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# Assessing High-Impact Practices and RISE Experiences

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Contact us with questions or requests for information!

Overview

- Theoretical Framework for Implementing High-Impact Practices Well
- What HIPs and RISE look like at IUPUI
- Assessment Methods
- Assessment Findings
- Implications
- Discussion

Presentation also found at http://irds.iupui.edu

High-Impact Practices and the College Experience

"when I am asked, what one thing we can do to enhance student engagement and increase student success? I now have an answer:

…make it possible for every student to participate in at least two high- impact activities during his or her undergraduate program, one in the first year, and one taken later in relation to the major field. The obvious choices for incoming students are first-year seminars, learning communities, and service learning."

George D. Kuh (2008)

High Impact Practices

Through the LEAP initiative, AAC&U has published research on a set of widely tested teaching and learning strategies and programs that—<u>when done well</u>—have substantial educational benefits, especially for traditionally underserved students. The elements of good teaching and learning embedded in these practices can be applied in many settings, including in traditional classrooms as well as special programs, and in co-curricular settings.

★ First-Year Seminars and Experiences

★ Common Intellectual Experiences

★ Learning Communities

★ Writing-Intensive Courses

★ Collaborative Assignments and Projects

★ Undergraduate Research

★ Diversity/Global Learning

★ Service Learning, Community-Based Learning

★ Internships

★ Capstone Courses and Projects

LEAP

Association of American Colleges and Universities

Markers of HIPs Done Well

- Expectations set at appropriately high levels
- Significant investment of time and effort
- Interactions with faculty and peers
- Experiences with diversity
- Frequent and constructive feedback
- Periodic and structured opportunities for reflection
- Relevance through real-world applications
- Public demonstration of competence
  (Kuh, 2008; Kuh & O'Donnell, 2013)

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HIP Benefits and Outcomes

High Impact practices are positively associated with:

- Persistence and GPAs

- Deep approaches to learning

- Higher rates of student-faculty interaction

- Increases in critical thinking and writing skills

- Greater appreciation for diversity

- Higher student engagement overall

Bronwell, J & Swaner, L (2010); Hansen & Schmidt (in press; *Journal of The First-Year Experience and Students in Transition*); NSSE, (2007); Kuh (2008)

RISE at IUPUI

Principles of Undergraduate Learning

- Core Communication and Quantitative Skills

- Critical Thinking

- Integration and Application of Knowledge

- Intellectual Depth, Breadth, and Adaptiveness

- Understanding Society and Culture

- Values and Ethics

RISE Categories

- **R**esearch (CRL)
- **I**nternational Experience (OIA)
- **S**ervice Learning (CSL)
- **E**xperiential Learning (CTL)

RISE To the IUPUI Challenge

R - Research

"RISE engages students in transformative experiences that will help prepare them to meet the challenges within a complex global society."

Research

As a premier urban research campus, IUPUI is a place where students can become involved in projects that range from fuel-cell technology and biomedical engineering to the impact of homelessness on our society and combating identity theft. There are numerous opportunities to conduct research that leads to new knowledge.

I - International Experiences
S - Service Learning

International

Employers are increasingly looking for graduates with competencies related to different cultures and languages. IUPUI is rapidly expanding the opportunities for students to study abroad, participate in collaborative programs with one of our partner institutions in other countries, and learn from international students on campus.

Service Learning

Through service activities such as working with children, conducting research for a nonprofit organization, developing a democracy project, or providing medical care to indigent populations, students can learn civic responsibility and engage with different aspects of the global community they might not otherwise encounter.

E – Experiential Learning

Experiential Learning

Real work experiences such as internships, student teaching, and clinical placements provide students with involvement in professional settings and practical experience that better prepare them for the workforce. In the heart of downtown Indianapolis, IUPUI provides access to top companies, government offices, and nonprofit organizations.

Your RISE Experience

RISE courses are available in each semester. Students can work with their advisor to select the course that best suits their interests and major.

Community Engagement

RISE Goals For Students

- Challenges Students to Participate in at Least Two High Impact Practices

- Engages Students More Deeply in Their Learning

- Promotes Application of Knowledge through guided reflection

- Helps Students Further Clarify and Commit to Their Career Goals

RISE Goals For Faculty

- Engages Faculty More Deeply in Using High Impact Practices

- Asks Faculty/Departments to Tag Courses

- Facilitates Ability to Conduct Institutional Research on High Impact Teaching Strategies, Particularly at the Student Level to Understand Success and for Whom

RISE – Potential to Create Meaningful Change

I celebrate teaching that enables transgressions—a movement against and beyond boundaries. It is that movement that makes education the practice of freedom. (hooks 1994)

RISE as Transformative

Re-launching RISE as a Transformative Initiative with attention to:

o Engaging all educational agents and students

o Integrating inclusive excellence and equity

o Creating better communication and greater visibility for program

Challenges and Opportunities

- Evaluation and Assessment

- Course Tagging

- Credit Bearing Courses

- Professional Development for Faculty

Challenges and Opportunities

- Equity and Inclusion

- Value to All Stakeholders

- Quality Monitoring and Built In Accountability

New Directions

Focus on the "experiences"

Curricular and Co-Curricular

Student incentives: leadership opportunities

New Directions

Faculty Incentives and Rewards

ePortfolio (ePDP-Taskstream)

Main Focus - Challenges to RISE Assessment

- Course Tags not accurate indicators of actual participation in RISE.

- Lack of fidelity of RISE implementation and course tagging system.

Taxonomies - Background

- ## California State University
  - Taxonomies to categorize and describe the educational experiences that seem most effective for early alert, FYE, intrusive advising, learning communities, peer mentoring, supplemental instruction, summer bridge, orientation, and undergraduate research

- ## AAC&U
  - Value Rubrics

- ## IUPUI
  - Guide for Course Design and Tracking Course Revision/Enhancement

Taxonomies – Benefits

• Fidelity Issues (taxonomies can serve as a guide to curriculum committees and course schedulers tagging RISE courses)

• Assessment (the quality of the HIP experience can be evaluated and the intensity measured)

• Course development (guide/tool for instructors interested in creating or improving RISE courses)

• Resource (can be used when evaluating applications for course development grants and other HIP awards connected to curriculum)

HIP Program Fidelity

- Fidelity is defined by Webster as "the quality or state of being faithful, the accuracy in details, exactness."

