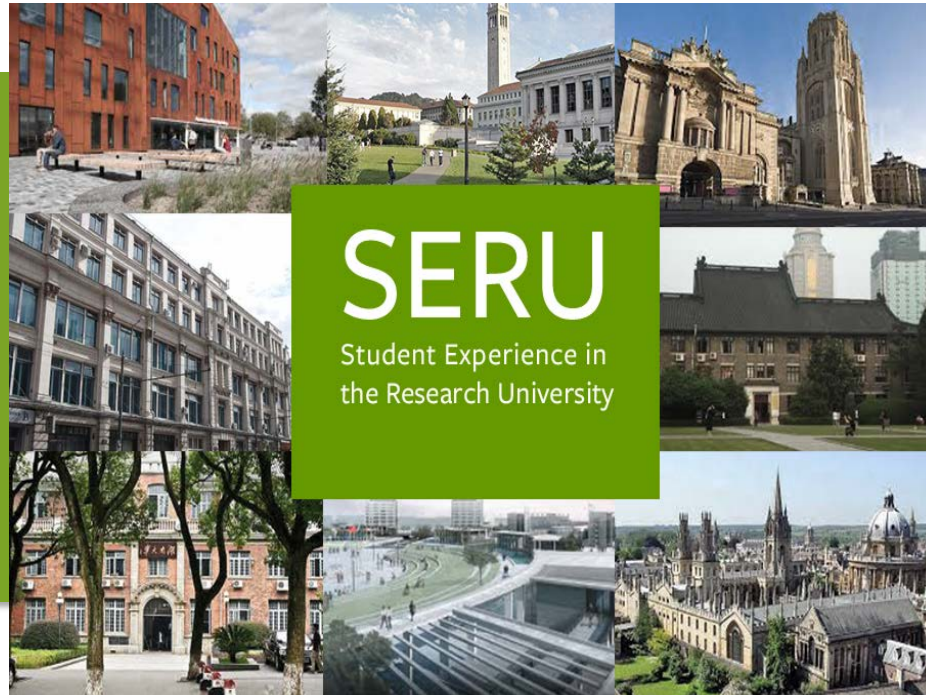


# A Comparative International Lens on Undergraduate and Graduate Education – An Exploration of SERU Data and Discussion on Chile and California



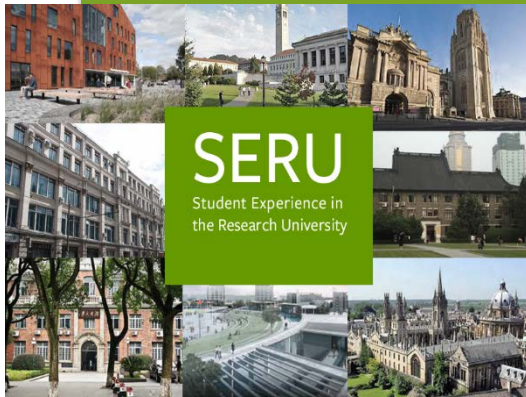
June 25, 2015 - Social Science Matrix, 8th Floor Barrows Hall

Student Experience in the Research University (SERU) International Consortium

UC Berkeley/Higher School of Economics - Moscow/University of Minnesota

**John Douglass**, SERU-I Principal Investigator, UC Berkeley

**Igor Chirikov**, SERU-I Managing Director, HSE-Moscow/UC Berkeley



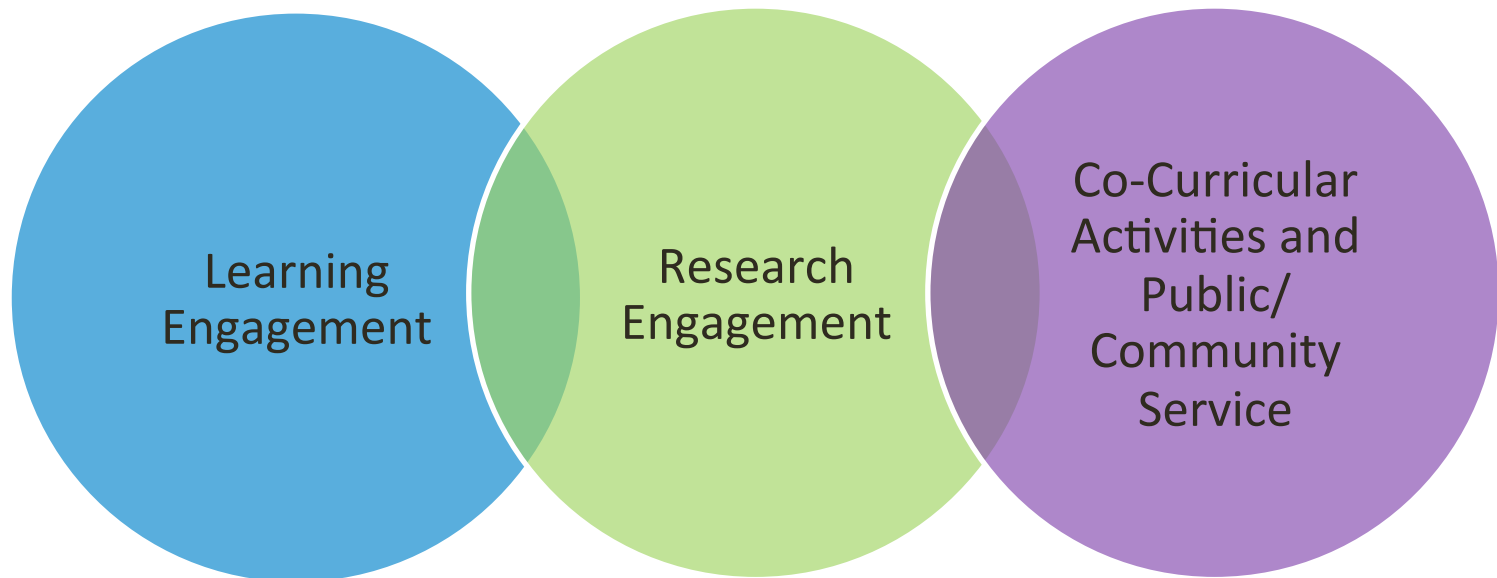
## About the Consortium

# Improving Student Experience in Research Universities

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## Turning to the Student Side of the Equation

### SERU Portrait of Student Engagement – 3 Pillars



**Seeking a Holistic Understanding of the Student Experience**

# SERU-I Consortium History

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**2002:** System-wide survey focused on the academic and civic engagement of undergraduate students at 8 campuses of the University of California (*University of California Undergraduate Experience Survey - UCUES*).



**2008:** More universities – members of prestigious Association of American Universities (AAU) – join the project, forming *SERU Consortium (SERU-AAU)*. It is housed at the Center for Studies in Higher Education at the University of California Berkeley.



**2011:** *SERU International (SERU-I) Consortium* was established. It includes a selective group of top ranked international research universities.

**2014:** SERU-I Consortium develops a partnership with *i-graduate* and *HSE-Moscow* for better survey administration and deliverables for its members.

# Why Universities Join SERU?

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## Why?

At Nanjing University?

At Hunan University?

At Higher School of Economics - Moscow?

At Berkeley, Michigan, Virginia, Texas . . . ?

**SERU Members have similar goals for student engagement – while at different points that trajectory**

**Motivated by a desire for institutional self-improvement and evidence based management**

**We also know we benefit greatly from international comparative data, and sharing best practices and policy relevant research among similar research-intensive universities**

# SERU-I Objectives

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## Survey administration

Develop and administrate an online, census, and customized version of the SERU survey of students for international research universities, parallel to the SERU Surveys in the US.



## Data sharing and benchmarking

Collaborate with SERU-AAU Consortium members in the generation and sharing of institutional, comparative, and longitudinal data on the student experience, including SERU surveys of students, and based on agreed data sharing protocols.



## Institutional self-improvement

Conduct research on the student experience, sharing best practices via SERU meetings, symposia, and joint-research projects intended to inform and drive institutional self-improvement in undergraduate education and broaden our understanding of the socioeconomic impact of these institutions.



# SERU-International Members

## 2013/2014 Members Profile:

University	Country	Founded	Students	Faculty
Unicamp	Brazil	1966	35000	1759
Nanjing University	China	1949	31000	2100
Xi'an Jiaotong University	China	1896	30000	2900
Hunan University	China	1926	34000	1950
University of Cape Town	South Africa	1829	26000	2000
Amsterdam Univ. College	Netherlands	2008	700	150
HSE-Moscow	Russia	1992	16000	1700
Oxford University	UK	1096	22000	1700
University of Bristol	UK	1909	19000	2000
Osaka University	Japan	1724	25000	3000

## New 2015 Members:

University	Country	Founded	Students	Faculty
Hiroshima University	Japan	1929	16000	3200
Tongji University	China	1907	37000	2800



UNICAMP



HIROSHIMA  
UNIVERSITY



# SERU-AAU Members

## University of California



Berkeley (ARWU: 4)



Davis (ARWU: 55)



Irvine (ARWU: 47)



Los Angeles (ARWU: 12)



Merced (-)



Riverside (ARWU: 101-150)



San Diego (ARWU: 14)



Santa Barbara (ARWU: 41)



Santa Cruz (ARWU: 93)



Rutgers University (ARWU: 52)



University of Florida (ARWU: 78)



University of Michigan (ARWU: 22)



University of Minnesota (ARWU: 30)



University of Oregon (ARWU: 201-300)



University of Pittsburgh (ARWU: 65)



University of Texas (ARWU: 301-400)



University of S. California (ARWU: 51)



University of North Carolina (ARWU: 36)



University of Virginia (ARWU: 101-150)



Texas A&M University (ARWU: 96)



University of Iowa (ARWU: 151-200)



Purdue University (ARWU: 60)



University of Washington (ARWU: 15)



# SERU-I Survey: Administered in 5 Languages

まずは  
**経済/理**  
の学生諸君!ウェブアンケート<sup>※</sup>で君たちの  
声<sup>※</sup>を聞かせて欲しい!  
※SERUによるもの。KOANにて通知します。

【期間】  
平成25年 00月00日(月)  
～ 00月00日(月)

【対象者】  
経済学部、経済学研究科  
理学部、理学研究科

回答者にはもれなく  
阪大オリジナル  
図書カード  
500円分を  
プレゼント!

教育担当理事・副学長  
東島 清

【問い合わせ先】  
総務企画部経営企画課計画係 souki-keiei-keikaku@office.osaka-u.ac.jp

EVERY STUDENT  
HAS A VOICE.  
EVERY VOICE  
IS HEARD.

携手全球23所一流研究型大学  
中国3所著名985院校同步启动

研究型大学学生就读经  
历调查国际联盟试调查

湖南大学学生  
就读经历调查

・調査時間: 2011.11.22-2012.01.03  
・详情查询请登录 蘇湘陳市 渠境紅霞 或 湖大学生会人人网  
・届时使用学校统一派发的邮箱名和密码进入邮箱(可向辅导员索  
取)。按邮件提供的链接即可进入调查网址  
・宣传册将会入寝发放, 里面更多详细内容  
・参与同学将有机会获得 ipad 等精美奖品

湖南大学&加州大学  
合作项目

ПОЗНАЕТСЯ  
В СРАВНЕНИИ

Вышка стремится улучшить образовательную среду для своих студентов. Насколько  
условия обучения в нашем университете отличаются от ведущих вузов мира? Студенты  
знают об этом лучше других.

В начале апреля в Вышке стартует опрос студентов, который проводится  
в рамках международного консорциума «Student Experience in the Research University».  
Точно такую же анкету заполняют студенты Калифорнийского университета в Беркли,  
Оксфордского университета и других ведущих вузов мира. После опроса мы сможем  
сравнить Вышку с ними.

Принять участие просто: каждому студенту придет ссылка для заполнения анкеты на  
его адрес почты @edu.hse.ru. Все участники опроса смогут принять участие в лотерее  
и выиграть фирменные сувениры с логотипом ВШЭ или супер-приз – планшетный  
компьютер!

