SERU

"Undergraduate Education in the Public University Symposium " March 10-11, 2016 @Berkeley



Time Allocation, Cultural Change, and Student Engagement for Further Development

Takahiro SAITO, Ph.D.

Strategic Planning Office, Institute for Academic Initiatives

Osaka University

saito@iai.osaka-u.ac.jp



Changing Circumstances

Challenges to our society:

- Aging society with fewer children
 Decreasing number of students
- Borderless economy and culture
 International competition with other nations

Universities as "Base of Intellect"

- Development of global human resources
- Formation of intellectual foundations
- Creation of innovations



University Reform Action Plan (June 2012)

Reestablishment of the Functions of Universities at a Time of Major Social Change;

- 1. Qualitative changes in university education and reform of university examinations
- 2. Human resource development corresponding with globalization
- 3. The realization of universities that can serve as a core for regeneration of local communities (Center of Community)
- 4. The strengthening of research competencies (Creating world-class research outcomes and innovations)

Function-Based University Segmentation



University Reform Action Plan (June 2012)

Strengthening and Enhancement of University Governance;

- 5. National university reform
- Development of a system and foundation for promoting university reform
- 7. Establishment of stable financial foundations and selective allocation of funding (Matching Fund Subsidy for Private Universities)
- 8. Thorough promotion of quality assurance of universities (with reference to private universities, in terms of both education and management)



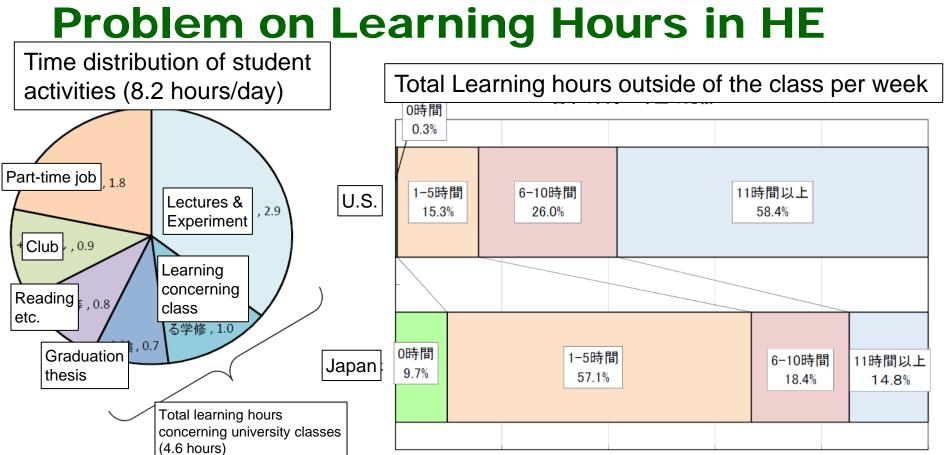
New Policies in Higher Education

- Promote disclosure of information on education (Accountability)
- Establish Three Policies (Admission, Curriculum, and Diploma Policy)
- Credit substantiation (Learning Time)
- Segmentation of National Universities (Rural, Specialized, & World-class research)
- Outcome-based Resource Allocation





100%



出典:東京大学 大学経営政策研究センター(CRUMP) 『全国大学生調査』2007年、サンプル数44,905人 http://ump.p.u-tokyo.ac.jp/crump/NSSE(The National Survey of Student Engagement)

20%

40%

60%

80%

0%

The Central Council for Education (2012) "A qualitative turning point in higher education, with the aim of empowering people to continue lifelong learning and think independently", P.58. (新たな未来を築くための大学教育の質的転換に向けて) http://www.mext.go.jp/component/b_menu/shingi/toushin/__icsFiles/afieldfile/2012/10/04/1325048_7.pdf 6



SERU Survey in Osaka University

1st Survey (Nov. 20, 2013 – Dec.10, 2013)

Target: Undergraduate and Graduate students in a couple of Departments/Schools

Responses: UG 299 (13.4%), Graduates 154 (11.2%)

2nd **Survey** (Dec. 15, 2014 – Feb. 27, 2015)

Target: All of Undergraduate and Graduate students

Responses: UG 998 (6.4%), Graduates 826 (10.4%)

Method: This survey was informed to the students through the University Portal site. They accessed the website and then forwarded the external enquete website operated by i-Graduate.