- Program fidelity assessment offers another level of detail about the program as implemented by examining the degree to which interventions are implemented as theoretically planned.

    – Poor Fidelity Examples

        - LC implemented with no integrative learning assignments.

        - SL implemented with no structured reflection.

        - Undergraduate Research with no faculty mentoring.

- It is not possible to test the effectiveness of an intervention if the intervention failed to be implemented as planned (Scott & Sechrest, 1989).

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Assessment Methods

- Employ Mixed-Method designs using qualitative and quantitative methods.
- Attempt to understand how HIPs and RISE experiences influence students' success levels (e.g., retention rates, GPAs, engagement, civic outcomes).
- Administer end-of-course questionnaires (designed to provide information on students' perceptions of course benefits, learning outcomes, satisfaction levels, why decided to enroll)
- Administer campus-wide questionnaires
- Administer National Survey of Student Engagement
- Conduct focus groups and individual interviews.
- Collect direct measures of student learning (e.g., electronic portfolios and embedded course assessment)

RISE Course Tags Totals by Student Fall 2014

	E		I		R		R &E		R &S		S		Total N
	N	%	N	%	N	%	N	%	N	%	N	%	
Other	282	6%	40	6%	23	3%	1	5%	3	6%	59	2%	408
Native to IU Undergraduates	2963	58%	366	53%	374	57%	15	75%	23	48%	1643	69%	5384
Undergraduate Transfers	1837	36%	225	33%	262	40%	4	20%	21	44%	671	28%	3020
Graduate Degree-Seeking Students	2	0%	54	8%	1	0%		0%	1	2%		0%	58
Grand Total	**5084**	**100%**	**685**	**100%**	**660**	**100%**	**20**	**100%**	**48**	**100%**	**2373**	**100%**	**8870**

Students are counted once for every RISE course enrolled in. They may be enrolled in more than one course tagged as RISE. This is duplicated headcount.

RISE Course Tags and One-Year Retention

One-Year Retention for all Students in a Course Tagged as RISE
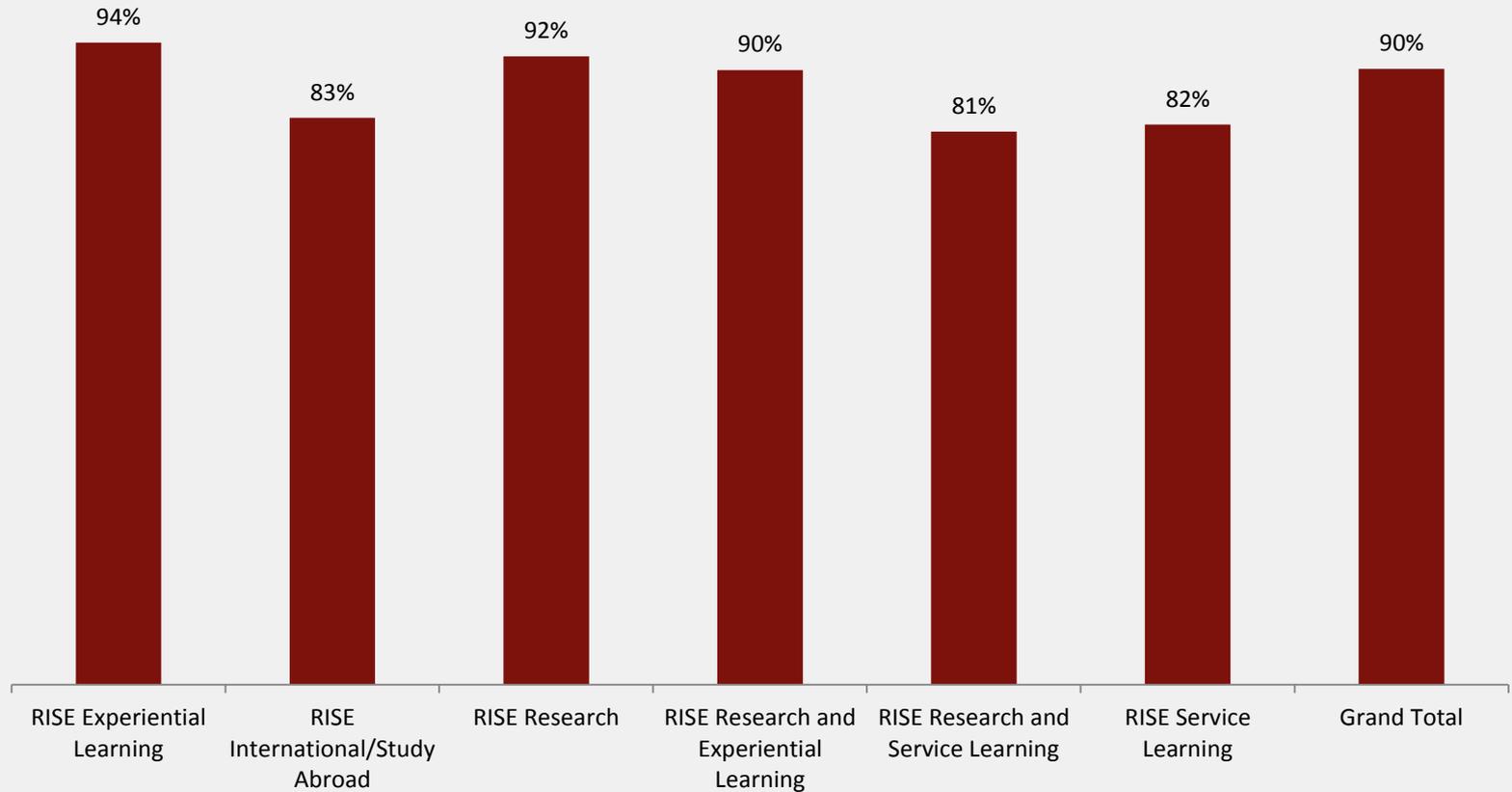
Category	Retention
RISE Experiential Learning	94%
RISE International/Study Abroad	83%
RISE Research	92%
RISE Research and Experiential Learning	90%
RISE Research and Service Learning	81%
RISE Service Learning	82%
Grand Total	90%

Students are counted once for every RISE course enrolled in. They may be enrolled in more than one course tagged as RISE. This is duplicated headcount.