Интересуют подробности? Заходите на сайт проекта [seru.hse.ru](http://seru.hse.ru) или пишите  
сотрудникам Центра внутреннего мониторинга ВШЭ – [cm@hse.ru](mailto:cm@hse.ru)

SERU  
Student Experience in  
the Research University

# Uses of SERU Data

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## **Internal:**

- Program Review
- Campus Climate
- Accountability Reports
- Student Persistence and Success Studies



## **External:**

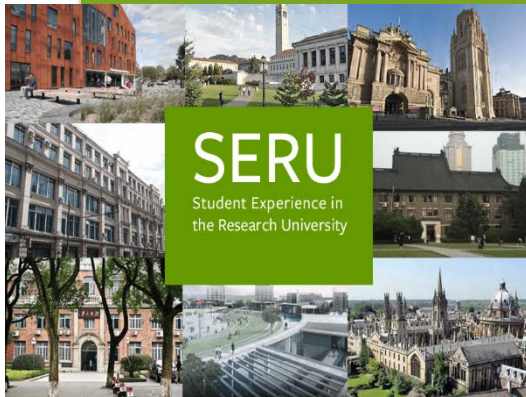
- Campus accreditation
- National Accountability Regimes
- Media and public relations



## **Research and Policy Analysis:**

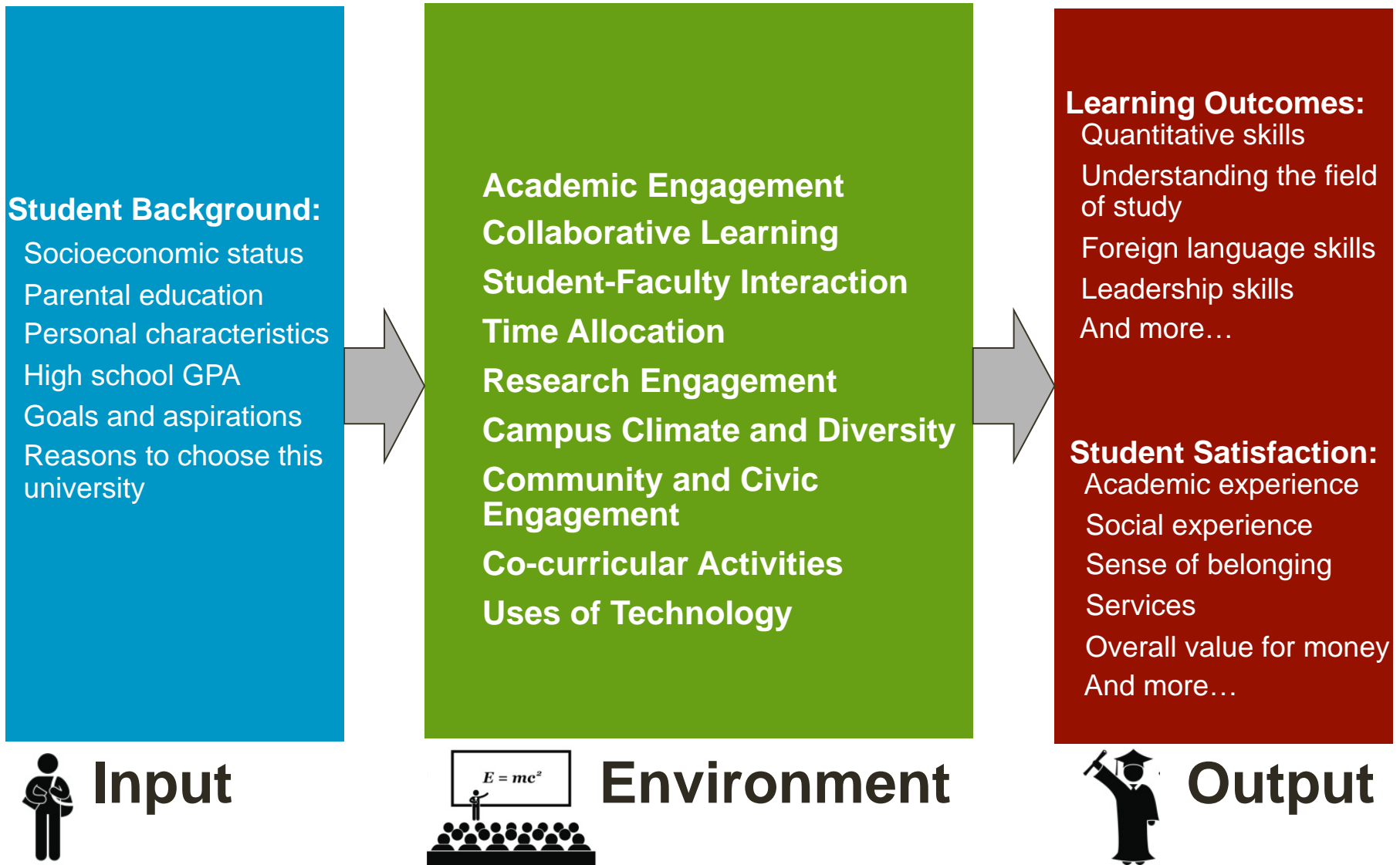
- Learning Outcomes
- Research Engagement
- Global Skills

This Leads to New HEI's Policy and, in turn, informs the SERU Survey



# SERU's Conceptual Lens

# SERU-I Undergraduate Survey Concept Map



# SERU-I Undergraduate Survey Instrument

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## Core Module (36 questions)

Academic and research engagement, time use, learning outcomes, personal development, plans and aspirations, satisfaction and background characteristics

### Module 1 (11 questions)

Academic  
Experience  
and  
Globalization

### Module 2 (23 questions)

Community  
and Civic  
Engagement

### Module 3 (11 questions)

Student Life  
and  
Development

### Module 4 (12 questions)

Uses of  
Technology

### Module 5 (6 questions)

International  
Students

**Campus Wildcard:** a set of questions specific to the campus

## Customized Survey for each University



SERU International UG Survey 2014/2015

In which language would you like to complete the survey in?/このアンケートに答えるために使用する言語をお選びください。

- ☐ English/英語
- ☐ Japanese/日本語

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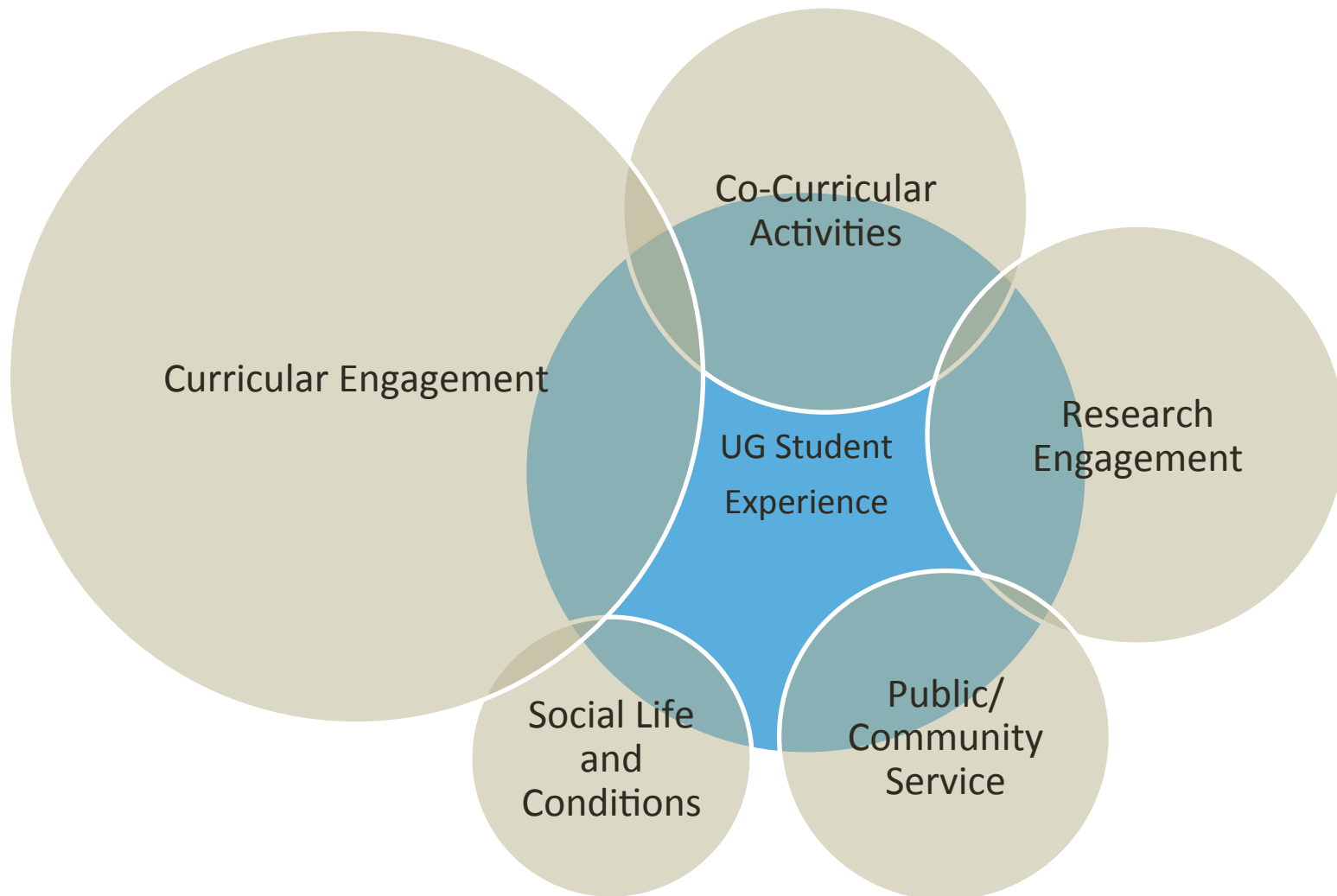
[Click here](#) to view i-graduate's privacy policy

Powered by [Conformit](#)



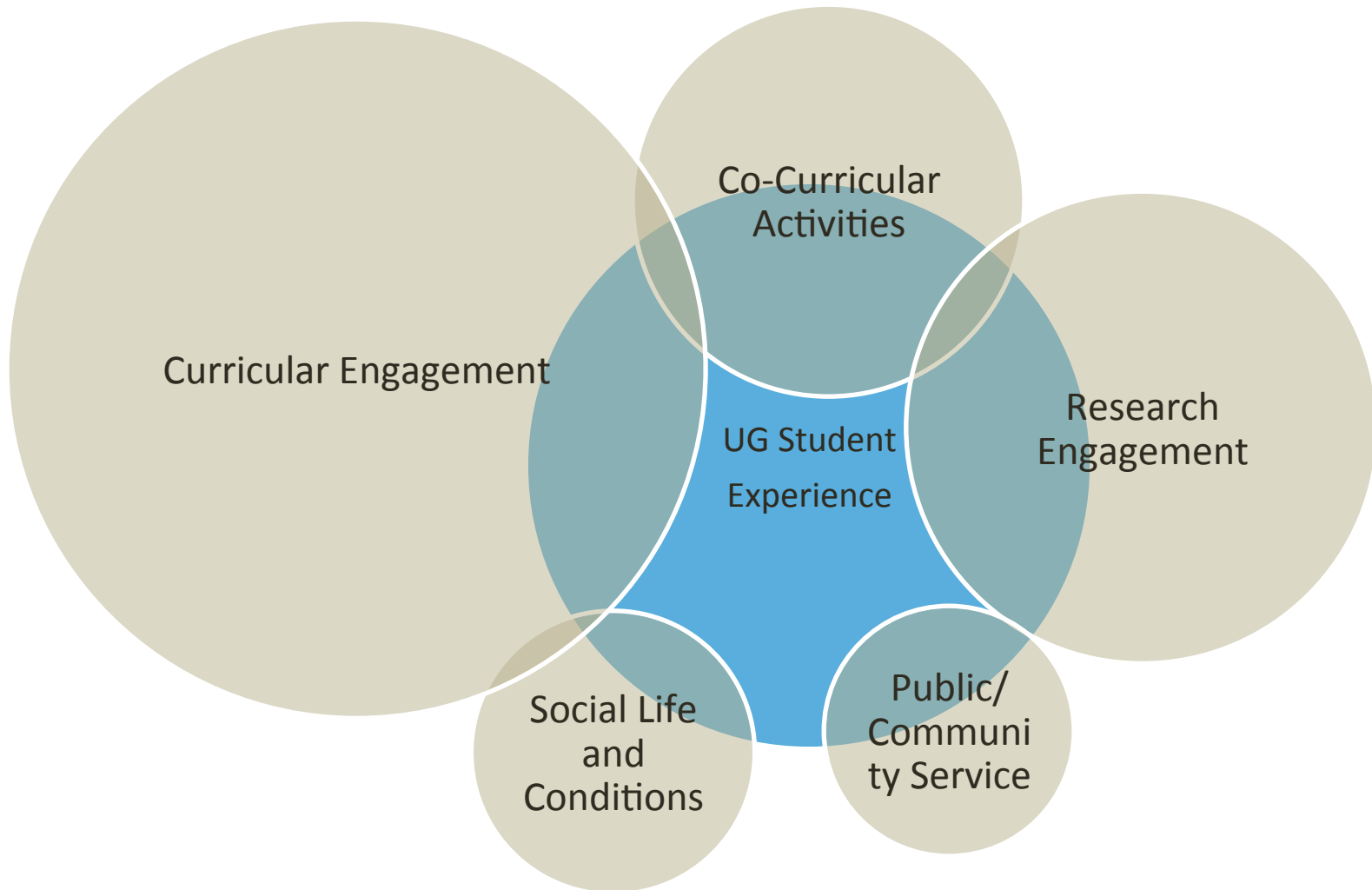
# Five Spheres of the Undergraduate Experience

