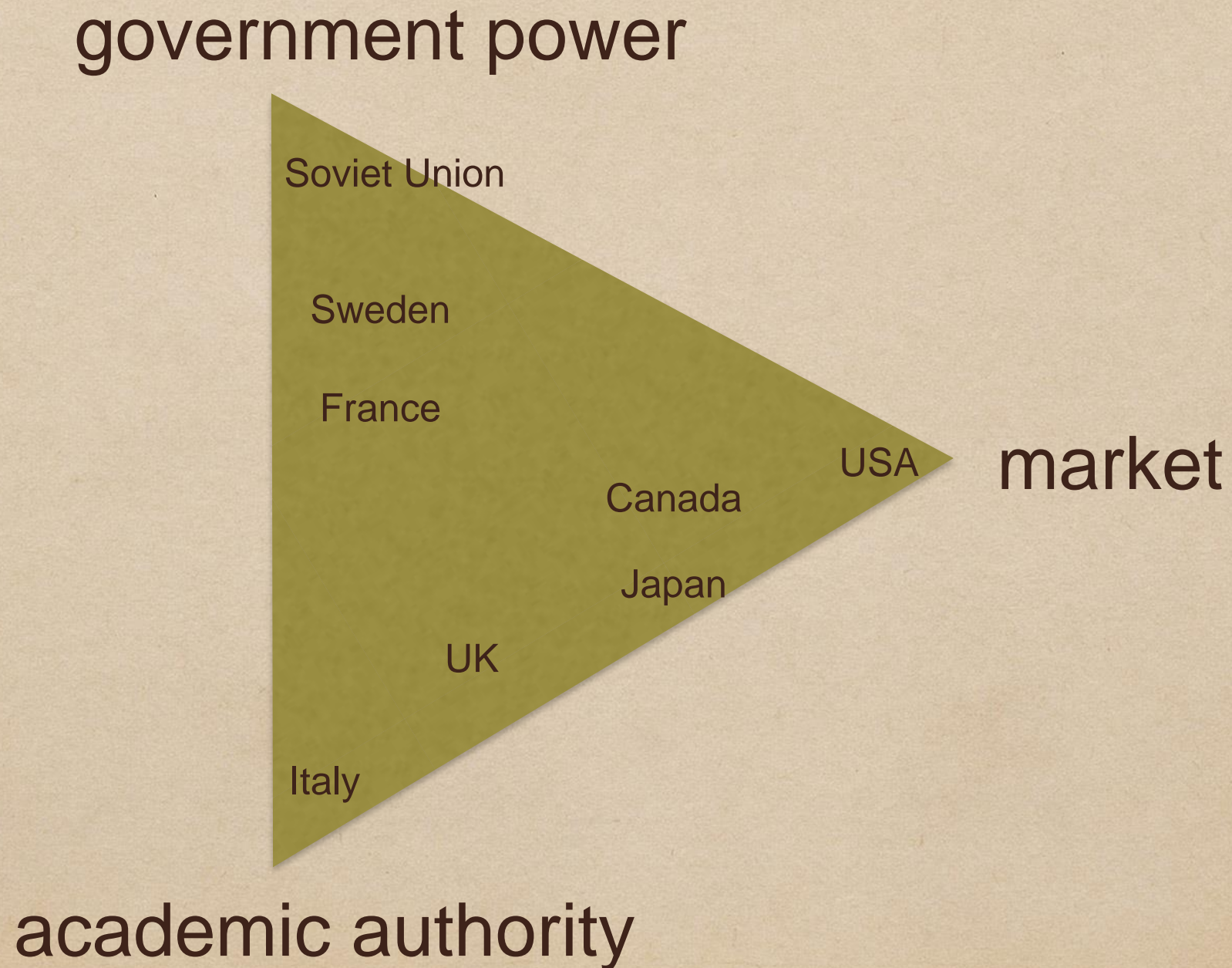
PETER LANG
EDITION

I. Historical Review of Quality Assurance Schemes in China

II. Exemplary student learning outcomes assessment programs in China

III. Institutional case: Learning outcomes assessment and internal quality schemes

IV. Reflections & Further study

Burton Clark's "triangle of coordination" (1983)