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RISE Student Questionnaire Fall 2014

Designed collaboratively between IRDS (formerly OSDAE), Jennifer Thorington-Springer, RISE committee, and other offices on campus

Gain understanding of students' experiences in RISE courses

Sent at the end of Fall 2014 semester.

All students in courses tagged "R", "I", "S", "E"

- Also multiple tags
- From registrar

284 full responses (314 partial)

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Type of Course (self-identified)

	Number	%
Guided independent research projects (R)	33	11.6
Study Abroad (I)	8	2.8
Service Learning (civic engagement) (S)	110	38.7
Internship, field work, practicum, capstone (E)	73	25.7
Community based learning combined with Research Project (S+R)	32	11.3
Study Abroad combined with Service Learning (I+S)	1	0.4
Other (?)	27	9.5

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HIP Characteristics

In this course, how often did you:	R	S	E	S+R	?
Spend a great deal of time on a project or assignment	3.15	2.68	3.07	3.19	2.70
Felt personally invested in a project or assignment	3.33	2.93	3.48	3.19	2.77
Engage in structured opportunities for reflection on your experience	2.73	3.13	3.32	2.97	2.58

4-point scale: 1=Never, 2=Sometimes, 3=Often, 4=Very Often

HIP Help

Please indicate how much your RISE experience in this course helped you in the following areas:	R	S	E	S+R	?
Gain a sense of clarity about my career goals	3.42	3.51	4.14	3.55	2.78
Feel a sense of purpose in pursuing my degree	3.63	3.67	4.26	3.71	3.11
Decide on a future career or major	3.16	3.09	3.93	3.13	2.59
Gain technical skills related to my chosen/ intended career or major	3.74	3.05	4.16	3.48	3.07

5-point scale: 1=Very little, 2=Little, 3=Some, 4=Much, 5=Very Much

NSSE HIP Dashboard

[NSSE Tableau Dashboard (IUPUI Data Link)](#)

HIPs – Higher Order Learning FY Students

Means Higher-Order Learning Scores
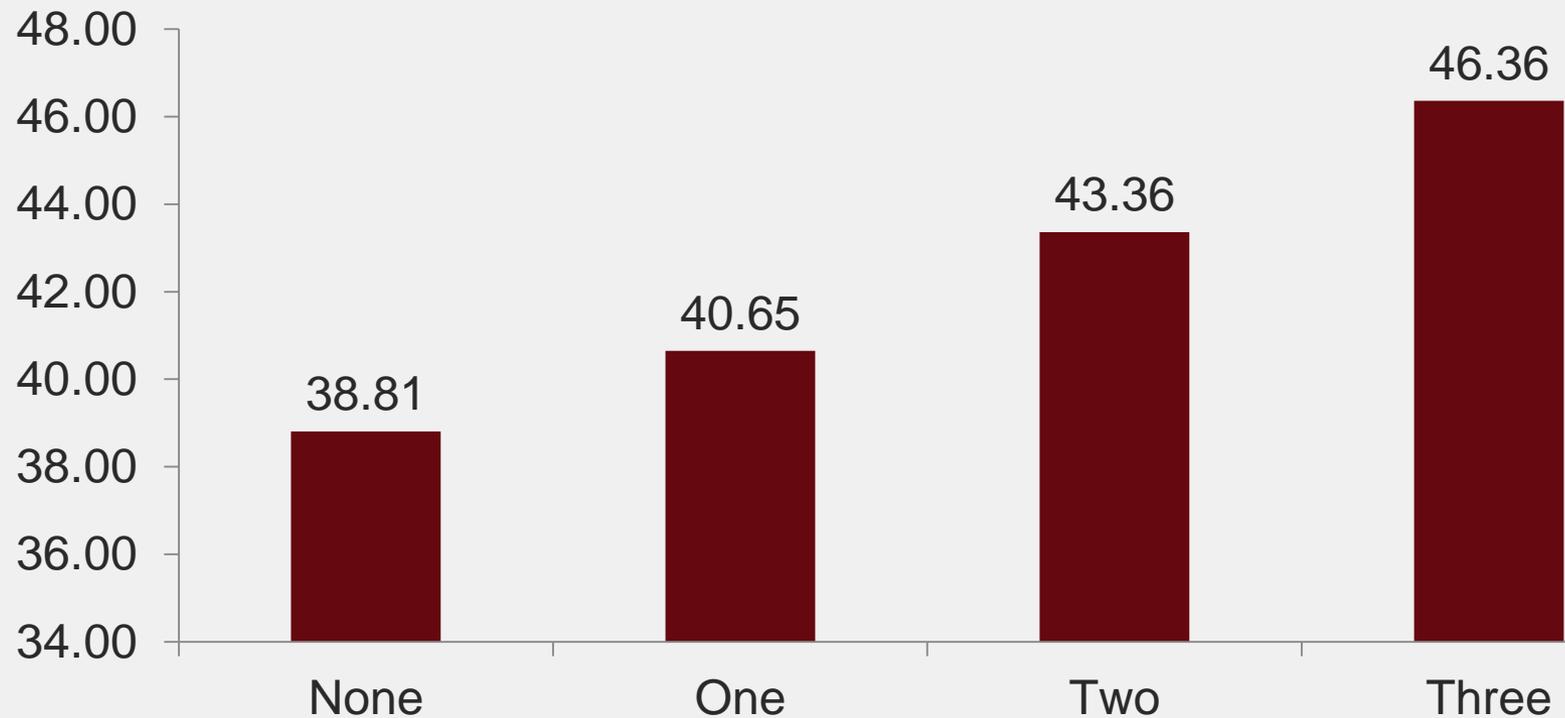
Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