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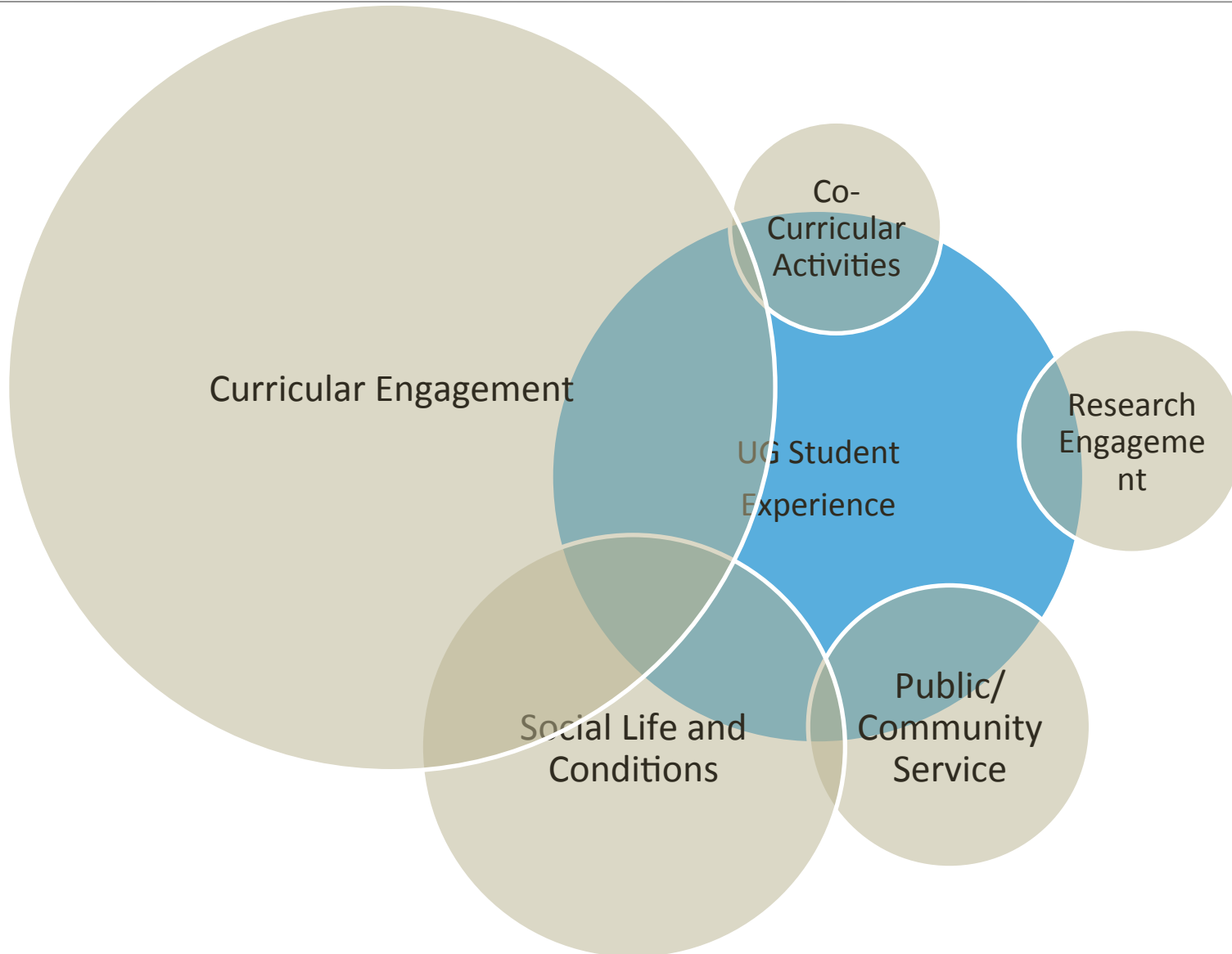
# Student “A” Berkeley - Five Spheres of the Undergraduate Experience

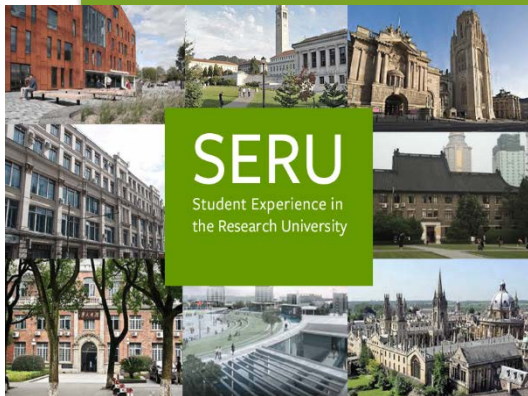
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## Student “B” Nanjing (China) - Five Spheres of the Undergraduate Experience

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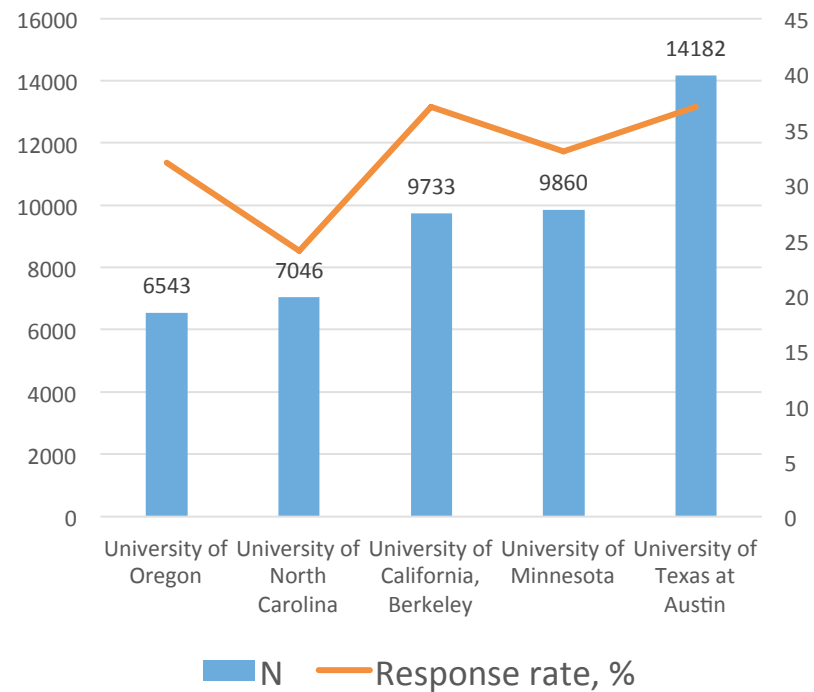


SERU Research

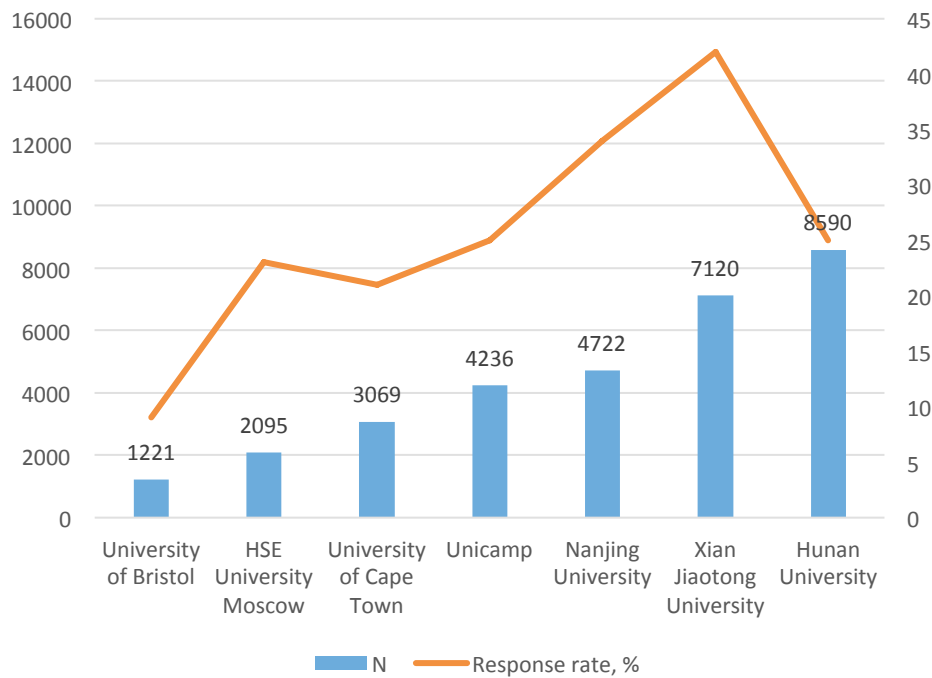
## International Comparisons – The Power Of Benchmarking and Analysis