government power

academic authority

market

Soviet Union

Sweden

France

USA

Canada

Japan

UK

Italy

Historical Review of Quality Assurance Schemes in China

Quality assurance schemes have changed a lot in China and most of the changes are closely related to era-specific social contexts. These schemes can be divided into four stages.
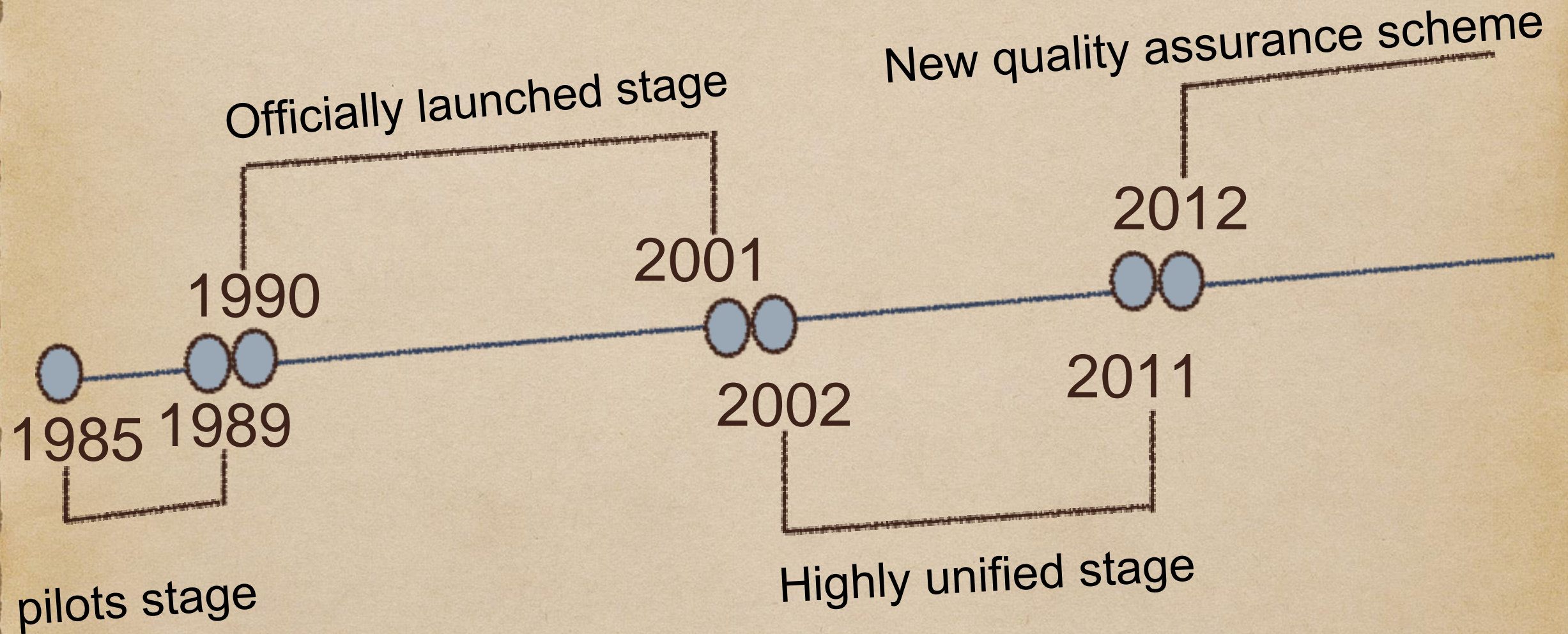
(1)1985-1989: Pilots Stage

In 1985, the National Education Commission issued the notice of carrying out higher

engineering education evaluation research and evaluation pilot. Pilots were applied in 80

universities in three disciplines (Machinery Manufacturing Process and Equipment,

Heating Ventilation and Air Conditioning, computer science) and four courses

(mathematics, physicals, theoretical mechanics, material mechanics) (National Education

Commission, 1985).

(2)1990-2001: Officially Launched Stage

In October 1990, the National Education Commission issued **interim provisions for regular higher education institutions evaluation**.(MoE, 1990,).

In December 1992, the National Education Commission established the **National Committee for Setting up HEIs**.

In February 1993, the National Education Commission issued the **Outline for Education Reform and Development in China**, which set quality standards and evaluation benchmarks for all forms of education at all levels (MoE, 1993).

In 1994, the National Education Commission started to **launch a nationwide quality evaluation of undergraduate teaching program in a planned and organized way**. Quality evaluation of undergraduate teaching has undergone three types according to its history:
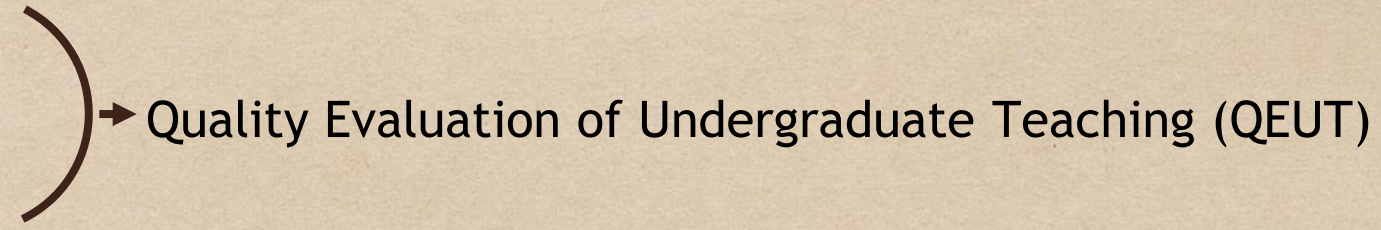
> (1) qualified evaluation;
>
> (2) excellent evaluation,
>
> (3) random evaluation.

In January 1999, **Higher Education Law of the People's Republic of China** was issued and the article 44th provided that "the educational level and education quality of HEIs should accept the supervision and evaluation from educational administrative departments" (MoE,1999).

In 2001, the Ministry of Education issued **Several Opinions on Strengthening Undergraduate Education to improve the quality of teaching**, and indicate that undergraduate education quality was taken as the key evidence of evaluating and measuring HEIs.

(3) 2002-2011: Highly Unified Stage

(1) qualified evaluation

(2) excellent evaluation → Quality Evaluation of Undergraduate Teaching (QEUT)

(3) random evaluation

In November 2003, MoE released the *Notice of Carrying out Undergraduate Teaching Evaluation in 592 Higher Education Institutions,* and clearly arranged the specific time of evaluation for the **592 institutions that obtained bachelor's degree authorization qualification before 2001** (Binglin,Haitao,Zhen,et.al,2009). The first round of QEUT started from 2003, and finished at September 2008.

In October 2004, the Ministry of Education hosted a press conference and announced the founding of **the Higher Education Evaluation Center (HEEC).** HEEC was affiliated to Ministry of Education, symbolizing that quality assurance schemes in China had stepped into the standardized, scientific, systematic, professional stage.