HIPs – Discussions with Diverse Others FY Students

Means Discussions with Diverse Others
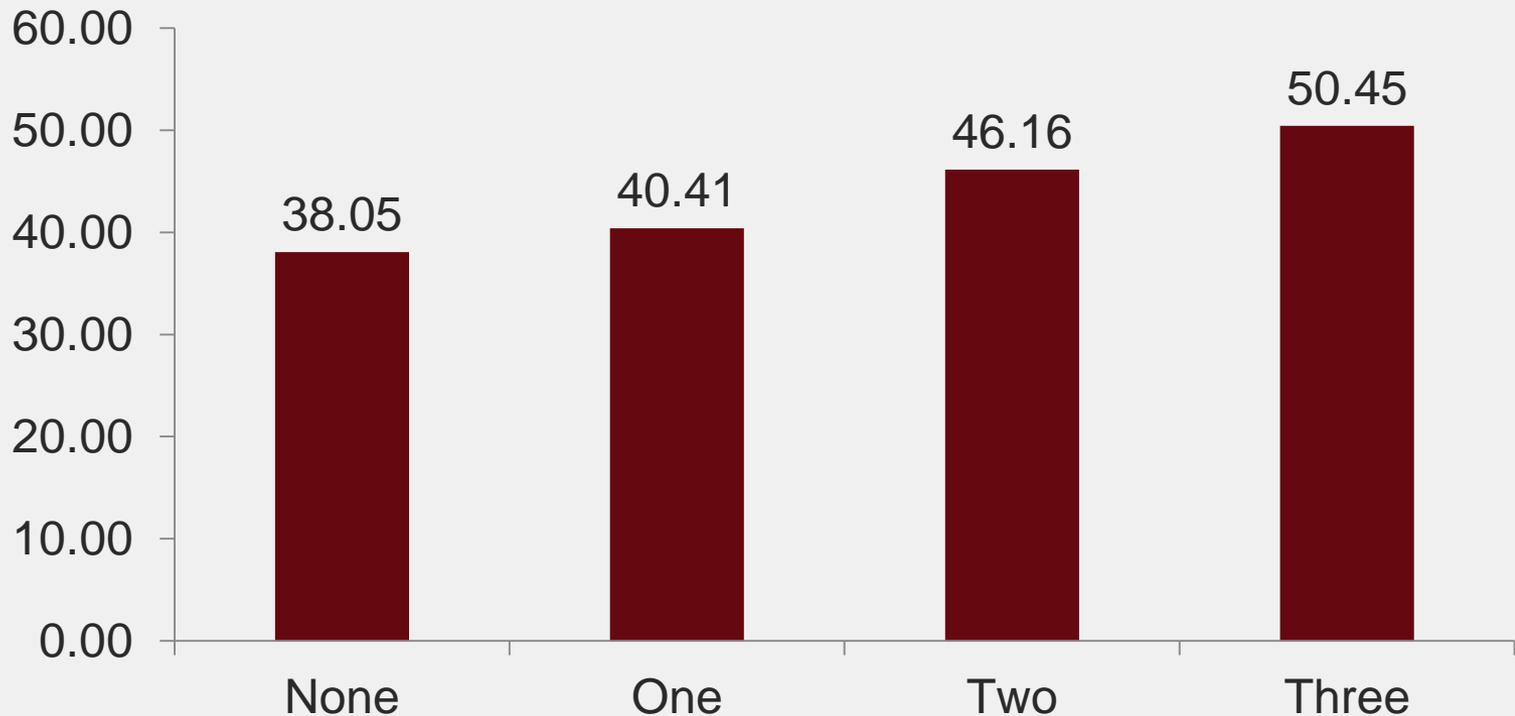
Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

HIPs – Higher Order Learning Senior Students

Means Higher-Order Learning Scores

| Category	Score
None	37.32
One	37.76
Two	40.13
Three	43.38
Four	43.11
Five	45.40
Six	44.00

Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

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HIPs – Discussions with Diverse Others Senior Students

Means Discussions with Diverse Peers
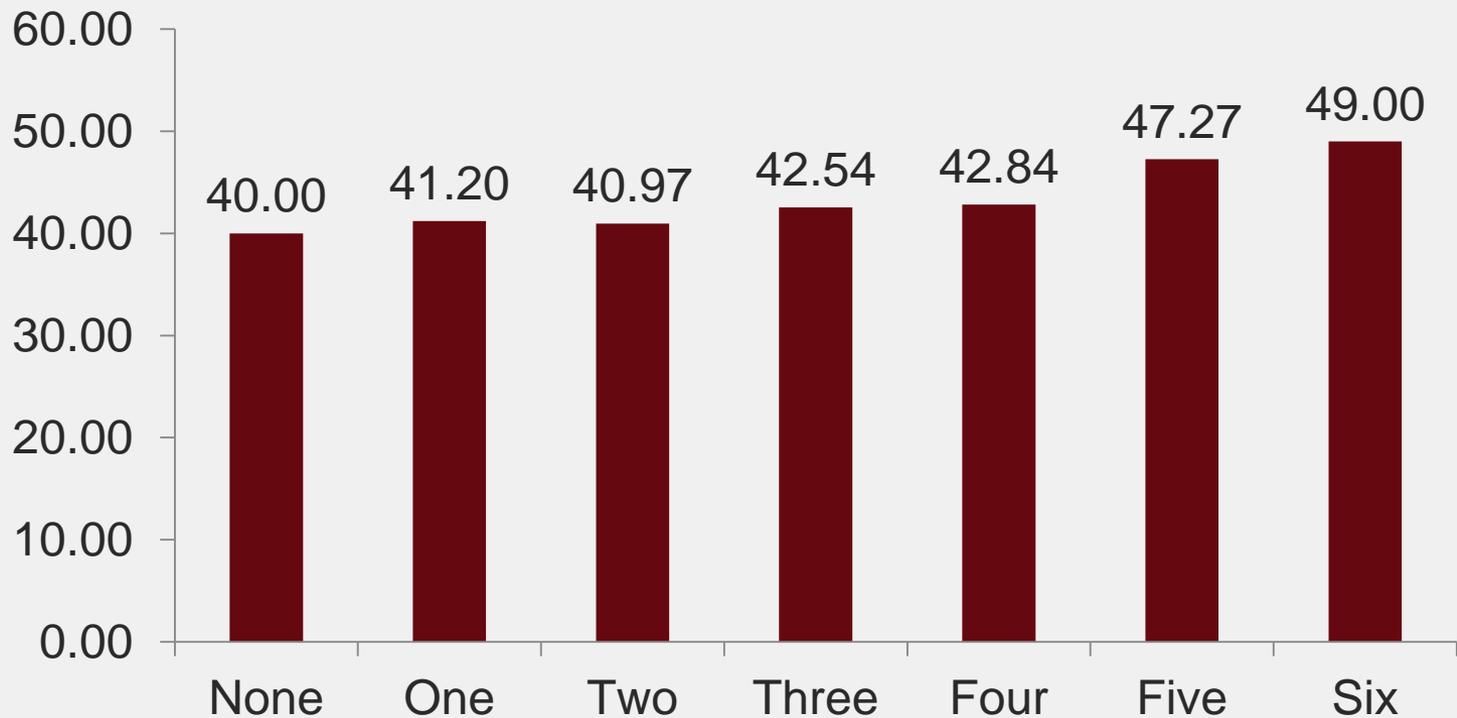
Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