# Student Response Rate by University

## US Universities

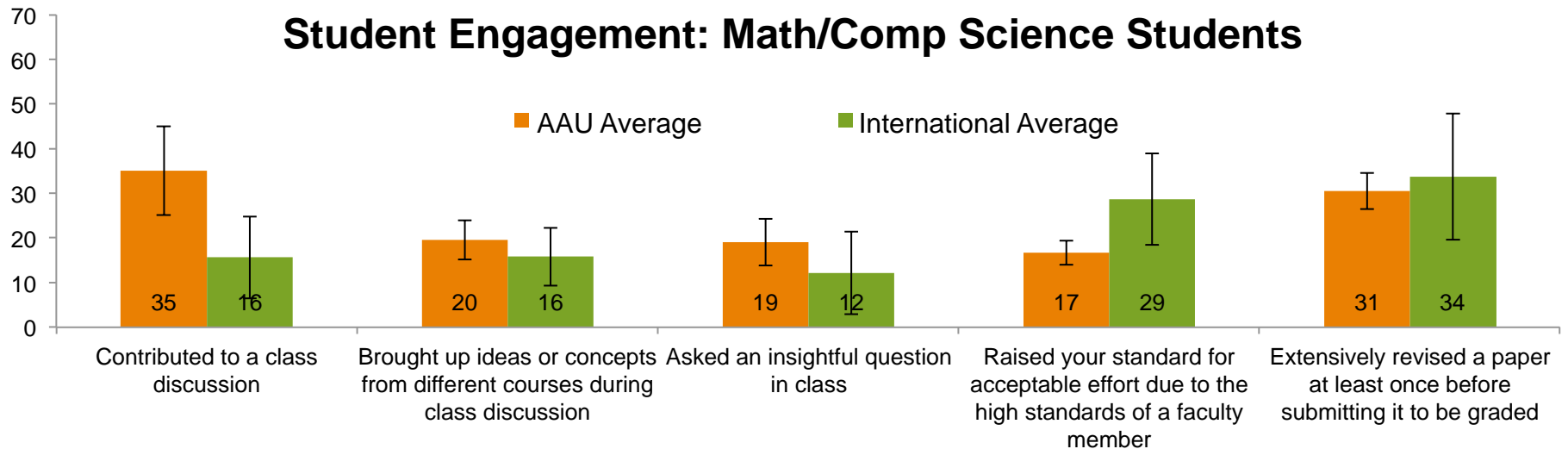


## International universities

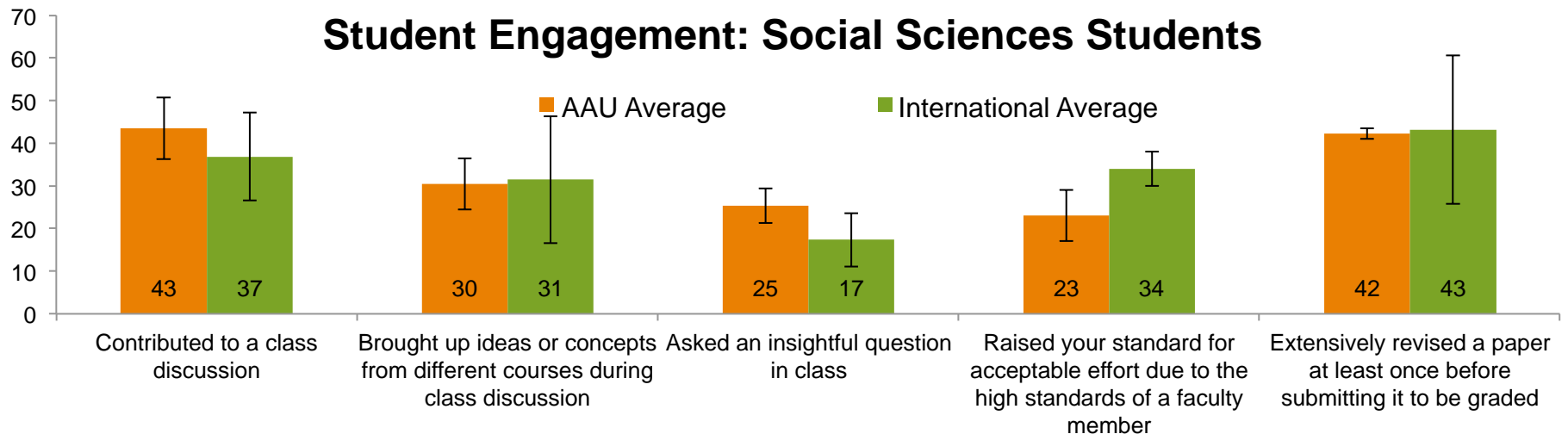


# 1. Greater Variability in Student Experience on International Side

## Student Engagement: Math/Comp Science Students



## Student Engagement: Social Sciences Students





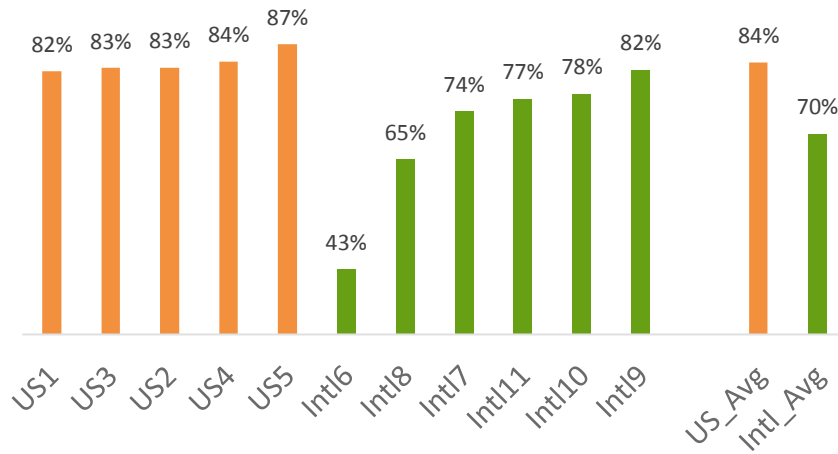
## 2. Different Patterns of Time Allocation

Average number of hours students spend on the following activities:

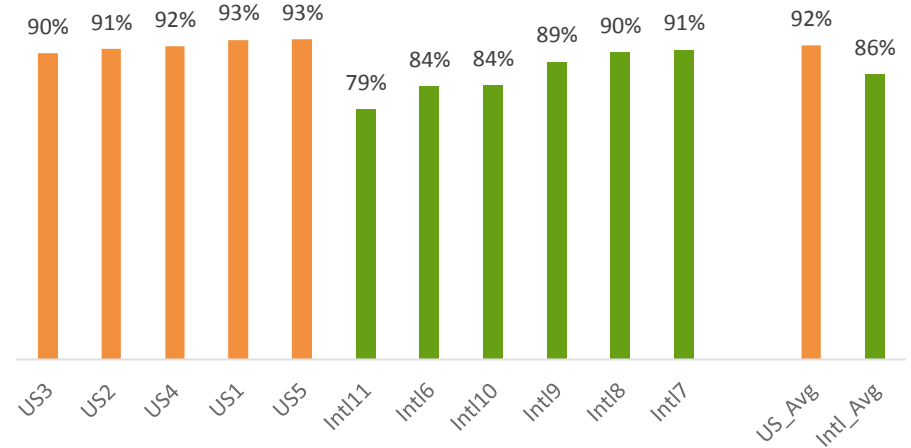
	Attending class, discussion sections, labs	Studying and other academic activities outside of class	Volunteer in community services	Participating in physical exercise	Participating in student clubs or organizations	Pursuing a recreational or creative interest	Paid employment	Family responsibilities
US1	15.5	14.6	3.6	6.1	5.1	4.8	6.5	3.0
US2	15.3	14.6	2.5	5.3	3.2	4.8	10.5	4.6
US3	15.3	13.5	3.5	7.0	3.8	6.2	8.3	4.4
US4	16.0	14.6	3.7	6.2	5.3	5.5	7.0	3.7
US5	16.2	15.0	3.6	5.4	5.5	5.2	5.5	3.0
Intl6	23.1	10.5	5.6	7.8	7.1	9.8	3.2	4.7
Intl7	22.8	11.1	3.2	5.7	4.3	7.7	2.6	2.3
Intl8	23.6	9.2	3.8	7.3	5.8	8.2	2.6	3.5
Intl9	19.4	15.6	2.0	4.8	1.7	5.2	4.5	5.2
Intl10	N/A	10.5	0.5	3.2	3.8	8.8	6.6	4.3
Intl11	N/A	16.5	1.6	5.5	3.9	5.3	1.9	2.2

### 3. Higher Level of Student Disengagement at the US Universities

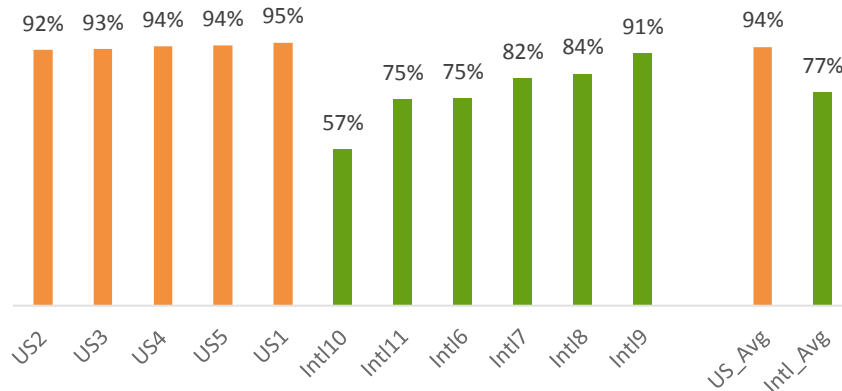
Skipped class (rarely to very often)



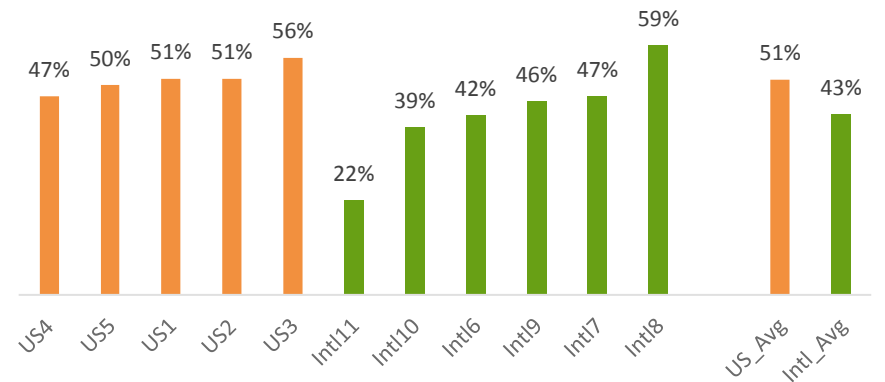
Gone to class unprepared (rarely to very often)



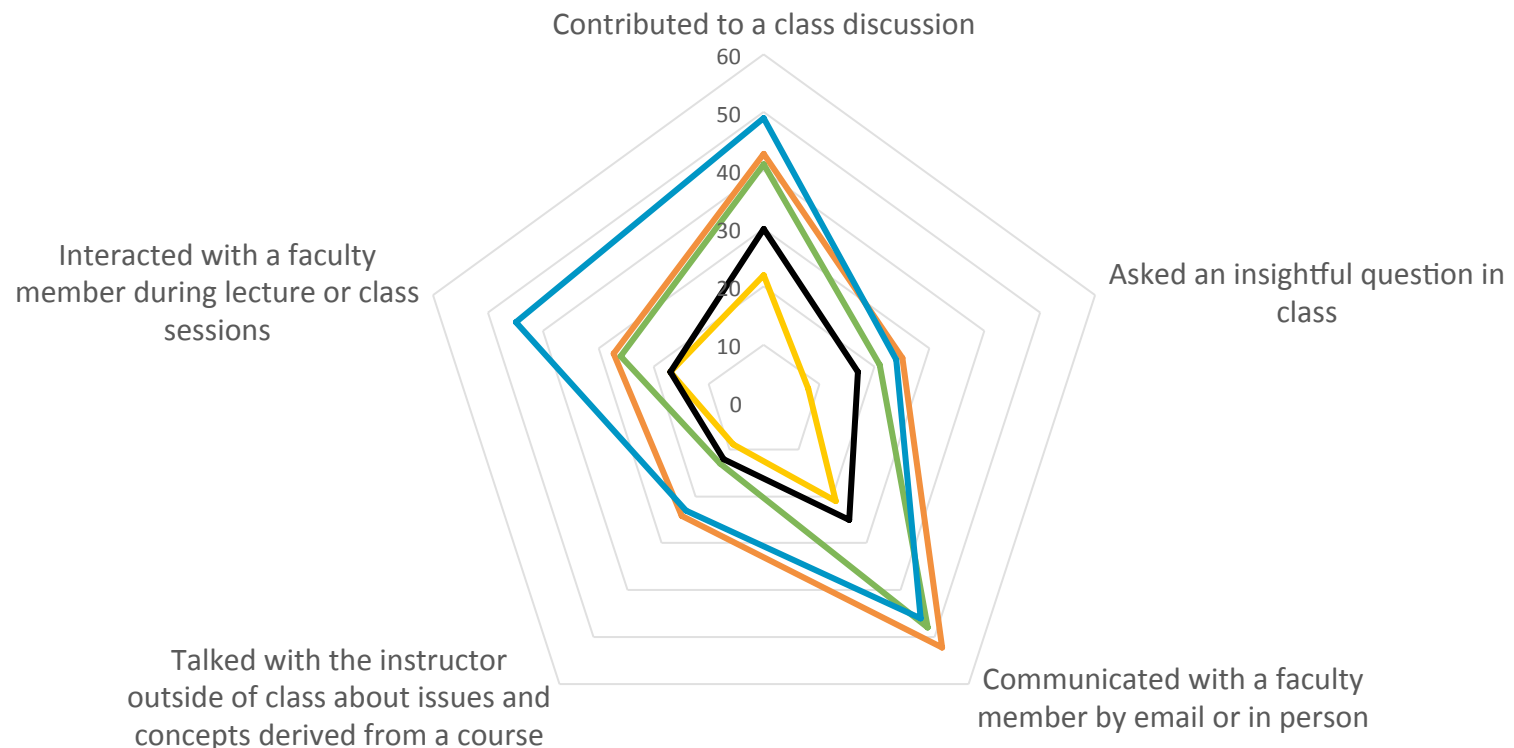
Gone to class without completing assigned reading (rarely to very often)



Turned in a course assignment late (rarely to very often)



## 4. Less Student-Faculty Interaction at International Universities (Social Sciences)



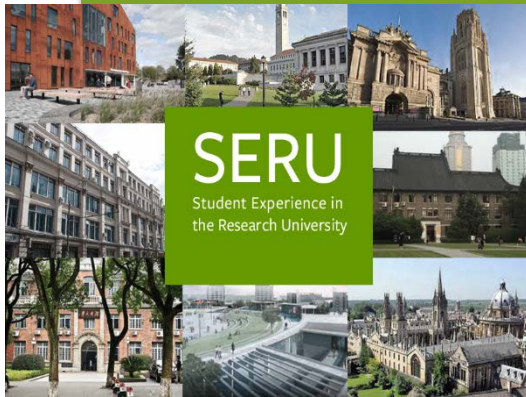
— US Average — Intl-1 — Intl-2 — Intl-3 — Intl-4

% of social science students who have done each of the above 'Often' or 'Very often'

# UG Experience - QUESTIONS FOR DISCUSSION

---

- How do these results match with the experience of students at Berkeley and in Chile?
- How Chilean students spend their time?
- Are they engaged or adrift? Curricular, research, civic, co-curricular engagement?
- Are there differences in the level of student engagement between disciplines?