Language: The respondents can select Japanese or English.







SERU Survey in Osaka University

3rd Survey (Nov. 22, 2015 – Feb. 15, 2016)

Target: All of Undergraduate and Graduate students

Access number and rate:

Undergraduate 4,122 (27%) Graduate School 1,832 (23%) Total 5,954 (26%)

Completion number and rate:

Undergraduate 3,377 (22%) Graduate School 1,469 (19%) Total 4,846 (21%)



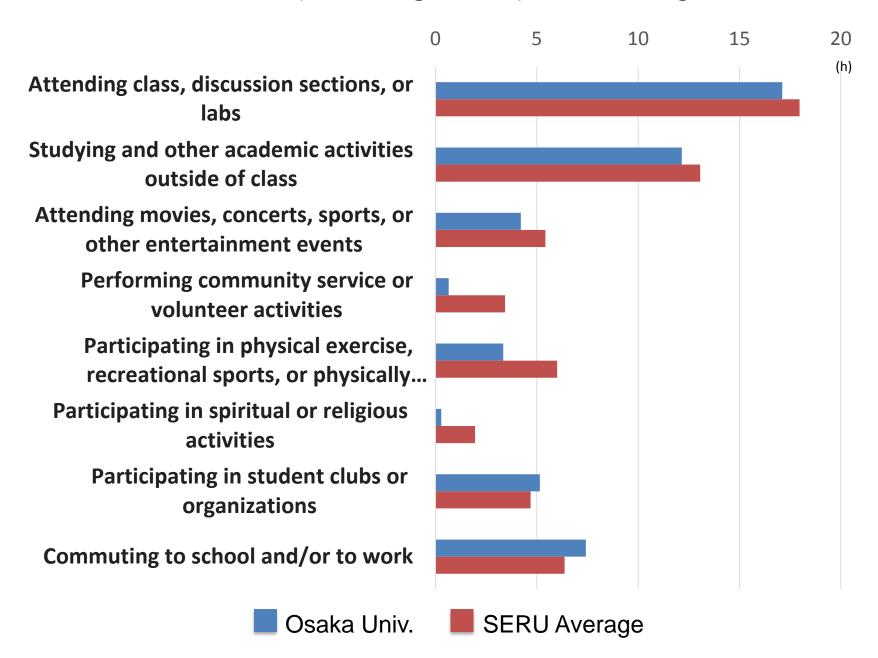


Survey Results

- 1. Time allocation (Learning hours)
- 2. Type of study required in the program
- 3. Activity required in the program
- 4. Factors which influence to their academic satisfaction
- * 2014-2015 data

Comparison between Osaka University (total: 998 responses) and 13 SERU universities which is available in our campus (total 72,637, including US and other areas).

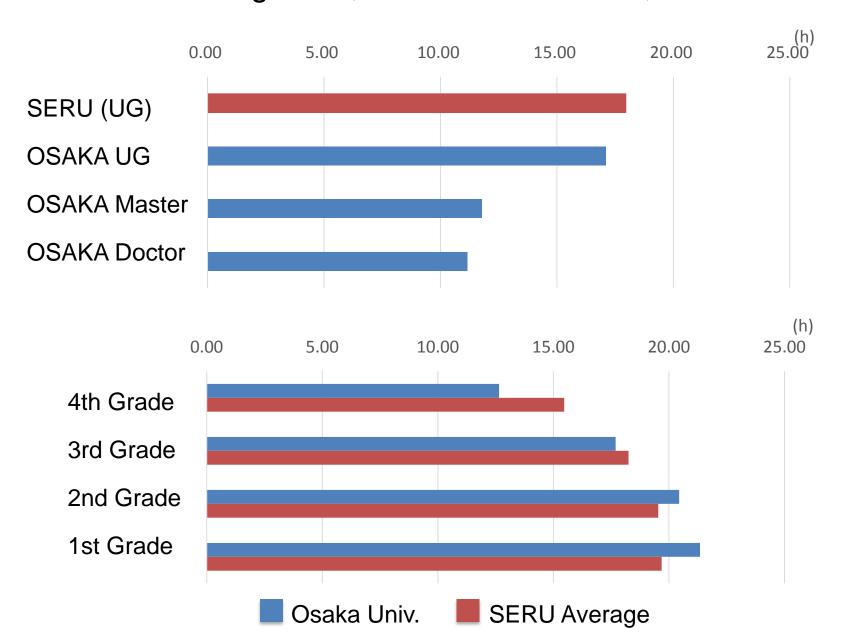
Time allocation (Learning hours) for under graduates







