

PLANNING FOR LEARNING COMMUNITY ASSESSMENT PRE-CONFERENCE SESSION

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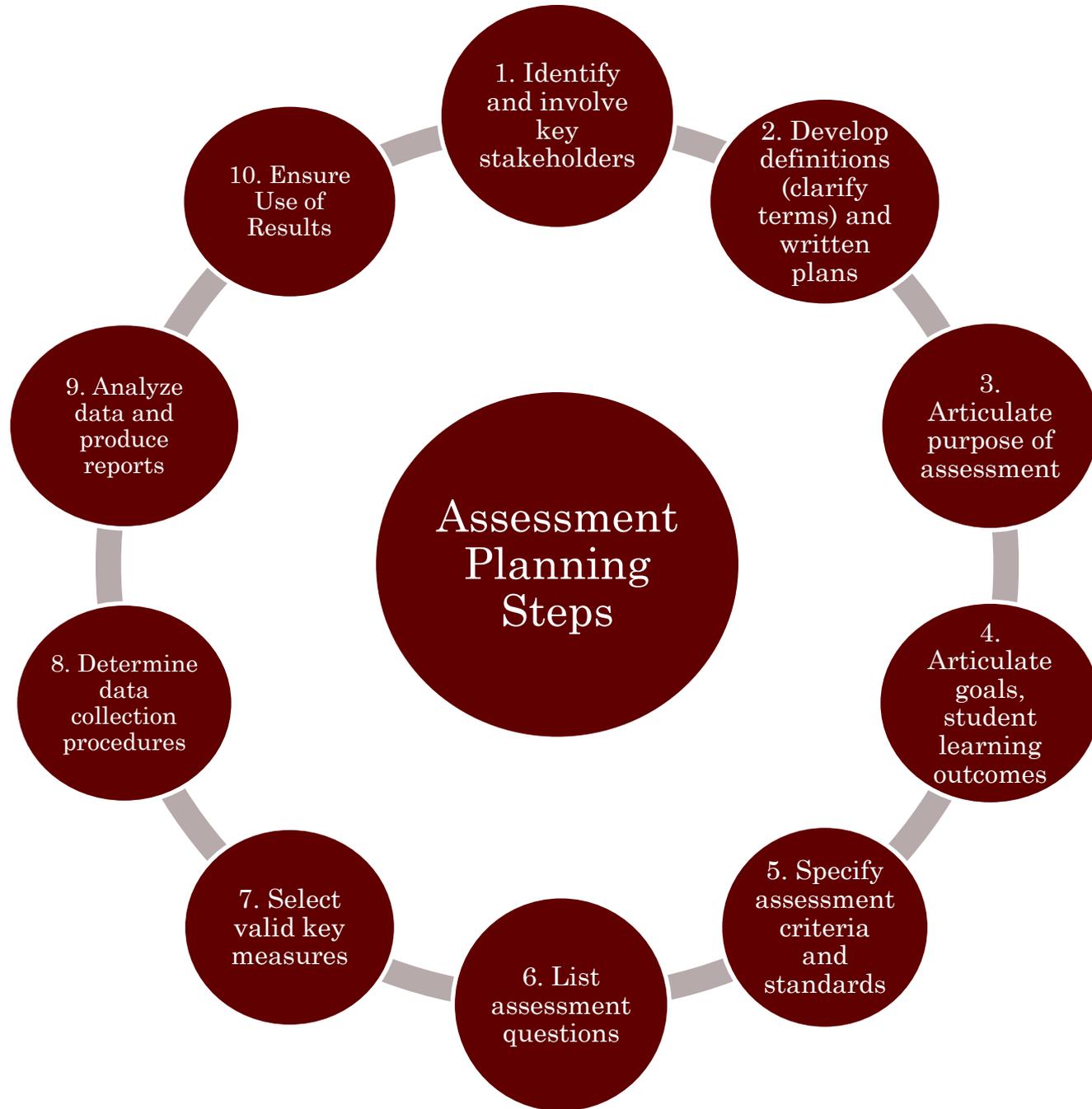
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NLCC
NATIONAL LEARNING
COMMUNITIES CONFERENCE

Delta College • Harper College • Indiana University-Purdue University Indianapolis • Kennesaw State University
• Metropolitan Community College - Kansas City • Texas A & M University - Corpus Christi



- Assessment Planning Steps
- Research on Learning Communities
- Using Direct and Indirect Learning Measures
- Using Quantitative and Qualitative Approaches
- Examples of LC Assessment
- Using Assessment Results for Planning
 - Followed by Break-Out Sections
 - Beginners: Assessment 101 Getting Started
 - Advanced: Planning for Assessment: How to assess your goals and intended outcomes



INVOLVEMENT OF STAKEHOLDERS CAN RESULT IN...

- Deeper understanding of program conceptually and intended outcomes.
- Better understanding of stakeholder assessment and information needs.
- More transparency and trust.

Stakeholders take on particular importance in ensuring that the right assessment questions are identified and that assessment results will be used to make a difference!

STAKEHOLDERS

- Students
- Faculty
- Staff
- Advisors
- Peer Mentors
- Students
- Program Administrators
- Upper-Level Administrators
- Community Members
- Who else?



SOME PURPOSES OF ASSESSMENT

- Determine if LC programs are attaining intended goals.
- Determine if students learn content.
- Enable students to assess own strengths.
- Allow more opportunities to improve student learning and LC programs.
- Help institution demonstrate accountability or determine worth and value of LC programs.
- Make data-based decisions.