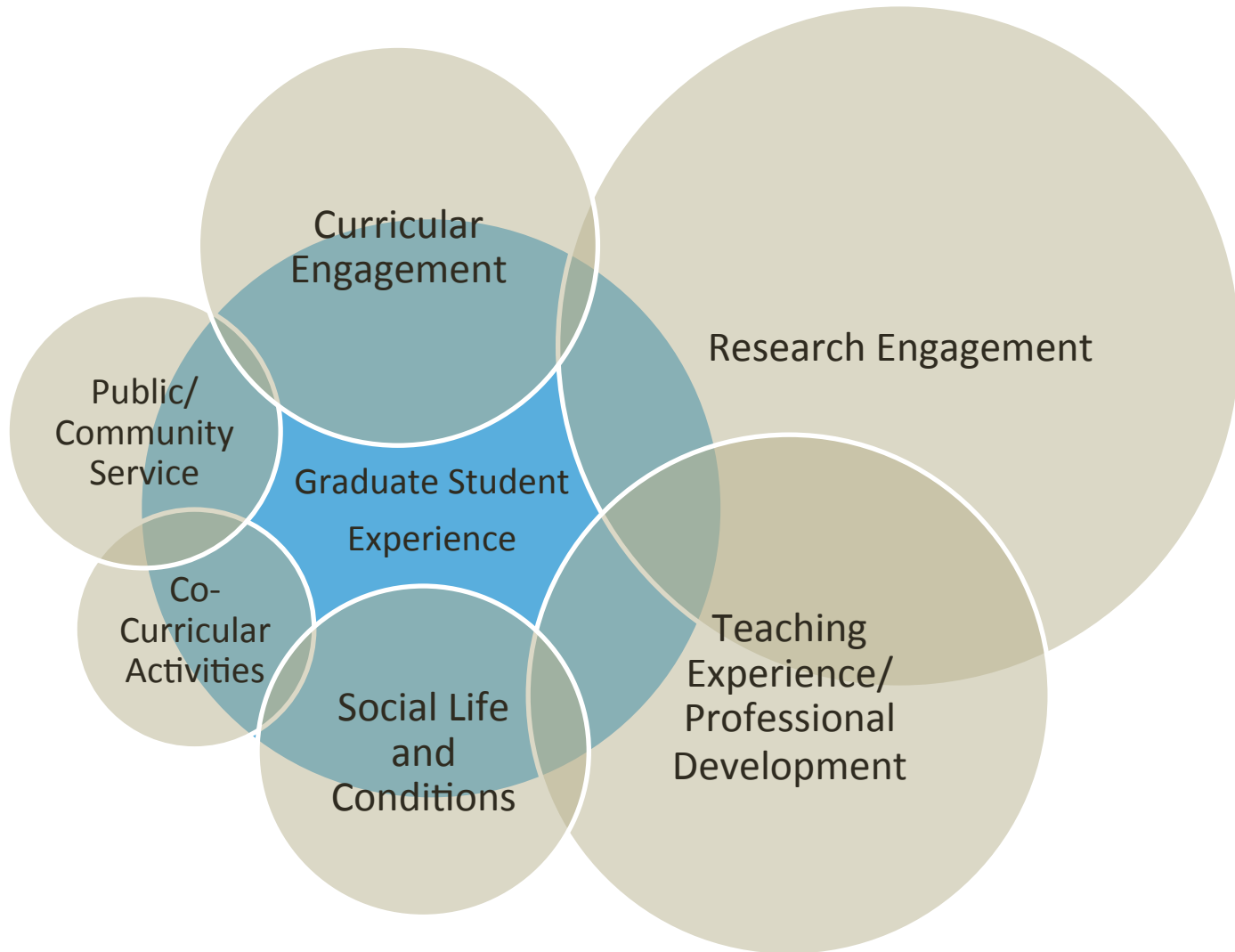


SERU Research

## New Graduate Student Survey – Initial Analysis

## Six Spheres of the Graduate Student Experience - Doctoral

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# More is Asked from the Next Generation of Researchers

---

## 1. Academic research skills

Skills developed in completing the PhD: critical thinking, research design + methods, data analysis/synthesis, writing, publishing), research ethics = responsible conduct in research.

## 2. Professional competencies

Teaching, team-work, presenting, grant writing, managing people and budgets, working in multi-disciplinary teams, translational competencies, leadership skills.

## 3. Inter-cultural competencies

Effective and appropriate interactions skills with those from different backgrounds, race/ethnicity, cultures, religions, perspectives

# SERU-I Doctoral Survey Concept Map

## Attributes

### Student Background

- Demographics
- Parents' educational attainment
- Current program
- Type of degree
- Stage in the program

### Previous Higher Education Experience

- Degree, field, institution
- Time elapsed since completing a previous degree

### Financial Resources

- Ability to pay
- Undergraduate/graduate loans

## Entry Orientations

### Admissions & Entrance

- Goals
- Reasons for selecting a program
- Program communications

### Financial Support

- Sources
- Degree of support

### External Commitments

- Work
- Family

## Student Experience

### Socialization into the Profession & Professional Development

- Professional values and ethical issues
- Opportunities offered by the program/college/school/Graduate School

### Other Institutional Support

- Quality of amenities at the institution

### Financial Support

- Satisfaction with financial support
- Impact of employment outside of the university on degree progress
- Anticipated consequences of debt burden

### Program Climate

- Satisfaction with the program climate

### Advising & Mentoring

- Quality of advising
- Areas of support from an advisor
- Areas of support from a mentor

### Dissertation/Thesis Stage

- Dissertation topic
- Dissertation research process

### Research Experience

- Experience with research-related activities
- Sources of financial support
- Interdisciplinary research and its challenges

### Teaching Experience

- Training
- Teaching experience
- Impact on degree progress

### Career Plans & Changes

- Changes in career plans during grad/prof studies
- Careers toward which a degree program is oriented
- Factors influencing career choices

### Obstacles to Degree Progress

- Factors that hinder degree progress

## Outcomes

### Graduate/Professional Degree Completion

- Commitment to complete a degree in the current program

### Proficiency Levels

- Development of academic, research, and professional skills

### Overall Satisfaction

- Satisfaction with various aspects of a program
- Fit between students' values, expectations and the program
- Choose the same field, program, university

# UC Berkeley Doctoral Students Wellness Survey Results

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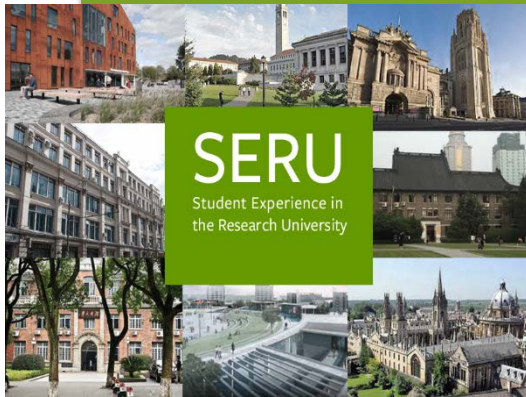
## Top Predictors of Student Self-Sense of Wellness

1. Career Prospects
2. Overall Health
3. Living Conditions
4. Academic Engagement
5. Social Support
6. Financial Confidence
7. Academic Progress & Preparation
8. Sleep
9. Feeling Valued & Included
10. Advisor Relationship

# Grad Experience - QUESTIONS FOR DISCUSSION

---

- How do these results match with the experience of students at Berkeley and in Chile?
- What are the biggest challenges in graduate education in Chile?
- How to improve time to degree and doctoral student experience?



SERU Research

The Research University  
Advantage (RUA) Project

Are Students Engaged or Adrift?

## The Broader View

---

- Research university undergraduates have opportunities for multiple forms of engagement and learning
- The purpose of higher education should be to produce graduates equipped for both careers and citizenship
- Our research agenda for SERU both can and should embrace this broader view; we have, in other words, the opportunity to assess the multiple “Spheres” of undergraduate engagement



## Phase 1: Exploratory Analysis

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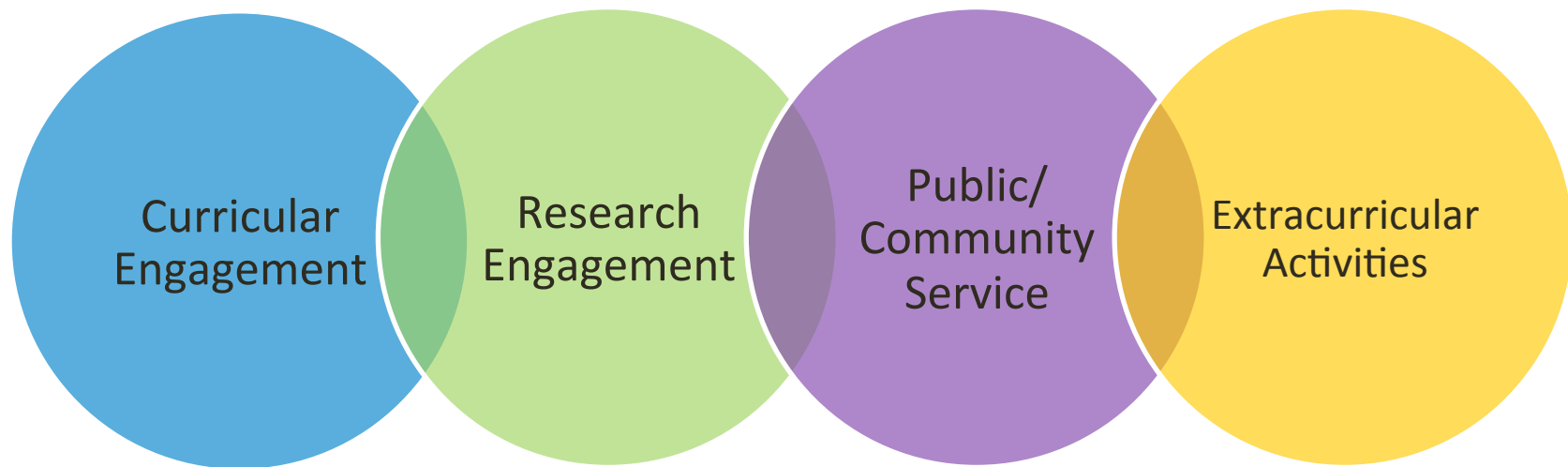
1. Do students appear to be engaged or adrift when various modes of engagement (curricular, research, extracurricular, and civic) are examined?
2. To what extent are various modes of engagement mutually exclusive, independent, or correlated?
3. How does both the extent and patterns of engagement vary by student background, GPA, level of study, field of study?

Data source: SERU-2014 data (UCUES data is not included). 11 institutions, >63000 student responses

# The Pillars of Engagement

---

## Turning to the Student Side of the Equation



**Seeking a Holistic Understanding of the Student Experience**

# Construction of Indices

---

**Curricular, research, civic, and extracurricular engagement are latent variables. How to measure them?**

**Equal weights** (Stuart and Thomson, 2013; NSSE)

**Pros:** Easy to interpret, Easy to Calculate

**Cons:** Not all forms of engagement are equal in terms of efforts, time, etc.

Weights are determined **based on experts opinion**

**Pros:** Inequality between forms of engagement is taken into account

**Cons:** How to organize experts nomination?  
How to resolve disagreement?

Weights are determined **based on Factor Analysis** (PCA, CatPCA)

**Pros:** The most accurate method

**Cons:** Harder to interpret, Multiple solutions, Data-sensitive

## Are Students Engaged or Adrift?

---

**0.69%**

**of students are  
completely  
disengaged.**

They belong to the  
lowest quartile in all  
4 areas (curricular,  
research, civic,  
extracurricular  
engagement)