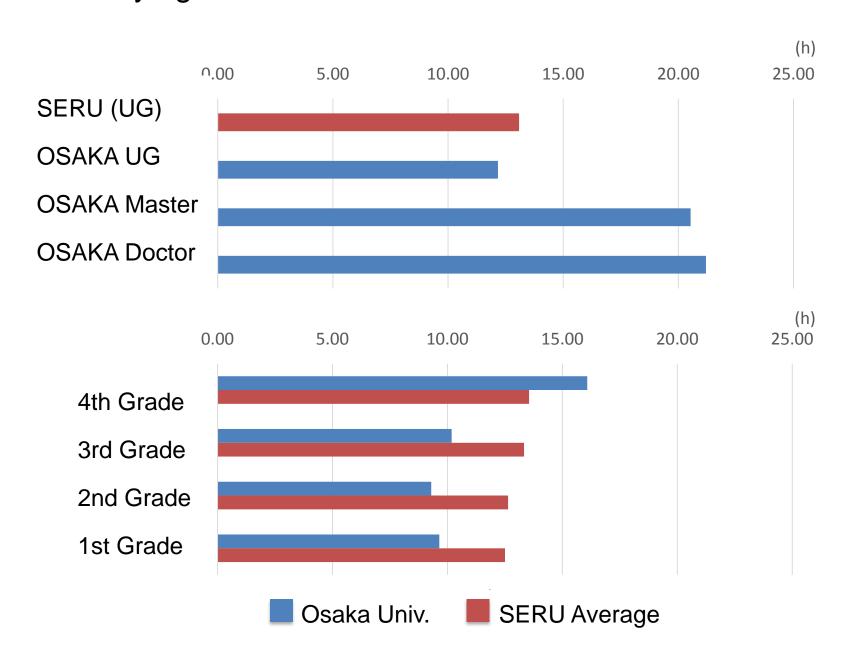
Attending class, discussion sections, or labs







Studying and other academic activities outside of class

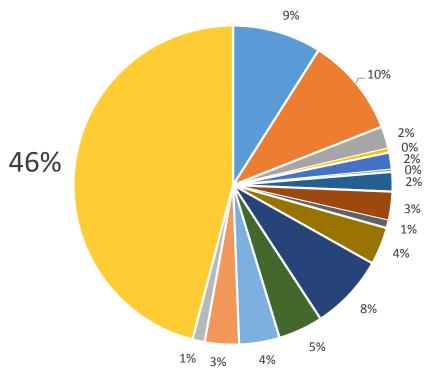




Time Allocation from SERU Portal

- ✓ Total hours in a week
- ✓ "Expectation values" calculated by using "class values" and "frequencies"

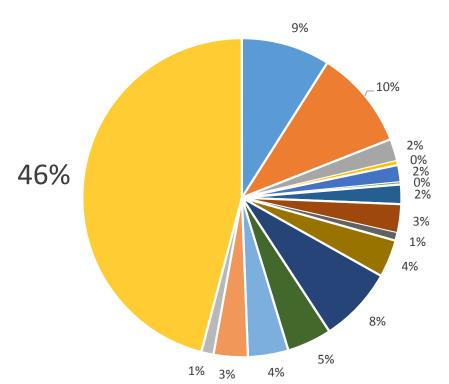
Osaka University



- Attending classes, discussion sections, or labs
- Studying and otheracademic activities outside of class
- Attending movies, concerts, sports, or other entertainment events
- Performing community service or volunteer activities
- Participating in physicalexercise, recreational sports, or physically activities
- Participating in spiritual or religious activities
- Participating in student clubs or organizations
- Socializing with friends
- Partying
- Spending time with family
- Using the computer/tablet/smartphone for nonacademicpurposes and ..
- Watching TV, streaming movies/TV on computer or tablet
- Commuting to school and/or to work
- How many hours -Paid employment (including internships) off campus?
- How many hours -Paid employment (including internships) on campus?
- Others(e.g. sleep?)