During the last round of QEUT, many problems and criticisms put QEUT under the spotlight. The main problems were reflected in four aspects:

1. Institutions lacked clear guidance about unitary benchmarks for all types of higher education;

Number of Schools or Institutions of Higher Education (2008)

单位：所 (unit)

项　目 / Item	总计	中央部委	教育部	其他部委	地方部门	教育部门	非教育部门	民办
研究生培养机构 **Institutions Providing Postgraduate Programs**	796	374	73	301	422	359	63	
普通高校　Regular Instituions of Higher Education	479	98	73	25	381	358	23	
科研机构　Research Institutions	317	276		276	41	1	40	
普通高校 **Regular Institutions of Higher Education**	2263	111	73	38	1514	859	655	638
本科院校　Universities with Full Undergraduate Courses	1079	106	73	33	604	533	71	369
专科院校　Colleges with Specialized Courses	1184	5		5	910	326	584	269
高等职业学校　Senior Vocational Schools	1036	2		2	770	260	510	264
成人高等学校 **Adult Institutions of Higher Education**	400	14	1	13	384	159	225	2
民办的其他高等教育机构 **Other Non-state Institutions Education institution**	866							866

source：National Bureau of Statistics of the People's republic of China

The old benchmarks	The new benchmarks	
	Qualified evaluation	audit
1 Guiding ideology of running school • Orientation • ideology	Mission and the role of leaders • mission • the role of leader • the model of talent cultivation	Orientation and aims • Orientation • aims of cultivation • Core position of talent cultivation
2 Faculty • Numbers and structures • Principle Instructors	Faculty • total number and structure • teaching quality level • faculty training	Faculty • total number and structure • teaching quality level • Faculty teaching inputs • Faculty development and service
3. Teaching facilities and its application • Teaching facilities • Teaching funding	Teaching facilities and its application • Teaching facilities • Teaching funding	Teaching resource • Teaching funding • Teaching facilities • Construction of majors and cultivation plan • Curriculum resource • Social resource
4 Professional construction and teaching reform • Major construction • curriculum construction • practical teaching	Majors and curriculums construction • Majors • curriculums • practical teaching	The cultivation process • Teaching reform • Classroom teaching • Practical teaching • The second classroom
5 Teaching administration • Administration team • Quality control	Quality management Teaching management team Quality control	Student development • admission and source of students • Student consultation and service • academic climate and learning effect • Employment and development
6 Academic climate • Faculty style • Learning climate	Academic climate &student service • Create academic climate • Instruction and service	Quality assurance • teaching quality assurance mechanism • quality control • quality information and its application • quality improvement
7 Teaching effect • Fundamental theory and ability • Dissertation and dissertation design • Ethic development • Sports • Social reputation • employment	Teaching quality • moral education • professional knowledge and ability • sports and arts • employment	
8 self-option of featured projects		

2. The unitary evaluation approach relied too much on site visits, with a need to improve committee composition and relations with local education administration departments;

- Preparation of Self-Study Report (SSR)
- **Peer team visit**
- release the Peer review evaluation report.

3. Evaluation results contrary to public impression, and with a high level of excellent evaluations there were concerns that evaluation had become a mere formality;

4. Institutions did not follow-up evaluation results with any real earnest (Binglin, 2011).

（4）2012～：New Quality Assurance Scheme

To address these problems, the Ministry of Education convened scholars and experts to do deep research about QEUT.

In 2012, the new quality assurance scheme was applied. The current scheme includes two kinds of evaluation for regular institutions:

- **Quality Accreditation (qualified evaluation of undergraduate teaching);**

  Aimed primarily at the newly-built colleges/universities. Currently there are 240 newly-built colleges/universities (including private undergraduate institutions) has been accredited by HEEC

- **Quality Audit of Undergraduate Teaching**

  Colleges/universities passed in the quality accreditation will take the next round of quality audits. Quality audits of undergraduate teaching formally started from 2013, serving the more than 600 institutions that took part in the last round of QEUT.

Mangy scholars claiming that Chinese higher education needed teaching reforms that required direct investigation of academics teaching and students' learning (Dunrong, 2008). Other scholars claimed that the evaluation of quality should source evidence from students. The concept of 'value-added' started to emerge in China (Jinghuan, 2012).

Higher education student learning outcomes emerged as a new perspective for quality improvement.

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Exemplary student learning outcomes assessment programs in China

- **Chinese College Student Survey (CCSS)/NSSE-China**

- The project of NSSE-China (National Survey of Student Engagement-China) was launched by Institute of Higher Education, Tsinghua University in 2007, which has changed the evaluation focus of educational quality from resource and the measurement of outputs to student learning process.

- The program has been developed as Chinese College Student Survey (CCSS) organized by the cross-disciplinary cooperation between Institute of Education and Chinese Economical and Social Data Center.

- The results can be used for international comparison or benchmarking within Chinese higher education. 71698 questionnaires from 59 colleges and universities were collected and analysed by Tsinghua team and project institutions in 2012 .

Exemplary student learning outcomes assessment programs in China

- **Student Experience in the Research University (SERU)**

- Housed at the UC Berkeley Center for Studies in Higher Education, the mission of the SERU Project is to help improve the undergraduate experience and educational processes by generating new, longitudinal information on the undergraduate experience at research universities. Currently there are 3 universities：Nanjing University，Xi'an Jiaotong University，Hunan University

- The survey design to measuring student learning outcomes rather than the commonly used rating of change used by a number of other surveys.

- Specifically, SERU asks students to rate their level of proficiency at two time points (when they started at university, and now) on a series of educational outcomes using a six-point response scale (ranging from poor to excellent) (Douglass,2012).

Exemplary student learning outcomes assessment programs in China

- **College Student Experiences Questionnaire (CSEQ)**

- CSEQ was developed in the 1970s (Gonyea, 2003). First administered in 1979, CSEQ formally moved its operations to Indiana University Pace in the Postsecondary Research in 1994. The instrument was introduced into China in 2001 (Zhou, 2012).

- With over 165 items, the Chinese CSEQ provides colleges and universities with a comprehensive inventory of the student experience. The Chinese CSEQ survey collects information about :

    - **student background** (17 items)

    - (e.g., age, sex, class, race and ethnicity, residency, major, and parent's education level)

    - **student and ethnicity, residency, major, and parent ethnic and college activities** (113 items),

    - **the college environment** (10 items),

    - **estimate of gains** (25 items).