## Are Students Engaged or Adrift?

---



**8%**

**of students have  
below median  
engagement in all 4  
areas (they belong to  
the lowest 2 quartiles)**

**Which means...**

## Are Students Engaged or Adrift?

---

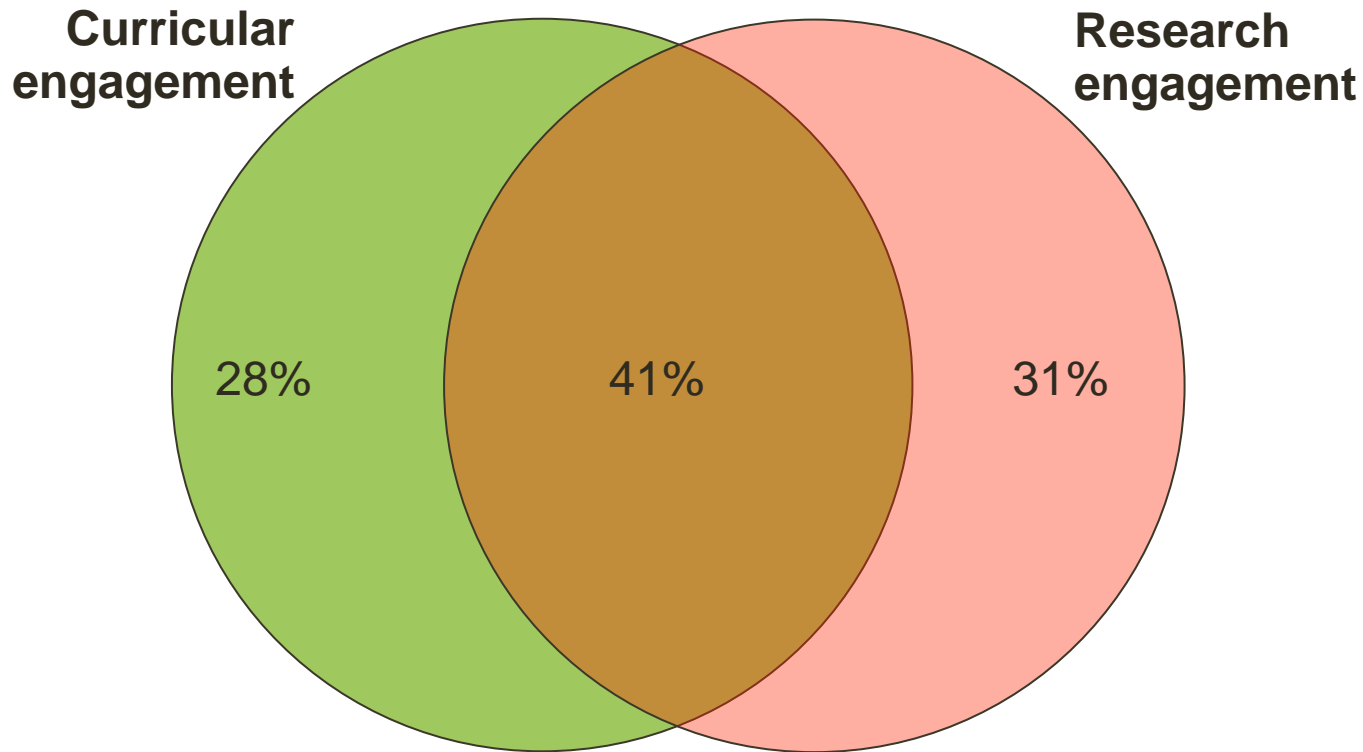
92%

of students have **above average level of engagement** in at least one area (curricular, research, civic or extracurricular)



## Curricular and Research Engagement – Above Average

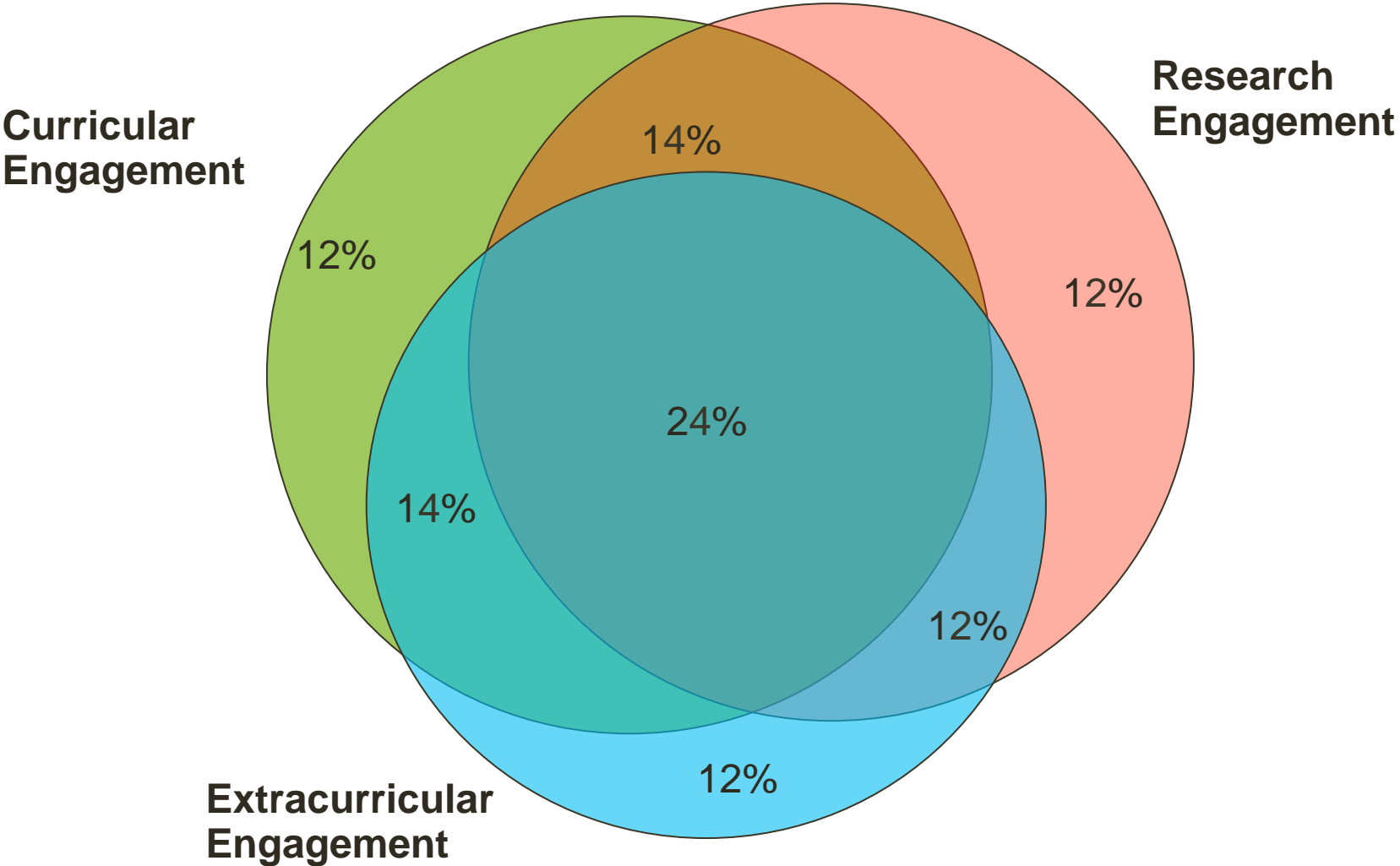
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Among students whose curricular engagement OR research engagement are above average:

41% have BOTH curricular and research engagement above average,  
28% have ONLY curricular engagement above average,  
31% have ONLY research engagement above average

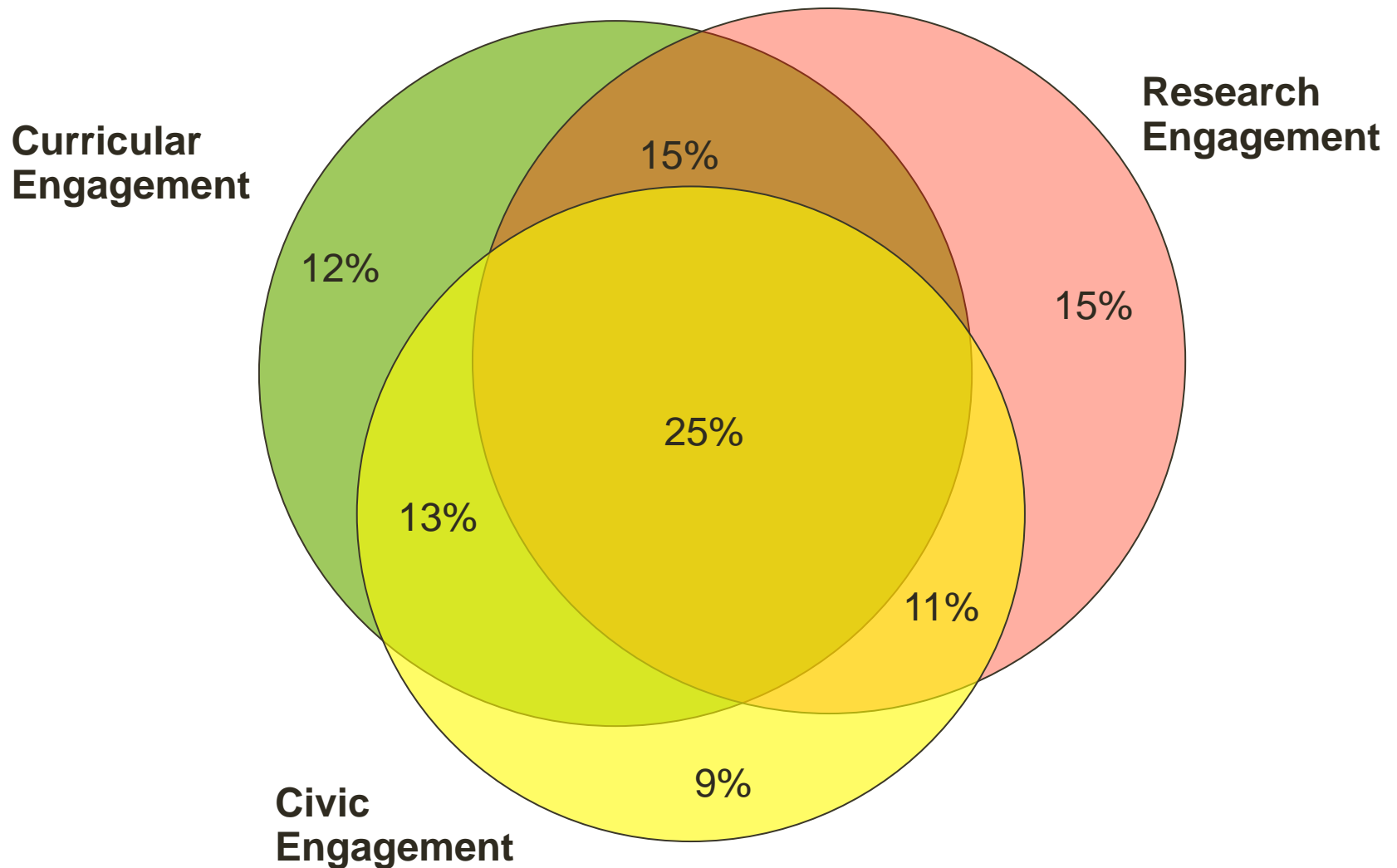
# Curricular, Research and Extracurricular Engagement – Above Average