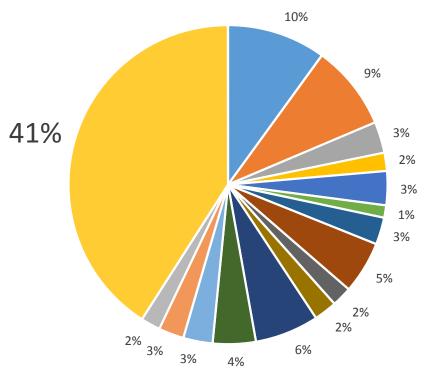
Osaka University



- Attending classes, discussion sections, or labs
- Studying and otheracademic activities outside of class
- Attending movies, concerts, sports, or other entertainment events
- Performing community service or volunteer activities
- Participating in physicalexercise, recreational sports, or physically activities
- Participating in spiritual or religious activities
- Participating in student clubs or organizations
- Socializing with friends
- Partying
- Spending time with family
- \blacksquare Using the computer/tablet/smartphone for nonacademic purposes and \dots
- Watching TV, streaming movies/TV on computer or tablet
- Commuting to school and/or to work
- How many hours -Paid employment (including internships) off campus?
- How many hours -Paid employment (including internships) on campus?
- Others(e.g. sleep?)

SERU Benchmark



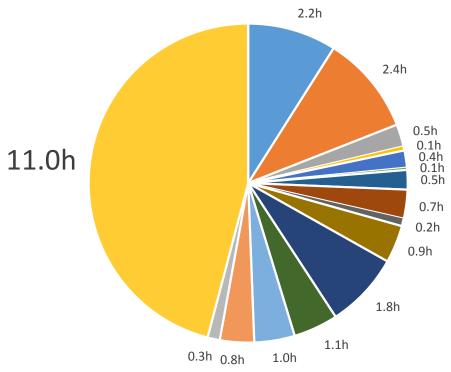


- Attending classes, discussion sections, or labs
- Studying and otheracademic activities outside of class
- Attending movies, concerts, sports, or other entertainment events
- Performing community service or volunteer activities
- Participating in physicalexercise, recreational sports, or physically activities
- Participating in spiritual or religious activities
- Participating in student clubs or organizations
- Socializing with friends
- Partying
- Spending time with family
- \blacksquare Using the computer/tablet/smartphone for nonacademic purposes and \dots
- Watching TV, streaming movies/TV on computer or tablet
- Commuting to school and/or to work
- How many hours -Paid employment (including internships) off campus?
- How many hours -Paid employment (including internships) on campus?
- Others(e.g. sleep?)