Qualitative Results: Understanding Students' Voices and Perspectives

Team Work

"By participating in group activities and presentations, the RISE experience contributed to my learning by helping me collaborate with other group members in coming up with solutions to problems in class as well as on projects."

"Learning to work with my peers and I learned patience."

"Taught me to work in a group and delegate work based on group members' strengths and weaknesses."

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Hands-On Experiences

"The course put me in a hands-on situation working with a real nonprofit organization. This allowed me to experience the issues firsthand and provide relevant recommendations accordingly."

"I liked the fact that I was able to experience real applications of what I am learning at IUPUI. Often times, students lose sight of the application of the academics and it's important to maintain perspective."

"Really applying class concepts, not regurgitating information for an exam."

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Sense of Purpose/Commitment to Major

"The RISE class itself helped me to understand my purpose in life. I am a social work major student and it related so well to my passion of helping others."

"I guess it helped me clarify that what I'm majoring in is what I do want to do."

"I completed a project that directly impacted me in my current career that contained applications from the course."

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Faculty Engagement in High Impact Practices

Percentage and number of faculty who have done the following in the past two years:	Tenure-track Faculty	Lecturer	Part-time Faculty
Include an internship, co-op, field experience, student teaching, or clinical placement for credit as part of a course	37.7% 81	36.6%* 34	14.7%*** 21
Include a study abroad/international travel experience as part of a course	8.4% 18	10.8% 10	1.4%* 2
Require an undergraduate research project as part of your course	55.9% 119	39.8% 37	21.0%*** 30
Teach as part of a Themed Learning Community for first-year students or some other formal program where groups of students take two or more classes together	4.7% 10	30.1%* 28	11.9%*** 17
Mentor an undergraduate student on a research project	59.3% 127	36.6% 34	15.4%*** 22
Teach a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	44.6% 95	33.3% 31	4.9%*** 7
Require students to participate in a community-based project (service-learning) as part of a course	23.3% 50	32.3% 30	19.6% 28
Provide periodic and structured opportunities for reflection	53.1% 113	57.0% 53	44.1% 63
Advise a student organization or group	31.3% 67	49.5%* 46	13.4%*** 19

***p<.001; **p<.01; *p<.05, group compared to tenure-track faculty. Not all faculty responded to all the items.

Respondents: 300 Tenure Track Faculty , 103 Lecturers, 208 Part-Time Faculty   815 total respondents, response rate = 43%

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HIPs in the First Year: Themed Learning Communities and Service Learning

2014 TLC Impact on First Year GPA: ANCOVA Results

	N	Avg. Cumulative GPA	Adjusted Cumulative GPA
TLC	859	2.72	**2.76**
Non-Participants	2212	2.72	**2.70**
Overall	3070	2.72	

Note 1: Bolded items are significantly different based on ANCOVA Results ($p < .05$). Covariates included the following: H.S. GPA, SAT score, income level (received a Federal Pell Grant or not) and Enrollment Date (proxy for motivation and commitment). Missing cases excluded.

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Indianapolis Only 2011 First-Time, Full-Time Cohort University College Students Only

Four-Year Graduation Rates Graduated from IUPUI Indianapolis

	Summer Bridge	Themed Learning Communities (TLCs)	Summer Bridge - TLCs	First-Year Seminars
Participants	17%	16%	16%	14%
Nonparticipants	12%	12%	13%	8%

■ Participants   ■ Nonparticipants

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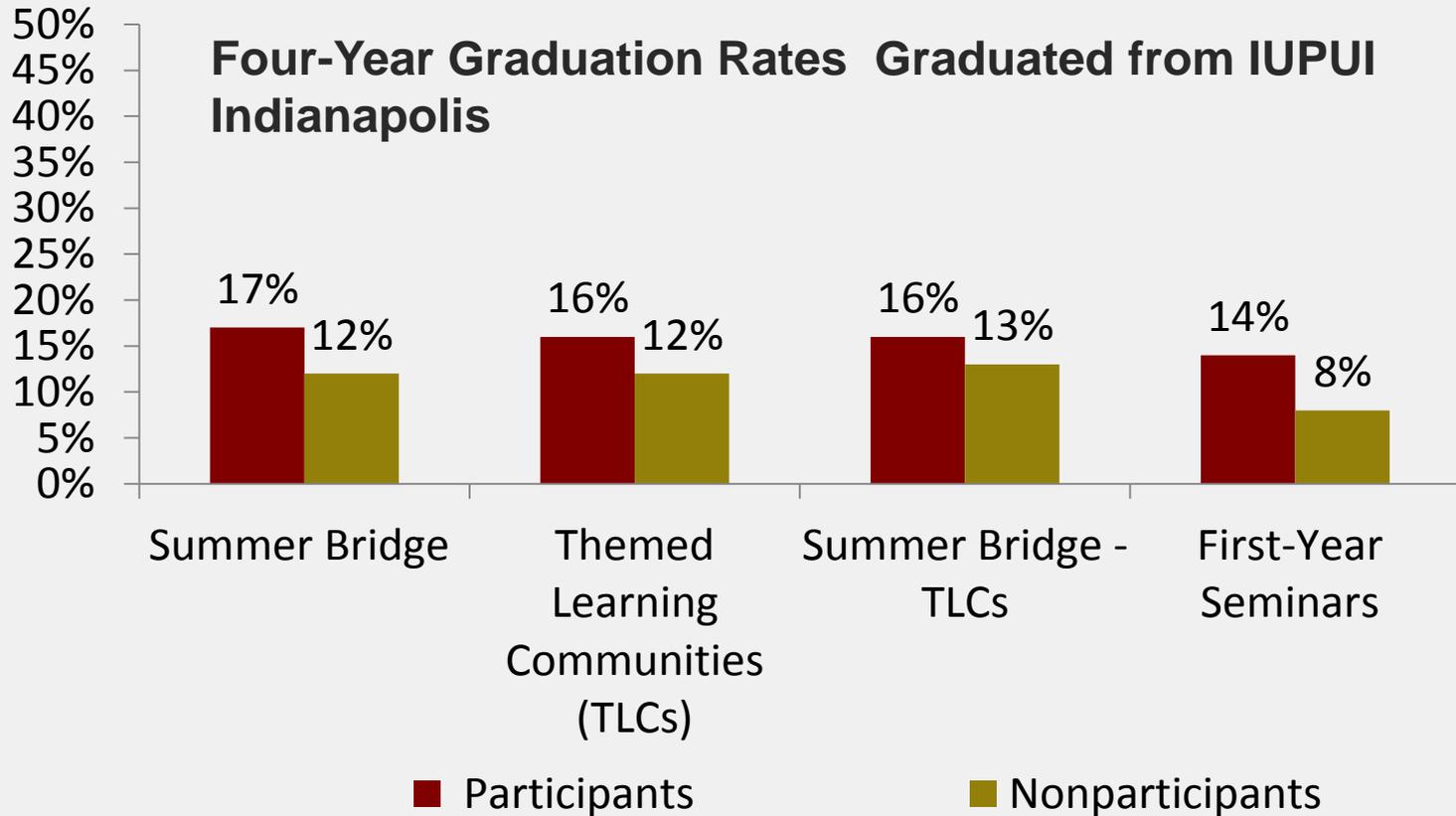
"While improved retention is a welcome consequence of learning-community work, it has never been its aim.