## Curricular, Research and Civic Engagement – Above Average

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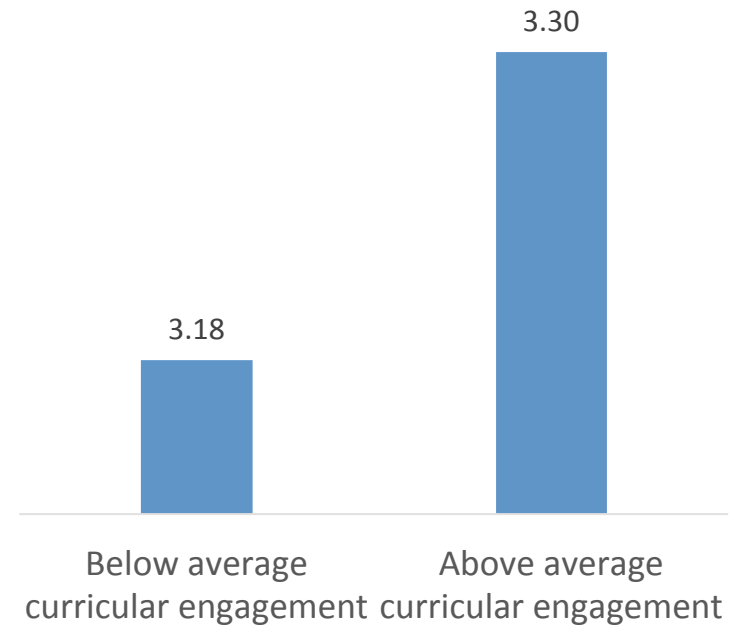
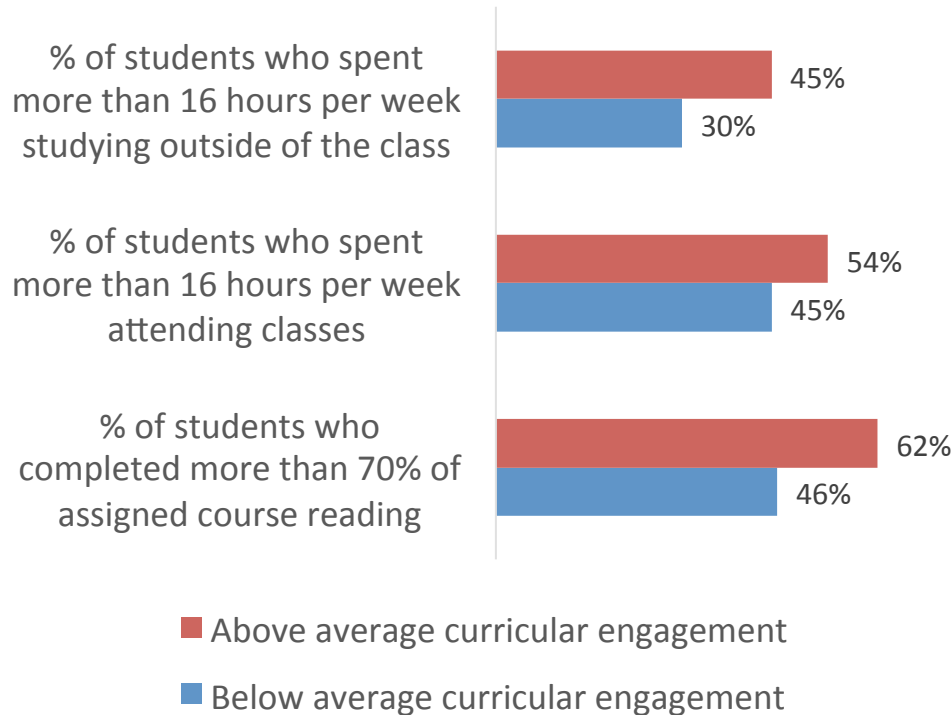
# 1. Curricular Engagement: Profiles of Engaged Students

	Above average curricular engagement: Most frequent response	Below average curricular engagement: Most frequent response
Contributed to a class discussion	‘Often’	‘Occasionally’
Asked an insightful question in class	‘Often’	‘Occasionally’
Found a course so interesting that you did more work than was required	‘Somewhat Often’	‘Occasionally’
Chosen challenging courses, when possible, even though you might lower your GPA by doing so	‘Often’	‘Occasionally’
Made a class presentation	‘Often’	‘Occasionally’
Communicated with a faculty member by e-mail or in person	‘Very Often’	‘Occasionally’
Talked with the instructor outside of class about issues and concepts derived from a course	‘Often’	‘Occasionally’
Interacted with faculty during lecture class sessions	‘Often’	‘Occasionally’
Raised your standard for acceptable effort due to the high standards of a faculty member	‘Often’	‘Occasionally’
Extensively revised a paper before submitting it to be graded	‘Often’	‘Occasionally’
Worked on class projects or studied as a group with classmates outside of class	‘Very Often’	‘Occasionally’
Helped a classmate better understand the course material when studying together	‘Often’	‘Occasionally’

# 1. Curricular Engagement: Profiles of Engaged Students

Engaged students spend more time studying, complete more assigned course reading

Engaged students have a higher GPA

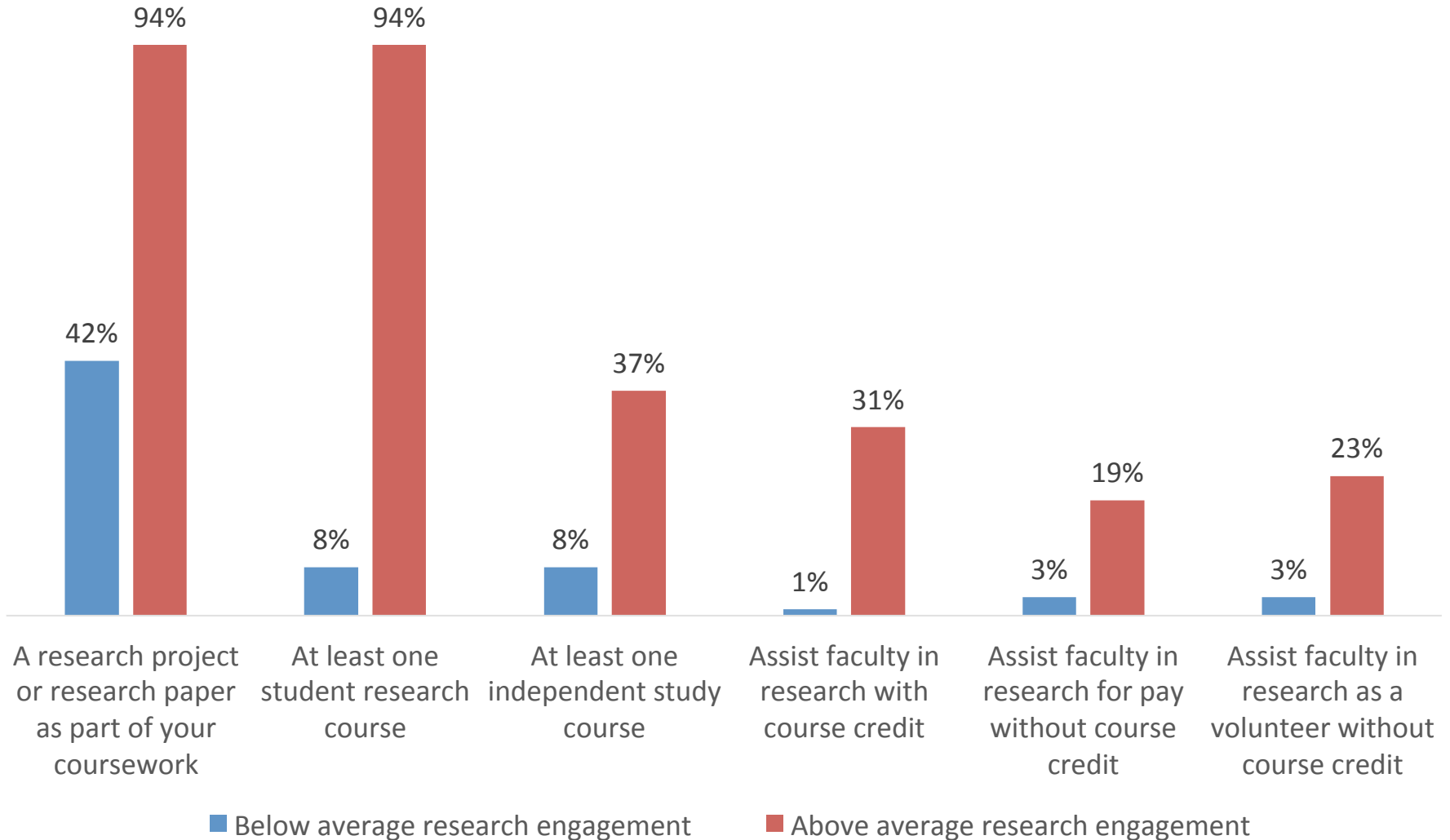


# 1. Curricular Engagement: Profiles of Engaged Students

	Significantly higher percentage of engaged students	Significantly lower percentage of engaged students	No significant differences in the level of engagement
<b>Social class</b>	Wealthy Upper-middle class	Working class Middle class	Low-income
<b>Race</b>	African American	Asian	White Hispanic
<b>Mother's education</b>	Postgraduate degree	Less than Bachelor degree	Bachelor degree
<b>Father's education</b>	Postgraduate degree	Less than Bachelor degree	Bachelor degree
<b>Gender</b>			Female / Male
<b>International students</b>			International Domestic
<b>Field of study</b>	Arts and Humanities Business Professional	STEM	Social sciences Other
<b>SAT/ACT scores</b>			Quartiles 1-4
<b>Class level</b>	Senior	Freshman / Sophomore	Junior
<b>Matriculation</b>	Transfer		Freshman

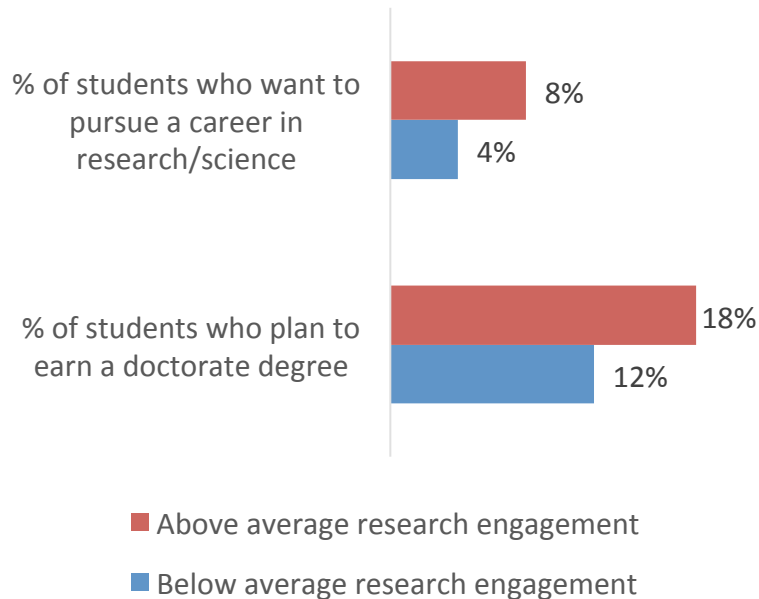
## 2. Research Engagement: Profiles of Engaged Students

% of students who have completed:

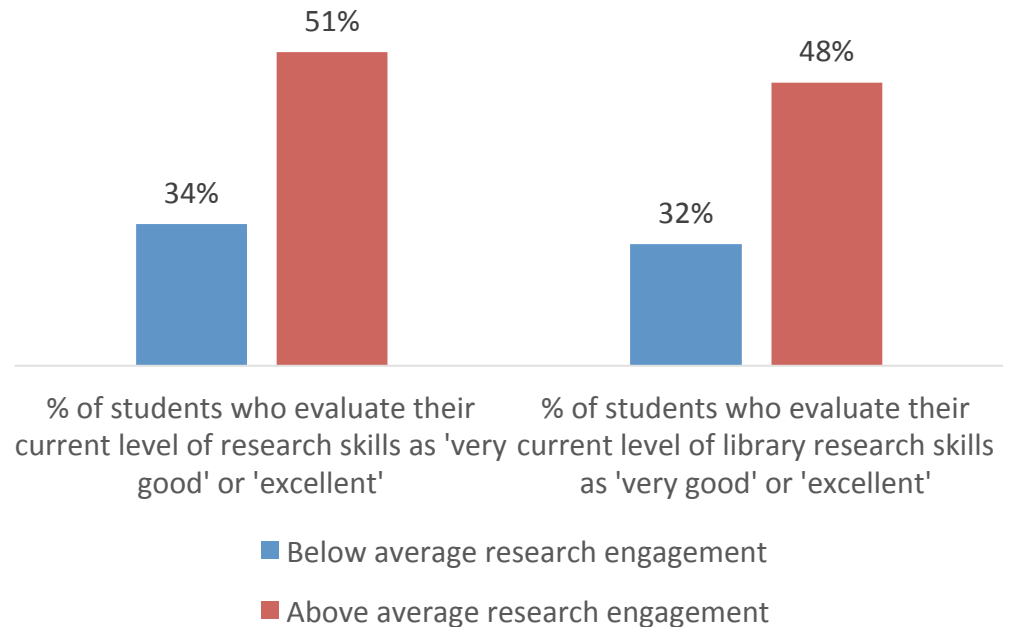


## 2. Research Engagement: Profiles of Engaged Students

More engaged students are more likely to pursue a scientific career



Engaged students report higher levels of current library and other research skills (no difference in the initial level)