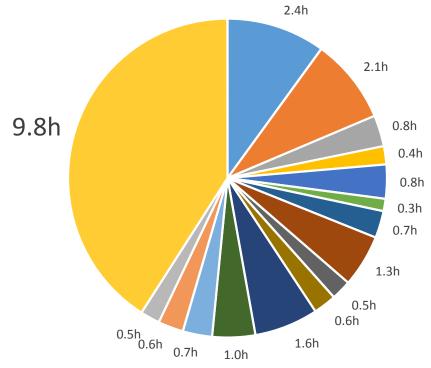
Osaka University

SERU Benchmark



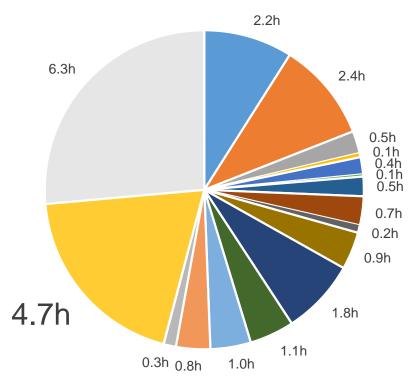


- Attending classes, discussion sections, or labs
- Studying and otheracademic activities outside of class
- Attending movies, concerts, sports, or other entertainment events
- Performing community service or volunteer activities
- Participating in physicalexercise, recreational sports, or physically activities
- Participating in spiritual or religious activities
- Participating in student clubs or organizations
- Socializing with friends
- Partying
- Spending time with family
- Using the computer/tablet/smartphone for nonacademicpurposes and ..
- Watching TV, streaming movies/TV on computer or tablet
- Commuting to school and/or to work
- How many hours -Paid employment (including internships) off campus?
- How many hours -Paid employment (including internships) on campus?
- Others(e.g. sleep?)



- Attending classes, discussion sections, or labs
- Studying and otheracademic activities outside of class
- Attending movies, concerts, sports, or other entertainment events
- Performing community service or volunteer activities
- Participating in physicalexercise, recreational sports, or physically activities
- Participating in spiritual or religious activities
- Participating in student clubs or organizations
- Socializing with friends
- Partying
- Spending time with family
- Using the computer/tablet/smartphone for nonacademicpurposes and ..
- Watching TV, streaming movies/TV on computer or tablet
- Commuting to school and/or to work
- How many hours -Paid employment (including internships) off campus?
- How many hours -Paid employment (including internships) on campus?
- Others(e.g. sleep?)

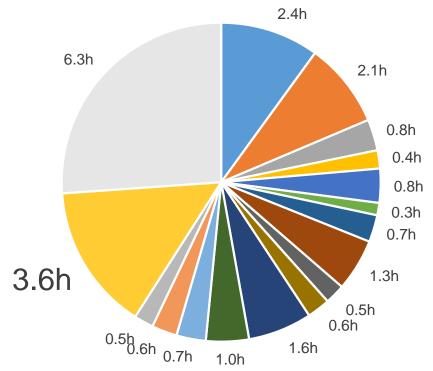
Osaka University



- Attending classes, discussion sections, or labs
- Studying and otheracademic activities outside of class
- Attending movies, concerts, sports, or other entertainment events
- Performing community service or volunteer activities
- Participating in physicalexercise, recreational sports, or physically activities
- Participating in spiritual or religious activities
- Participating in student clubs or organizations
- Socializing with friends
- Partying
- Spending time with family
- Using the computer/tablet/smartphone for nonacademicpurposes and ..
- Watching TV, streaming movies/TV on computer or tablet
- Commuting to school and/or to work
- How many hours -Paid employment (including internships) off campus?
- How many hours -Paid employment (including internships) on campus?
- Others(unknown)
- Sleep