- Since 2002, the Chinese CSEQ has been applied in 23 universities/college in direct-controlled municipality and provinces such as Beijing, Shandong, Nei Menggu and Hunan (Zhou,2012).
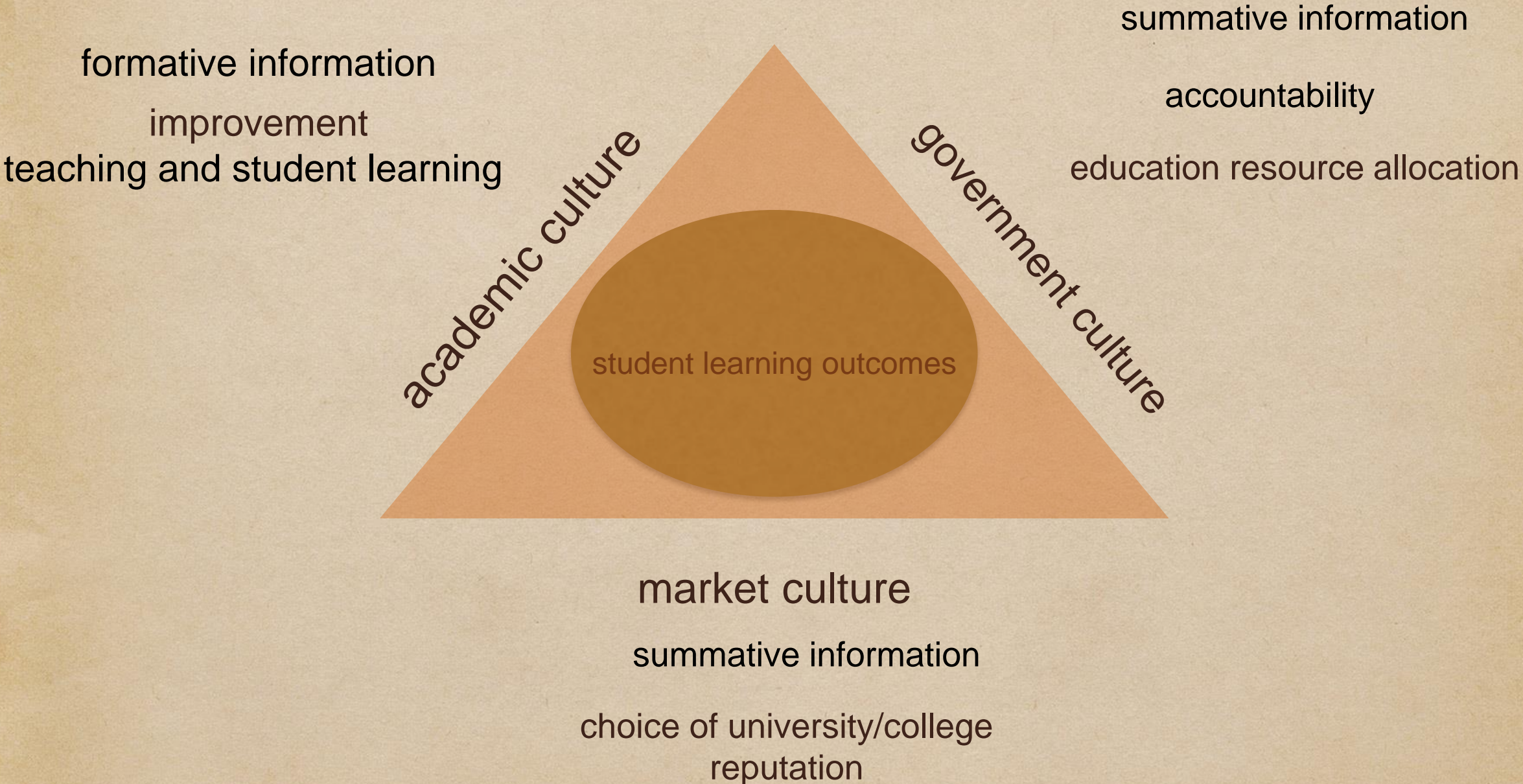
Exemplary student learning outcomes assessment programs in China

- **Alumni Evaluation of Education Quality (AEEQ)**

- AEEQ is a study of graduates' social needs and the quality of cultivation (follow-up study after graduated half year) that carried out by MyCOS Data.

- MyCOS Data has surveyed Chinese college graduates for seven consecutive years as part of their flagship service, the Chinese Higher Education Follow-up System (CHEFS).

- Currently they have worked with over 400 colleges and universities in China to implement CHEFS (Mycos Data, 2013).

- There are eight first level and 20 second-level benchmarks for the evaluation. This reflects a means of evaluating student learning outcomes from the perspective of graduate alumni.

Exemplary student learning outcomes assessment programs in China

Program	Actors	Focus	Assessment method
Chinese College Student Survey (CCSS)	Led by Tsinghua University, a total of 60 institutions have joined the program to date	Level of Academic Challenge Active & Collaborative Learning Student Faculty Interaction Enriching Educational Experiences Supportive Campus Environment Deep learning	self-reported data
the Student Experience in the Research University (SERU)	Three universities join the program independently	Analytical and critical thinking skills Writing skills Reading and comprehension skills Oral presentation skills Quantitative skills Skills in a particular field of study	Self-reported data
The College Student Experiences Questionnaire (CSEQ)	Led by Beijing Normal University, there are 23 institutions taking part in this program	Quality of effort College environment Estimate of gains	Self-reported data
Alumni evaluation of education quality	MyCOS Data has worked with over 400 colleges and universities in China	Employment status Employment character Ability and knowledge Alumni evaluation Curriculum evaluation Social activities Job service Analysis of graduate education	questionnaire