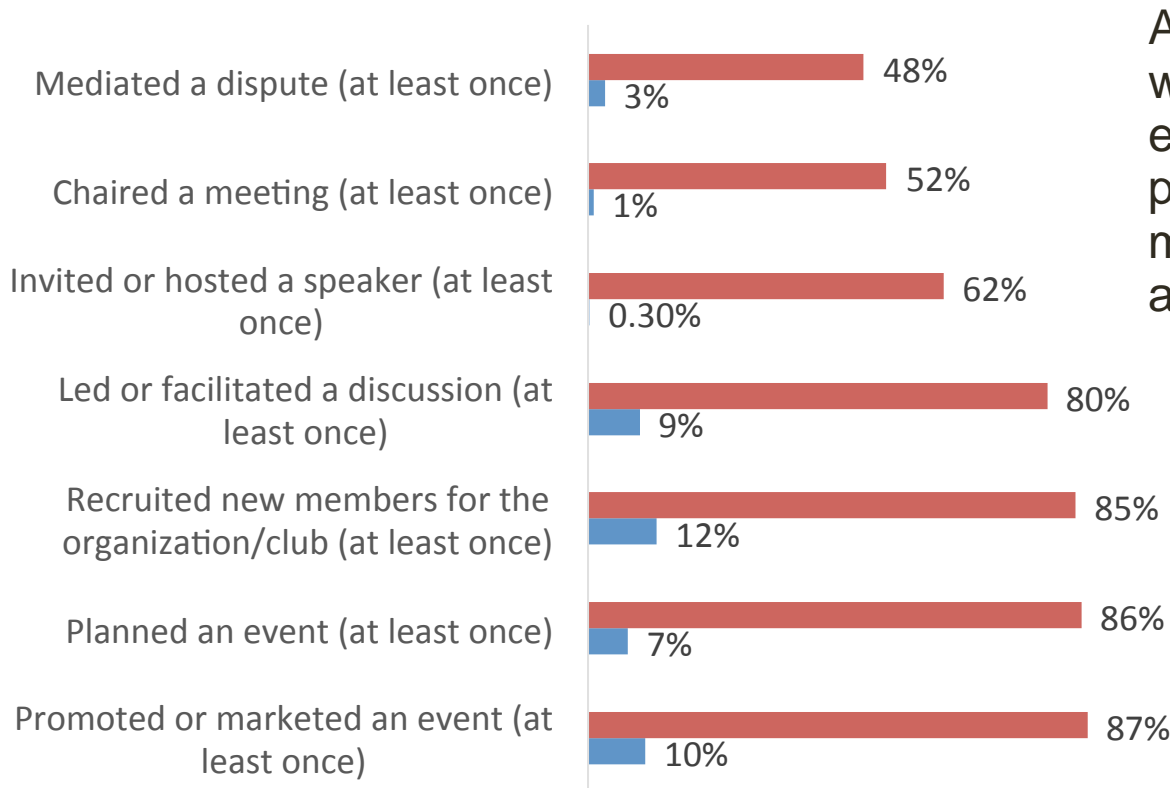
Engaged students have a slightly higher GPA

### 3. Civic Engagement: Profiles of Engaged Students

	Significantly higher percentage of engaged students	Significantly lower percentage of engaged students	No significant differences in the level of engagement
<b>Social class</b>	Low-income	Wealthy	Working class Middle and upper-middle class
<b>Race</b>	African American Hispanic	Asian	White
<b>Mother's education</b>			All education levels
<b>Father's education</b>			All education levels
<b>Gender</b>		Male	Female
<b>International students</b>		International	Domestic
<b>Field of study</b>	Social sciences Professional	STEM	Arts and Humanities Business / Other
<b>SAT/ACT scores</b>		Quartile 4	Quartiles 1-3
<b>Class level</b>	Senior	Freshman / Sophomore	Junior
<b>Matriculation</b>			Freshman/Transfer

## 4. Extracurricular Engagement: Profiles of Engaged Students

% of students who:



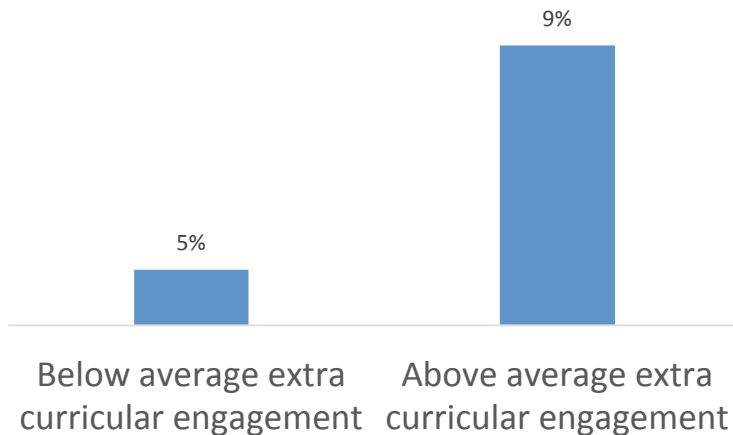
Around one fourth of students who have above average extracurricular engagement participated in these activities more than 5 times (during academic year)

- Above average extra curricular engagement
- Below average extra curricular engagement

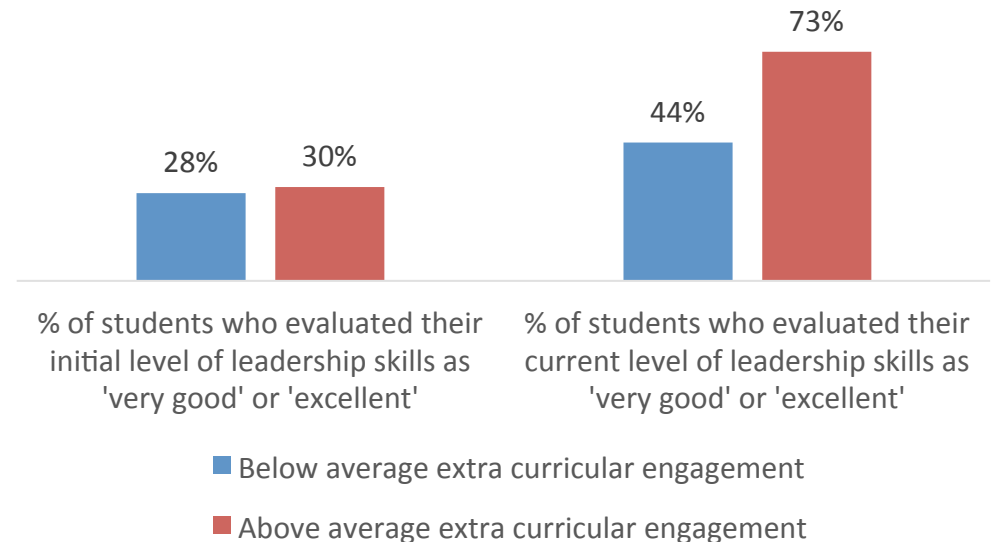


## 4. Extracurricular Engagement: Profiles of Engaged Students

More engaged students are more likely to pursue career in business



Engaged students report higher levels of leadership skills, interpersonal skills, ability to make a presentation



Engaged students have a higher GPA

## 4. Extracurricular Engagement: Profiles of Engaged Students

	Significantly higher percentage of engaged students	Significantly lower percentage of engaged students	No significant differences in the level of engagement
<b>Social class</b>	Upper-middle class Wealthy	Middle class	Low-income Working class
<b>Race</b>			All races
<b>Mother's education</b>	Postgraduate degree	Less than Bachelor degree	Bachelor degree
<b>Father's education</b>	Postgraduate degree	Less than Bachelor degree	Bachelor degree
<b>Gender</b>			Female / Male
<b>International students</b>			Domestic / international
<b>Field of study</b>	Business	Professional	Arts and Humanities Social sciences STEM / Other
<b>SAT/ACT scores</b>	Quartile 4	Quartile 1	Quartiles 2 and 3
<b>Class level</b>	Senior	Freshman	Sophomore / Junior
<b>Matriculation</b>		Transfer	Freshman

# Limitations

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1. Indices are data sensitive. Not all survey items were included in the core module -> the lack of responses in civic and extracurricular engagement
2. SERU survey questions measure particular types of engagement ('participating in discussions' as opposed to 'reading books in a library')
3. Engagement is defined in relative terms. Do researchers have other options?
4. No comparison group. It is unclear whether this level of engagement is unique for research universities (as opposed to teaching universities, liberal arts colleges, etc.)

# Preliminary Conclusions (1)

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1. Students at US research-intensive universities are engaged when not only curricular but other forms of engagement (research, civic, and extracurricular) are considered:
  - **92%** of students have above average level of engagement in at least one of four areas
  - Less than **1%** of students are completely disengaged
  - Four pillars of engagement are **not independent** but **not highly correlated**. Each area offers a unique array of experiences yet complements the others. Students benefit from multiple forms of engagement.

## Preliminary Conclusions (2)

2. The level of curricular, research, civic and extracurricular engagement varies by student characteristics.

Lower level of engagement:

	Curricular	Research	Civic	Extracurricular
<b>Social class</b>	Working class Middle class		Wealthy	Middle class
<b>Race</b>	Asian		Asian	
<b>Mother's education</b>	Less than Bachelor degree			Less than Bachelor degree
<b>Father's education</b>	Less than Bachelor degree			Less than Bachelor degree
<b>Gender</b>			Male	
<b>International students</b>			International	
<b>Field of study</b>	STEM		STEM	Professional
<b>SAT/ACT scores</b>			Quartile 4	Quartile 1
<b>Class level</b>	Freshman Sophomore	Freshman Sophomore	Freshman Sophomore	Freshman
<b>Matriculation</b>				Transfer

## Preliminary Conclusions (3)

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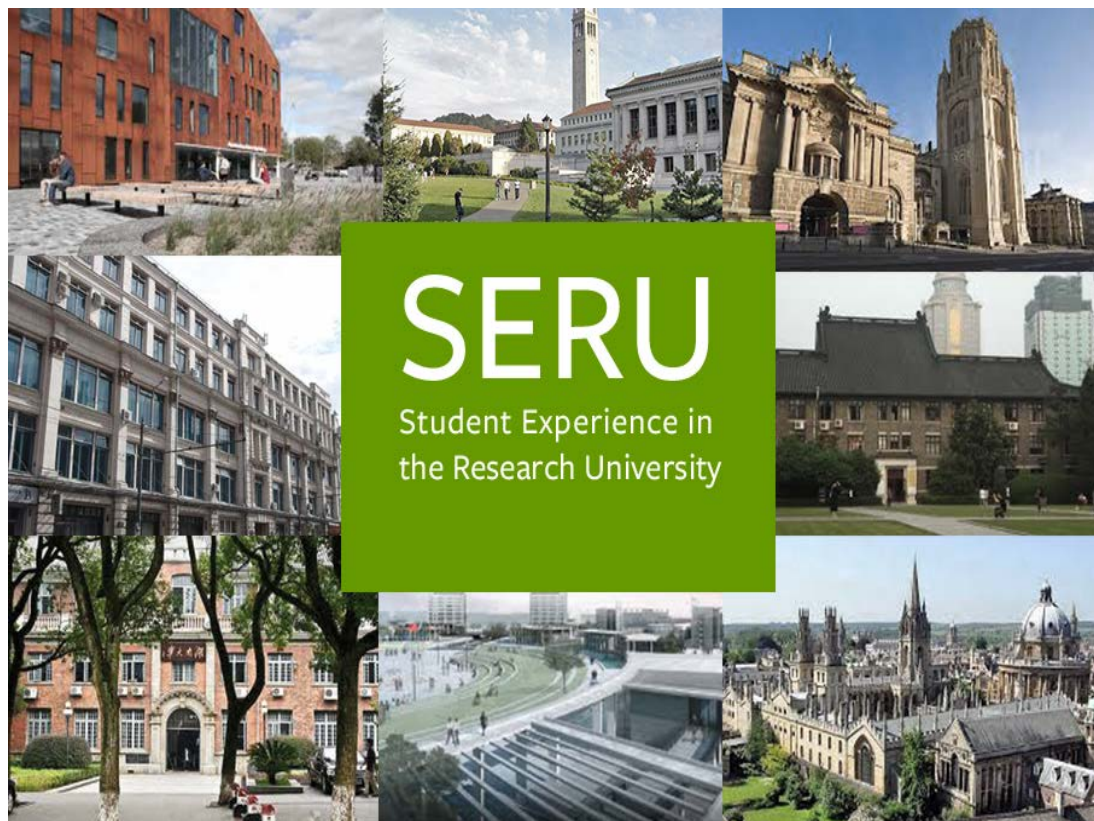


1. Research universities offer much more than just a classroom experience: curricular engagement is the tip of the iceberg
2. High GPA important but not enough for many employers. Students try to engage in various activities beyond studying to strengthen their resume (and because they are curious).

## Next Steps

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1. To add UCUES 'Best of module' 2014 data / historical AAU data / International data
2. To explore correlations between engagement indices and student characteristics (regression models)
3. To analyze how various forms of engagement influence learning outcomes, satisfaction, plans and aspirations.



# Thank you!

**For further details please contact:**  
John Douglass, [douglass@berkeley.edu](mailto:douglass@berkeley.edu)  
Igor Chirikov, [chirikov@berkeley.edu](mailto:chirikov@berkeley.edu)