SERU Benchmark



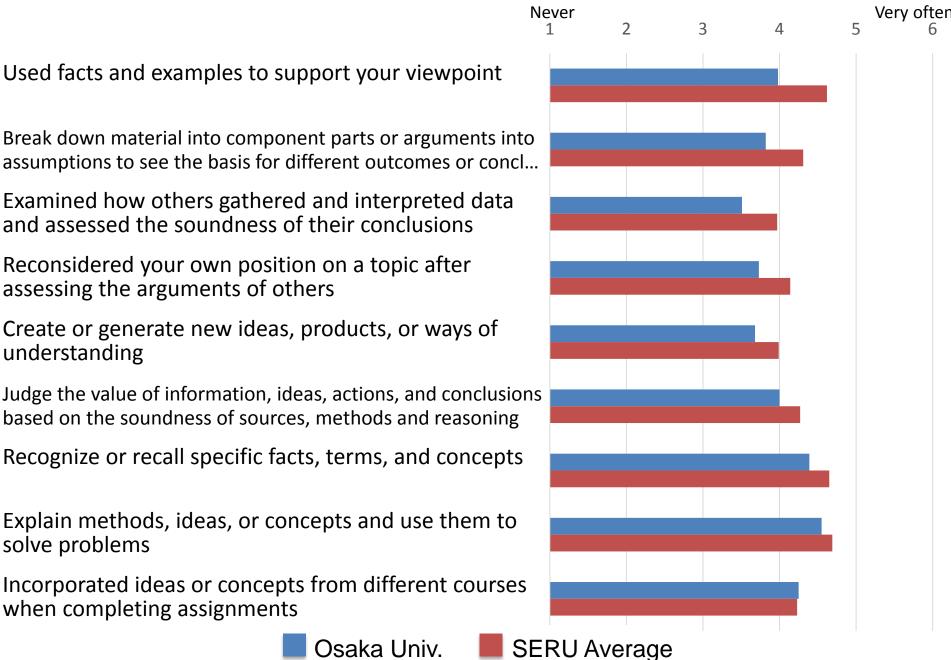


- Attending classes, discussion sections, or labs
- Studying and otheracademic activities outside of class
- Attending movies, concerts, sports, or other entertainment events
- Performing community service or volunteer activities
- Participating in physicalexercise, recreational sports, or physically activities
- Participating in spiritual or religious activities
- Participating in student clubs or organizations
- Socializing with friends
- Partying
- Spending time with family
- Using the computer/tablet/smartphone for nonacademic purposes and ..
- Watching TV, streaming movies/TV on computer or tablet
- Commuting to school and/or to work
- How many hours -Paid employment (including internships) off campus?
- How many hours -Paid employment (including internships) on campus?
- Others(unknown)