Culture Clashes in Higher Education Student Learning Outcomes Assessment

formative information

improvement
teaching and student learning

academic culture

government culture

summative information

accountability

education resource allocation

student learning outcomes

market culture

summative information

choice of university/college
reputation

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doctoral students, 3178

international students for bachelor's degree, 1008

master students, 8083

other international students, 841

non-degree students, 918
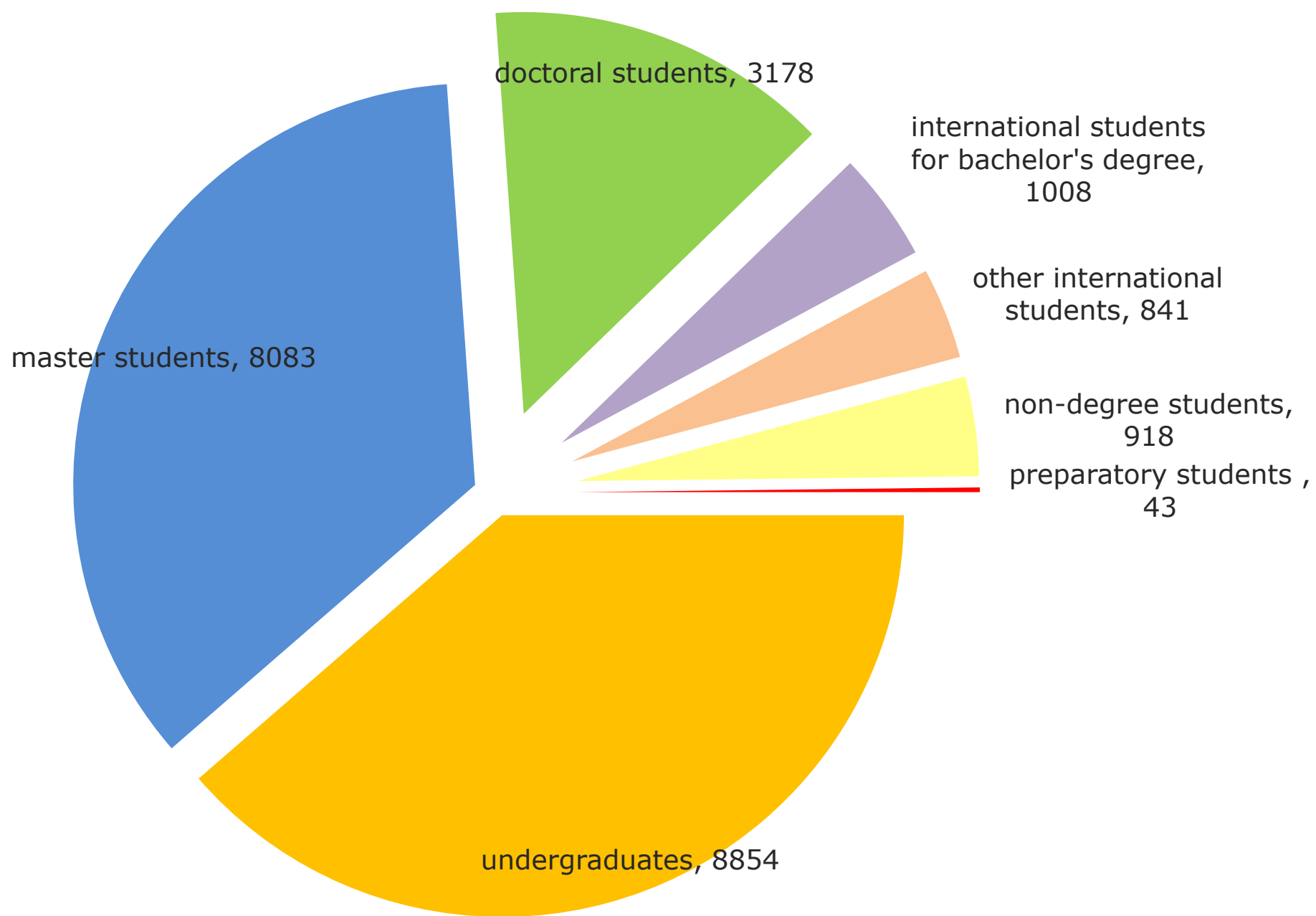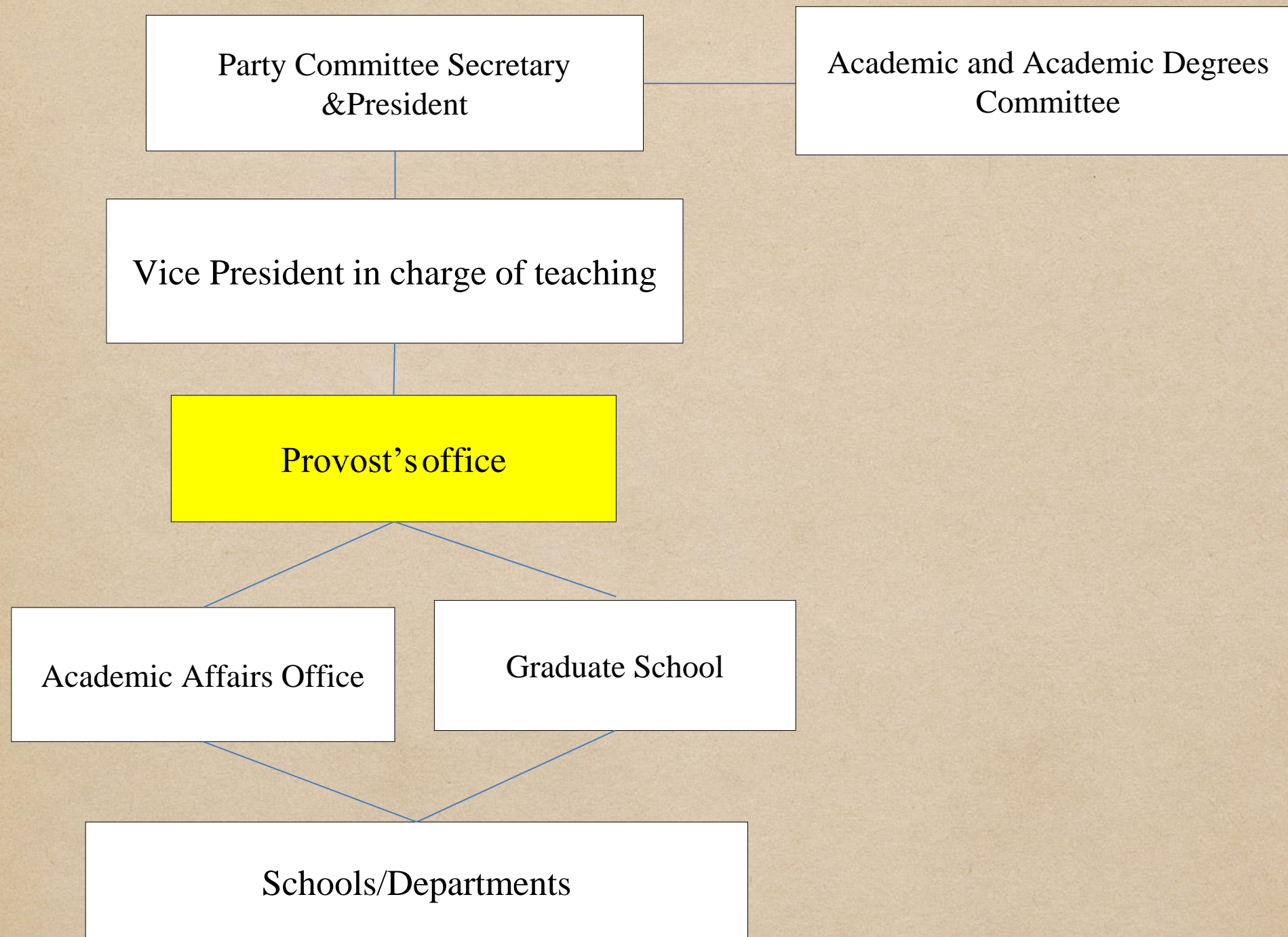
preparatory students , 43