In the push to improve student retention, it is easy to overlook what research tells us: Students persist in their studies if the learning they experience is **meaningful**, **deeply engaging**, and **relevant** to their lives" (Lardner & Malnarich, 2008).

Engagement Indicator (EI): Reflective and Integrative Learning (TLC N= 200 and Not TLC N=576)

Mean Scores

Legend: TLC | Not TLC | Official Peers | Public Research Univ.

Bar values: TLC 38.4, Not TLC 36.1, Official Peers 35.9, Public Research Univ. 35.1

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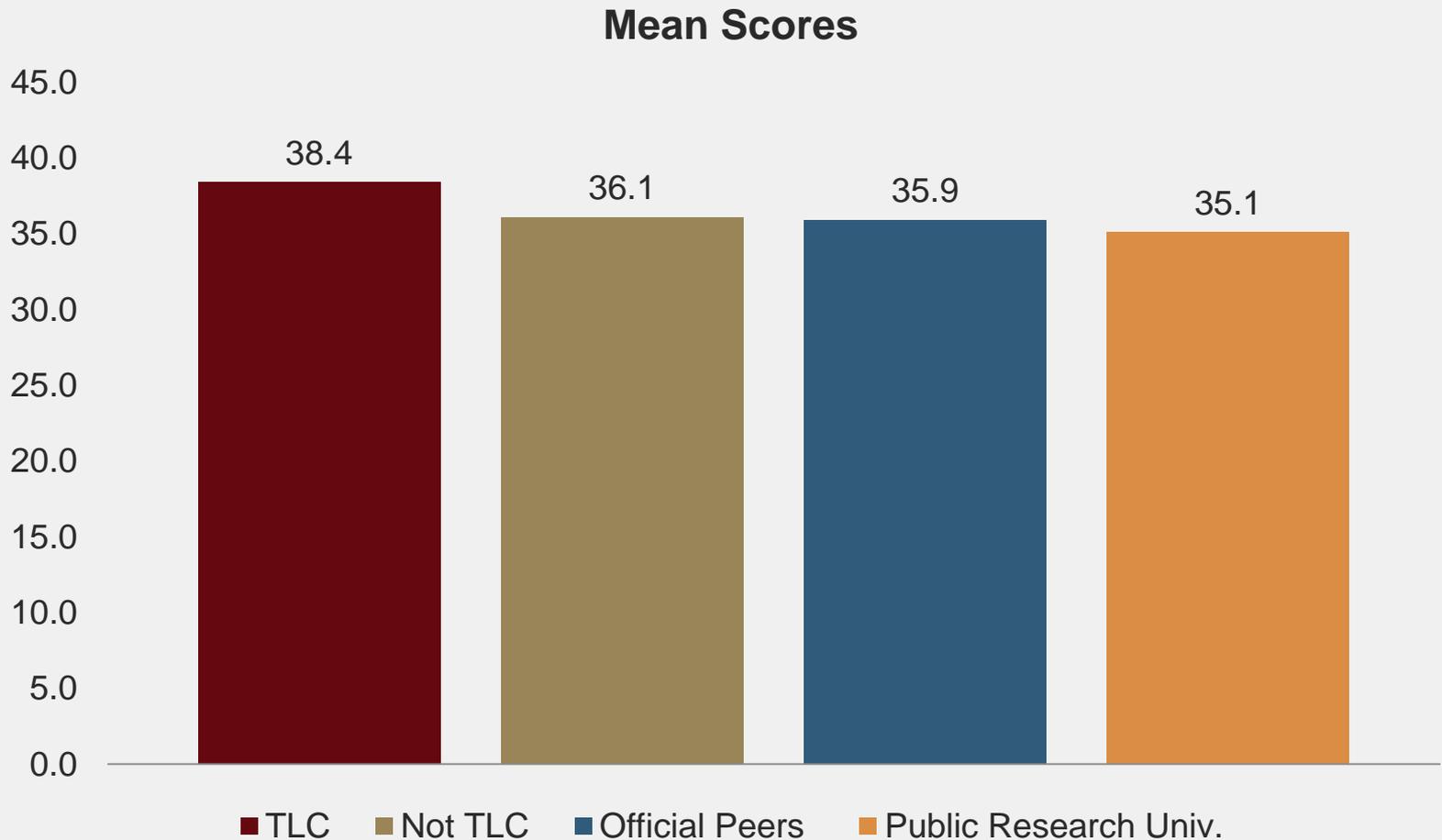
TLCs with Service Learning