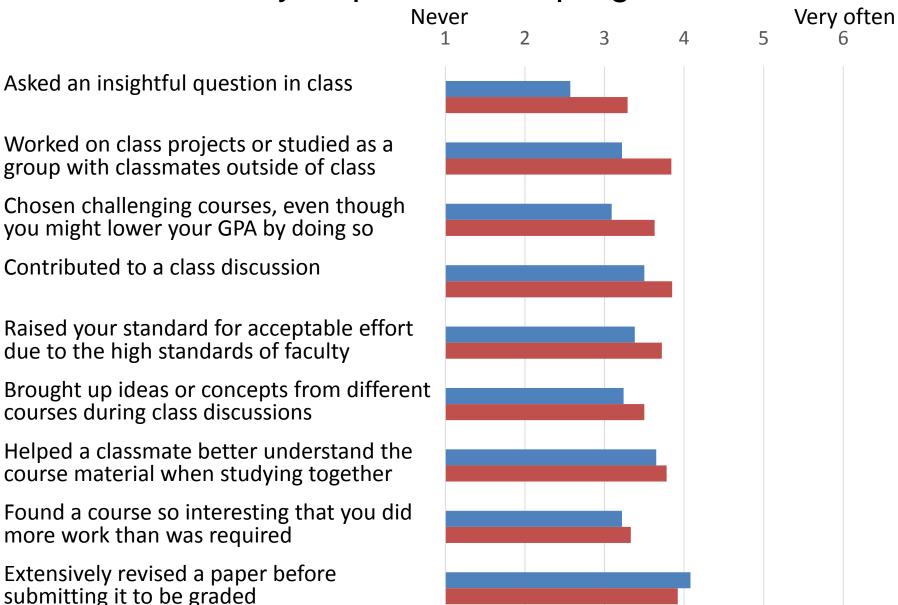
16

Sleep



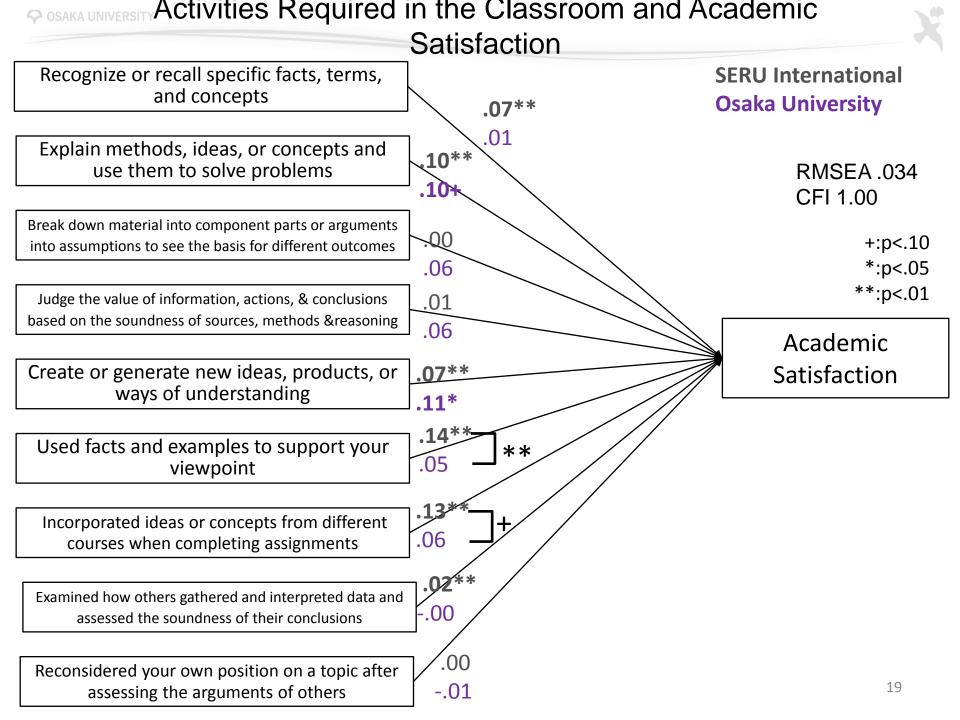


Activity required in the program



SERU Average

Osaka Univ.



Attitude in the classroom and academic OSAKA UNIVERSITY satisfaction **SERU International** Contributed to a class discussion **Osaka University** .18** ** .04Brought up ideas or concepts from -.07*<u>*</u> **RMSEA** .068 different courses during class discussions CFI .997 08** Asked an insightful question in class +:p<.10** *:p<.05 **:p<.01 Found a course so interesting that you did .08** more work than was required .19* Academic 08** Chosen challenging courses, when possible, Satisfaction * even though you might lower your GPA .01 .02** Raised your standard for acceptable effort ** .16** due to the high standards of a faculty Extensively revised a paper before .06 submitting it to be graded .09* ** Worked on class projects or studied as a .08 group with classmates outside of class .04** Helped a classmate better understand the + 20 course material when studying together



1. Time allocation (Learning hours)

- Almost same learning hours both within the class/labs and outside of the class in total
- Less learning hours outside of class in 1st, 2nd and 3rd grade
- Very short for social engagement and volunteer activities

Action:

- ✓ Lecturer should give appropriate assignments.
- ✓ The format of syllabus was modified to show the student attainment of the class explicitly.



- 2. Type of study required in the program
 - Almost equal experience to have knowledge and skills (Input Learning)
 - Less experience on the study to output something (Research oriented (output) learning)
 - Frequency of the research oriented learning is slightly dropped at 2nd grade (Their experience on active learning in 1st grade missed to continue.)

Action:

- ✓ Research oriented active learning should be more promoted.
- ✓ Better linkage should be developed between liberal arts and professional/academic education



3. Activity required in the program

- Following items have lower ratings:
 - "Asked an insightful question in class"
 - "Worked on class projects as a group with classmates outside of class"
 - "Chosen challenging courses, even though you might lower your GPA"

Action:

- ✓ Active learning should be more promoted.
- ✓ Numbering system should be more effective.



- 4. Factors which influence to their academic satisfaction
- For total SERU-I students, the more they show and use their knowledge, the more academic satisfaction they have.
- For OU students, the more effort they have, the more academic satisfaction they have.

Action:

✓ The culture should be replaced, not only for the knowledge but for the other abilities to be a researcher.



Some Concerns about SERU Survey

Difference in Education/Learning System

Activities in Laboratories and Seminars

Different Culture in responding the Survey

Humility, Modest, Underrate...

Different Culture in Leaners

Superficial Attitude (Mood) for Learning



Others

- Influence of Japanese response styles, especially for the self-reporting of abilities (Moderate? Humbleness?)
- Do we gauge "same phenomenon"?"your learning hours" = "あなたの学習時間"?

Action:

✓ Further research topics: "Tendency of self-evaluation responses"

"What is "learning" in their thoughts?" (ex. reading a specialized book other than your major, discussion in a club, preparation for an experiment, etc.)





Thank you.

Takahiro SAITO saito@iai.osaka-u.ac.jp