undergraduates, 8854

Figure 1 the numbers and percentage of students in BNU (unit: person)
Source: Quality Report of BNU Undergraduate Teaching (2013)

The organization structure of internal quality scheme

```
┌─────────────────────────────┐        ┌─────────────────────────────┐
│  Party Committee Secretary  │────────│  Academic and Academic Degrees │
│        &President           │        │        Committee            │
└─────────────────────────────┘        └─────────────────────────────┘
              │
┌─────────────────────────────┐
│ Vice President in charge of teaching │
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│      Provost's office       │
└─────────────────────────────┘
          ╱         ╲
┌──────────────────┐   ┌──────────────────┐
│ Academic Affairs │   │ Graduate School  │
│      Office       │   │                  │
└──────────────────┘   └──────────────────┘
          ╲         ╱
┌─────────────────────────────┐
│     Schools/Departments     │
└─────────────────────────────┘
```

Internal quality scheme includes

- 1. Setting rules and regulations

- 2. curriculum evaluation

- 3. academic review

- 4. feedback mechanism of student assistants for collecting teaching information.

- 5. CESQ survey

1. Setting rules and regulations

BNU formed a series of rules and regulations to **enhance faculty's awareness of undergraduate teaching, and also help maintains orderly teaching**.

The rules and regulations refer to course design, practical teaching, learning assessment, dissertation, international communication and exchange. etc. such as:

- Several Opinions of Beijing Normal University undergraduate teaching plan revision,

- Approaches for Beijing Normal University Teaching Improvement and Reform Project Management

- Specification of undergraduate experimental teaching in Beijing Normal University, etc.

2. curriculum evaluation

In order to promote the interaction between teaching and learning, BNU carry out curriculum evaluation in BNU, Students who enroll in the credits must give an evaluation to the curriculum and the instructors' teaching.

During the term of 2011-2012, 7886 students take part in the curriculum evaluation, 939 courses in total are evaluated by students. 320790 suggestions are collected by the Provost's office. Generally, BNU set benchmarks for the teaching evaluation.

Instructors can check the online evaluation results at any time. Instructors will receive the final evaluation report from the Provost's office and used it to improve their curriculum.

items	benchmarks
Overall evaluation	What is your overall evaluation to instructors' Teaching
	What is your overall evaluation to the course
	The instructor is conscientious and responsible for teaching
	The instructor make him/herself clear during teaching
	The instructor appropriately use auxiliary means
	The instructor emphasis on the key and difficulty content
	The instructor emphasis on teaching method
Evaluation of teaching quality	The instructor pay attention to communicate with students
	The instructor has his/her own teaching style
	The instructor's personality has a great impact on you
	The instructor can stimulate your enthusiasm of learning
	After the course, you are more interested in the course than before
	After the course, you feel your ability are improved
	The class hours are moderate
	The depth of content is acceptable
	The width of content is acceptable
Evaluation of the course	The workload is acceptable
	The course is important to you
	The textbooks and reference materials are fit for you
	Each teaching process link closely with each other

3. academic review

Academic review is another action to help improve teaching, BNU organizes experts who are distinguished experts in disciplines and professional educators, or experienced instructors to attend a classroom randomly during the semester. These experts will give advice to instructors about their curriculum's strengths and weaknesses. The experts will form a final report about the curriculum they attended to the Provost's office, and share it with instructors to help them improve their teaching.

4. Feedback mechanism of student assistants for collecting teaching information

Moreover, **feedback mechanism of student assistants for collecting teaching information** is another way to improve teaching from students' perspective. Student assistants do research about student learning, instructors' teaching, teaching administration and teaching conditions. The student assistants collect students' opinions and compile suggestions by attending lectures and interviewing students and deploying questionnaires.