Number of Student Participants
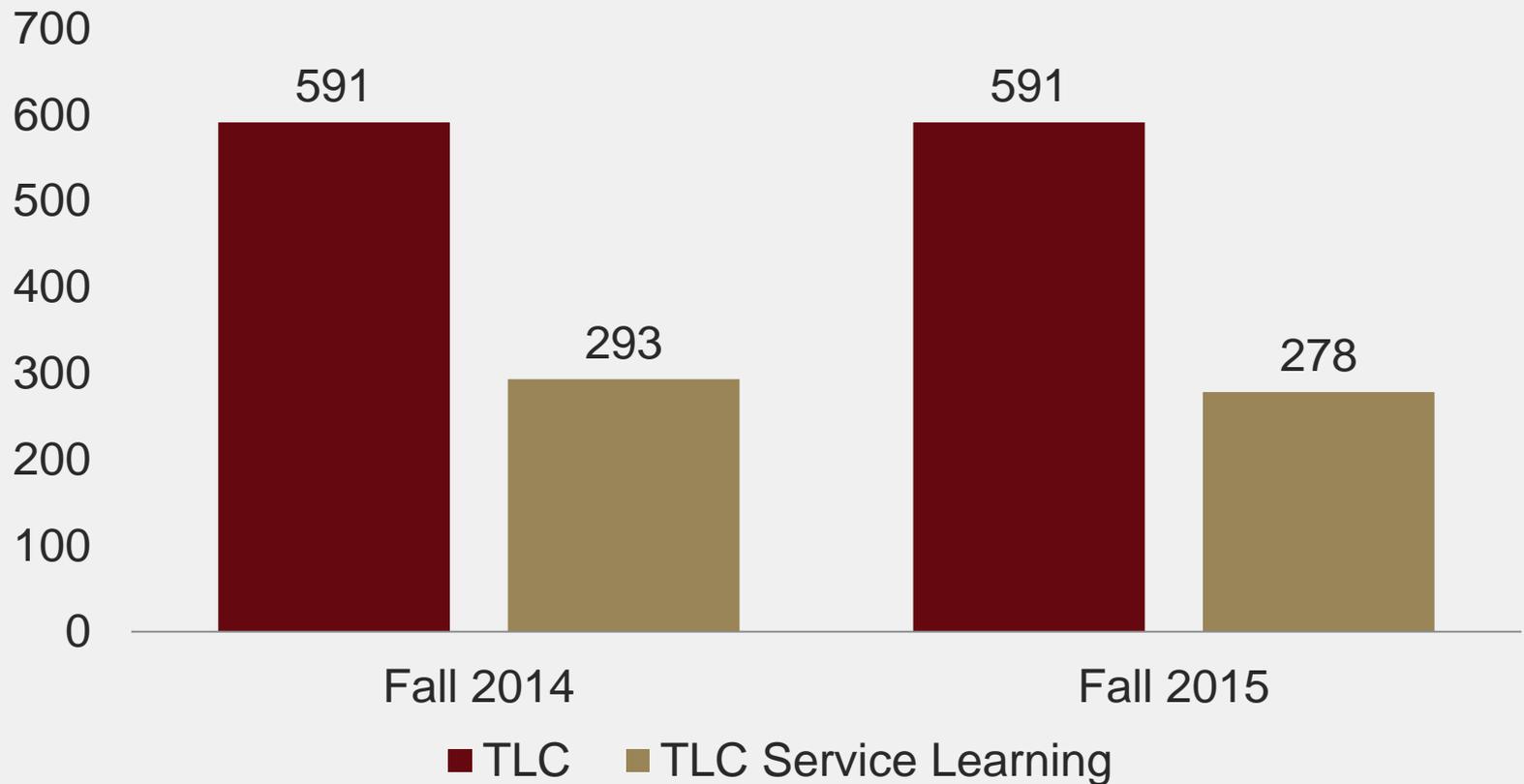
2014 TLC-Service Learning Impact on First-Year GPA: ANCOVA Results

	N	Avg. Cumulative GPA	Adjusted Cumulative GPA
TLC-Service Learning	286	2.81	**2.83**
TLC Not Service Learning	584	2.65	**2.64**
Overall	870	2.70	

Note 1: Bolded items are significantly different based on ANCOVA Results ($p < .05$). Covariates included the following: H.S. GPA, SAT score, income level (received a Federal Pell Grant or not) and gender. Missing cases excluded.