5. CESQ survey

The Provost's office of BNU cooperated with the research team of CSEQ in BNU to launch a study of student learning outcomes. The research team developed a localized instrument that based on CSEQ instrument, student learning outcomes in BNU-CSEQ embraced：

- students' background information

- university activities

- students' self-assessment of higher education gains

- students' perception of college environment

- the factors that affect students' attainment

……etc.

For example, the research does a cross sectional study in LIYUN college (as Harvard College in Harvard University, but not every students can attend the LIYUN currently) and other schools in BNU, the data shows that undergraduates in BNU have a high self-assessment in individual social development, career preparation, cognitive skills, scientific skills and liberal arts education, especially for students in Liyun College (see figure 2).
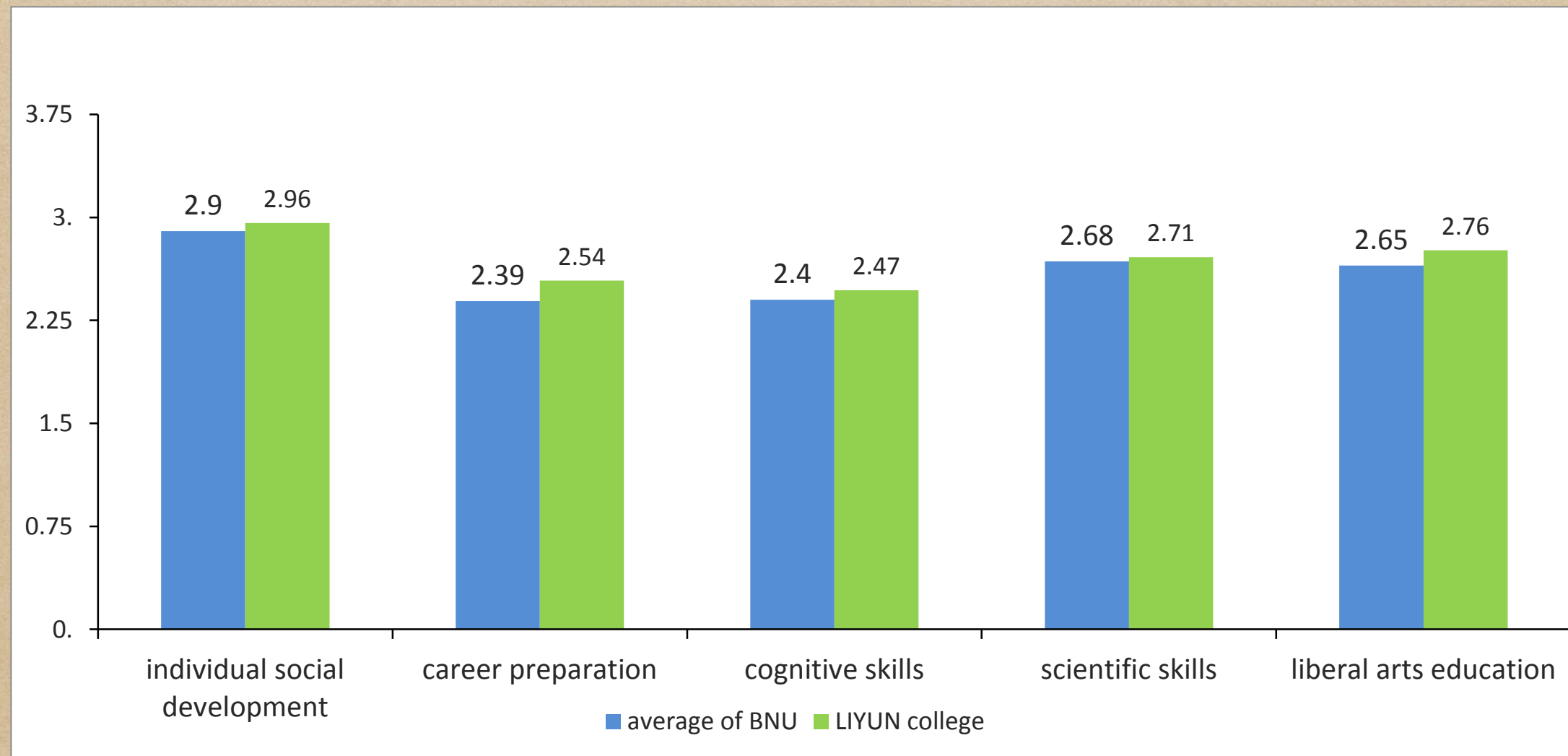

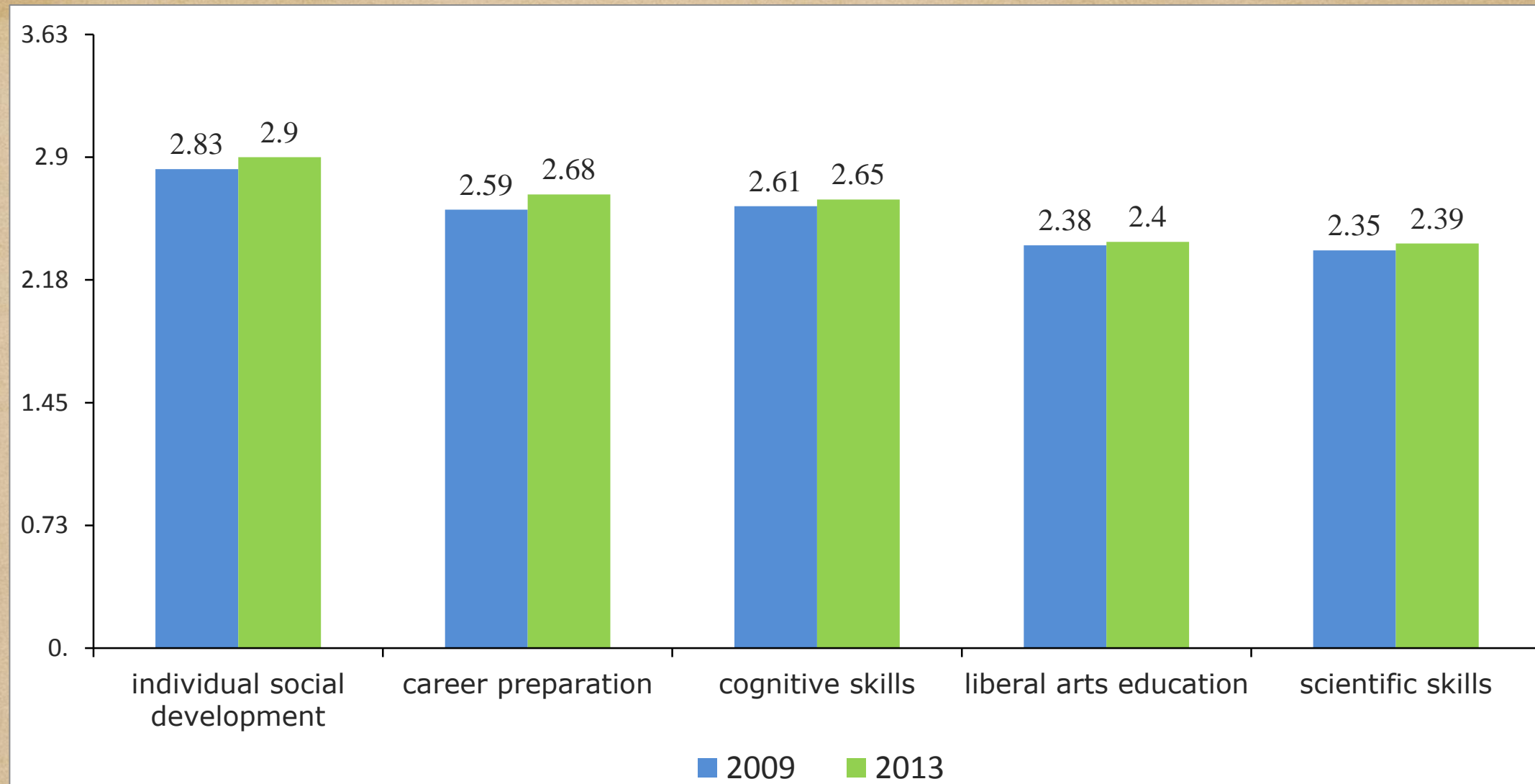Figure 2 the comparison of students' attainment in five dimensions

Figure 3 the comparison of students' attainment in 2009 and 2013
Source：Quality Report of BNU Undergraduate Teaching (2013)

BNU launch the study of BNU-CSEQ since 2006, and published Research Report of College Student Experiences every year, the latest research project is carried out in 2013, The assessment process has not yet integrated into curriculum and teaching to enhance students learning experience. and the research report is mainly used in the Quality Report of Beijing Normal University Undergraduate Teaching.

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Reflections 1

Quality audit leave space for higher education institutions, HEIs could collecting formative information and set up internal quality scheme to improve its quality, but in fact, the motivation for HEIs in China to do higher education student learning outcomes is mainly for external accountability.

Many universities like BNU in China have realized that student learning outcomes data is vital for university development, but the current situation is that student learning outcomes assessment in China is mainly carries out by academic communities, it doesn't get enough focus from administrative communities, and it cannot get enough resource for its development, So it has not yet integrated into students' learning process, faculty's teaching or senior decision making.

Reflections 2

Curriculum is an important part of higher education student learning outcomes. What kind of person is HE seeking to develop? HEIs should identify the important questions being raised in discipline and then to decide on the critical concepts that should be taught and the most appropriate methods for teaching student.

Moreover, curriculum has four key factors: teacher, learner, subject-matter and context, but curriculum evaluation applied in universities in China missing collecting data of subject-matter and context.

So，current internal quality scheme also miss student data too，CCSS CSEQ collecting students engagement in university, it helps university to understand about students, but how to measure subject-matter in higher education，how to help student from different background during teaching is still a difficult problem.

Reflections 3

The learning-centered paradigm requires that leaning itself is seen as a central pedagogical concept. It means that the art of facilitating students' learning process itself becomes a pedagogical key issue. The central pedagogical question is not "what to learn", but "how to learn"(Claus and Clive, 2008,17).

The current model in BNU is similar to that in other Chinese universities, serves as a strong impetus to improve teaching and curriculum, The next steps for universities in China could be to move from 'instructional paradigm' with its focus on teaching and instruction to a 'learning paradigm' that enables students to discover and construct knowledge for themselves, activate students and enable them to take responsibility for their own learning process, and help them to learn the way how to learn. Out go "spoon-feeding" teaching where students are treated like a passive audience.

To sum up, in recent years more and more attention has been paid to student learning outcomes assessment. But work on student learning outcomes is still in the stage of primitive attempts, especially in Chinese political and social background.

Quality audit is an idealized design of quality assurance scheme, as analyzed above, institutions in China still need to overcome many hurdles and barriers to realize the integration of student learning outcomes assessment and internal quality assurance scheme.

Reform needs time, but the existence of student learning outcomes assessment spotlights academic interest on student learning and education quality. It serves as a litmus test for use by academic scholars in improving student learning, and of course, will help improve education quality as well as evidence-based information for the general public.

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Further study

- What is higher education student learning outcomes in China?

- What information need to be collected in order to assess student learning?

- What method should be used to assess student learning, direct or indirect?

- how to carry it out in curriculum level?

- ……

Hope to communicate more with peers who also interested in this subject.