TLC-Service Learning: Integrative Learning
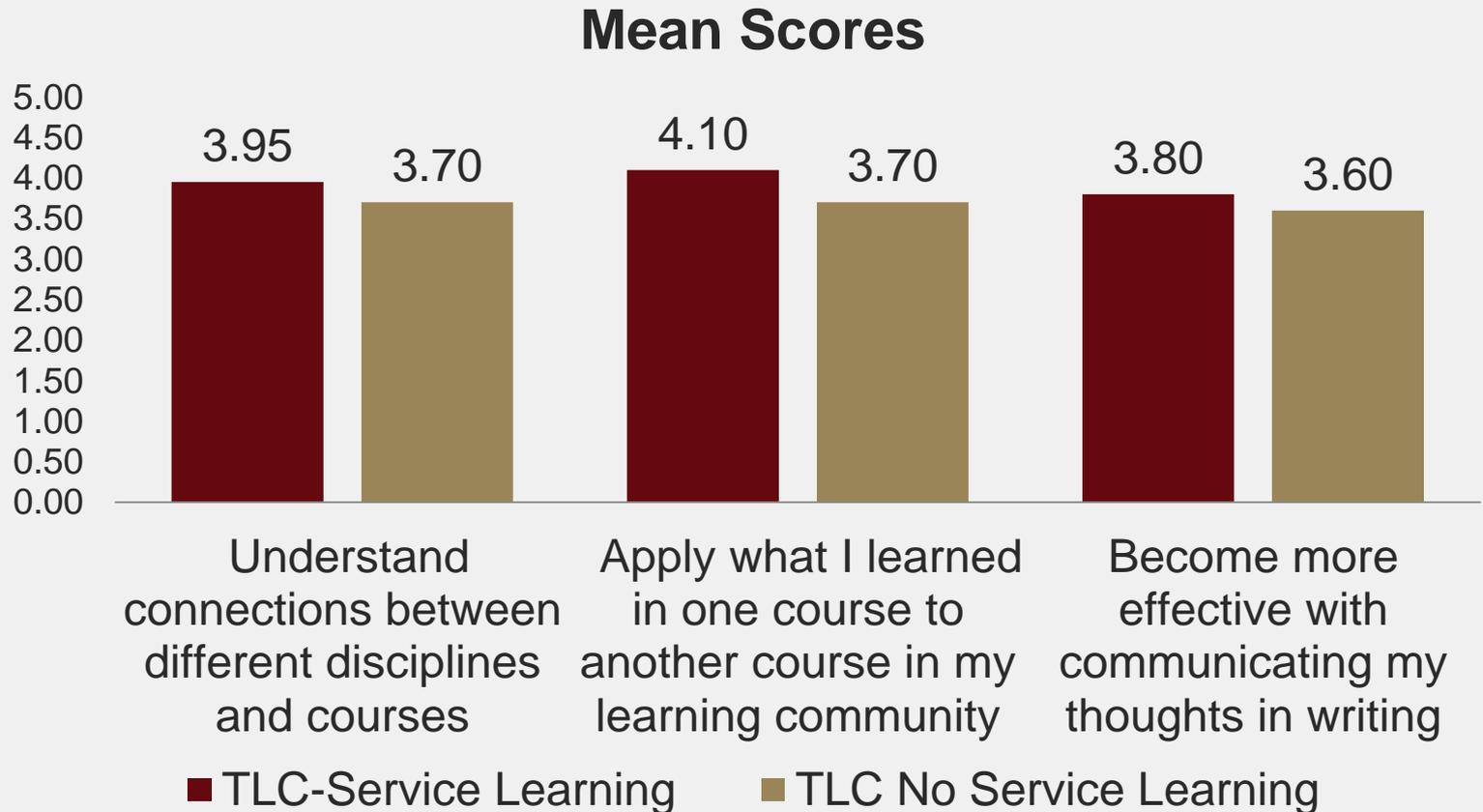
Mean Scores

Chart showing mean scores comparing TLC-Service Learning (dark red) and TLC No Service Learning (tan) across three categories:

- **Understand connections between different disciplines and courses**: TLC-Service Learning 3.95, TLC No Service Learning 3.70
- **Apply what I learned in one course to another course in my learning community**: TLC-Service Learning 4.10, TLC No Service Learning 3.70
- **Become more effective with communicating my thoughts in writing**: TLC-Service Learning 3.80, TLC No Service Learning 3.60

Legend: ■ TLC-Service Learning ■ TLC No Service Learning

Note 1: All items significantly different based on independent samples t-test results. TLC-SL N=476, TLC No SL N=216

Note 2: Responses based on a 5 point Likert-Type scale where
1 = "Very Little", 2 = "Little", 3 = "Some", 4 = "Much", and 5 = "Very Much"

TLC-Service Learning: Civic Engagement Outcomes

Mean Scores

	Develop a better understanding of complex real world social problems or issues	Apply knowledge gained in learning community courses to broader community or social issues	Apply course concepts to my own life experiences
TLC-Service Learning	4.08	4.02	3.94
TLC No Service Learning	3.79	3.54	3.67

■ TLC-Service Learning ■ TLC No Service Learning

Note 1: All items significantly different based on independent samples t-test results.
TLC-SL N=476, TLC No SL N=216

Note 2: Responses based on a 5 point Likert-Type scale where
1 = "Very Little", 2 = "Little", 3 = "Some", 4 = "Much", and 5 = "Very Much"

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Underserved Students Participation and Outcomes: TLCs

Student Characteristic	TLC Participants			Nonparticipants		
	N	One-Year Retention (any IU)	FY GPA	N	One-Year Retention (any IU)	FY GPA
African American	94	**76%**	**2.55**	213	**58%**	**2.14**
Latino(a)/Hispanic	74	74%	2.65	179	74%	2.58
Afr. American, Latino,(a) Two or More Races	209	**73%**	**2.55**	494	**65%**	**2.40**
First Generation	340	74%	2.59	858	69%	2.56
Received Federal Pell Grant (proxy for low income)	435	**72%**	**2.63**	1077	**67%**	**2.49**
Twenty First Century Scholars State Aid	246	**75%**	2.61	473	**70%**	2.50

Bolded items significantly different based on independent samples t-test or chi-square results.

Underserved Students Participation and Outcomes: TLC Service Learning

Student Characteristic	TLC Service Learning Participants			TLC Participants (No Service Learning)		
	N	One-Year Retention	FY GPA	N	One-Year Retention	FY GPA
African American	26	**73%**	2.50	70	**69%**	2.49
Latino(a)/Hispanic	33	70%	2.62	43	73%	2.68
Afr. American, Latino, Two or More Races	70	**74%**	2.57	148	**69%**	2.51
First Generation	117	71%	2.61	228	72%	2.56
Received Federal Pell Grant (proxy for low income)	139	71%	**2.72**	311	70%	**2.57**

Bolded items significantly different based on independent samples t-test or chi-square results.

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The Synergy Of Two High Impact Practices – TLC and Service Learning

TLCs

- Fosters sense of community belonging
- Involve students with "big questions" that matter beyond the classroom.
- Explore a common topic through the lenses of different disciplines
- Integration of learning experiences
- Engaging pedagogies
- Co-curricular experiences
- Campus engagement

Service Learning

- Opportunities to analyze and solve problems in the community.
- Critical structured reflection
- Meaningful experiences with diverse peers and community members
- Sense of purpose and broadened perspectives
- Hands-on, real world applications of learning
- Model the idea that giving something back to the community is an important college outcome.
- Working with community partners is good preparation for citizenship, work, and life.

Lessons Learned From Local Assessment and National Literature HIPs

- High Impact Practices have differential impacts.

- Underserved and underrepresented students benefit from HIPs. So reach out and encourage participation.

- Important to design internally valid studies that employ comparison groups.

- Important to clearly describe HIPs (activities, instructional strategies, assignments, intended outcomes).

- Critical that HIPs are done well and with fidelity.

- Lack of studies that investigate direct measures of learning.

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Discussion and Questions!?