FORMATIVE VS. SUMMATIVE ASSESSMENT

Formative Assessment

- Evaluations intended as a basis for improvement (Scriven, 1996).
- Typically conducted during the development or improvement of a program and it is conducted, often more than once, for in-house staff or faculty of the program with the intent to improve.
- It typically involves qualitative feedback (rather than scores) for both student and instructors that focuses on the details of content and performance.

Summative Assessment

- Seeks to monitor educational outcomes, often for purposes of external accountability.
- Assessment of learning and is contrasted with formative assessment, which is assessment for learning.
- Provides information on the program's efficacy (its ability to do what it was designed to do). For example, did the students learn what they were supposed to learn after participating in LC program.

ARTICULATING GOALS AND INTENDED OUTCOMES

- What are the goals of your Learning Communities?
- What are your intended outcomes?

LEVELS OF LEARNING COMMUNITY GOALS

Student

- Learning Outcomes (e.g., critical thinking, integrative learning, writing skills)
- Academic maturity, self-confidence and motivation
- Improved academic performance and persistence
- Sense of belonging and community

Faculty and Instructional Team Members

- Widened scholarly interests and efforts
- New understandings of other disciplines, and the nature of interdisciplinarity
- New understandings of discipline or professional specialty
- Deepened understandings about diversity and citizenship, and multicultural teaching skills
- Enlarged pedagogical repertoire

Institution

- Enhanced institutional reputation
- Strengthened institutional culture (focus on learning, and community)
- Hiring, tenure, promotion and other reward systems supportive of LC goals
- Increased cost efficiencies

GOALS OF LEARNING COMMUNITY PROGRAMS

- Enhance student motivation for learning.
- Ensure that students learn content and are able to apply material learned.
- Improve ability to think critically.
- Create opportunities for deep learning.
- Facilitate integrative learning.
 - the intentional integration of ideas and/or practices drawn from two or more disciplines (or areas of expertise) which invite new questions, understanding, explanations, and applications.
- Foster and encourage lifelong learning.
- Improve academic performance.
- Facilitate successful transitions.
- Improve retention and graduation rates.

INTEGRATIVE LEARNING AND THINKING

- “an approach that highlights the importance of addressing real-world issues relevant to students’ life experiences and interests” (Hinckley, 2010).
- “connecting skills and knowledge from multiple sources and experiences; applying theory to practice in various settings; utilizing diverse and even contradictory points of view; and, understanding issues and positions contextually.” (A Statement on Integrative Learning, AACU, 2004)
- “...an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situation within and beyond the campus” (AACU VALUE Rubric, 2007).

A FEW WORDS ABOUT GOAL DOMAINS

Three domains:

- Cognitive (about knowledge and the development of intellectual skills)
 - Affective (the manner in which things are dealt with emotionally)
 - Psychomotor (physical movement, coordination, and use of motor skills)
- * When developing goals, objectives, or intended outcomes start with the end in mind and identify developmental benchmarks along the way

CRITERIA AND STANDARDS

Criteria

- Factors that are considered important to judge something
- “the aspects, qualities or dimensions that distinguish a more meritorious or valuable evaluand [object being evaluated] from one that is less meritorious or valuable” (Davidson, 2005)
- Examples:
 - Improved critical thinking
 - Integrative learning
 - Leadership skills
 - Civic engagement
 - Faculty engagement
 - National reputation of institution

Standards

- Level of performance that expected at each criterion.
- Standards are subsets of the criteria.
- How good is “good enough.”
- Example: 75% of those students completing the LC program showed improved levels of civic engagement.
- Students who participate in the LC program earn higher scores on critical thinking rubric or test compared to matched comparison group of students not participating.

NORM- REFERENCED AND CRITERION-REFERENCED ASSESSMENT

Norm-Referenced

- Compares students with others.
- Does not say anything about the ideal or intended levels of students' performances, only about which students are better than others.
- Example: Students participating in LC program have a significantly higher retention one-year retention rate compared to nonparticipants.

Criterion-Referenced

- Students' performances are judged against pre-set criteria as specified in the intended learning outcomes.
- Informs instructors how well the intended learning outcomes have been achieved by students.
- Explicit criteria are essential which provide clear learning goals to students.
- Example: 85% of students perform at “effective” or “very effective” levels on scoring rubric for Critical Thinking or Integrative Learning.

GOOD ASSESSMENT

- ...provides meaningful, actionable data and information to address critical questions about student learning and institutional effectiveness.
- “Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.”
 - Principle #7 AAHE Assessment Forum, 9 Principles of Good Practice for Assessing Student Learning

CRITICAL QUESTIONS ABOUT LEARNING COMMUNITY PROGRAMS

- What are programs providing and for whom?
- Are they meeting the needs of students?
- How can the program be improved?
- Is the program improving student learning and other important educational outcomes?
- Where is learning satisfactory?
- Which approaches produce the most learning for which students?
- Are students effectively integrating their learning experiences?

- Do LC program impacts vary across different groups of intended beneficiaries (males, females, undergraduates, first-generation students, Latino students) and over time?
- Are there any unintended effects of the program, either positive or negative?
- Is the program worth the resources it costs?
- Can the changes in outcomes be explained by the program, or are they the result of some other factors occurring simultaneously?

TYPES OF ASSESSMENT APPROACHES

Needs

- Does the program or instructional strategy meet students' needs?

Process

- Is program or intervention implemented as conceptualized?

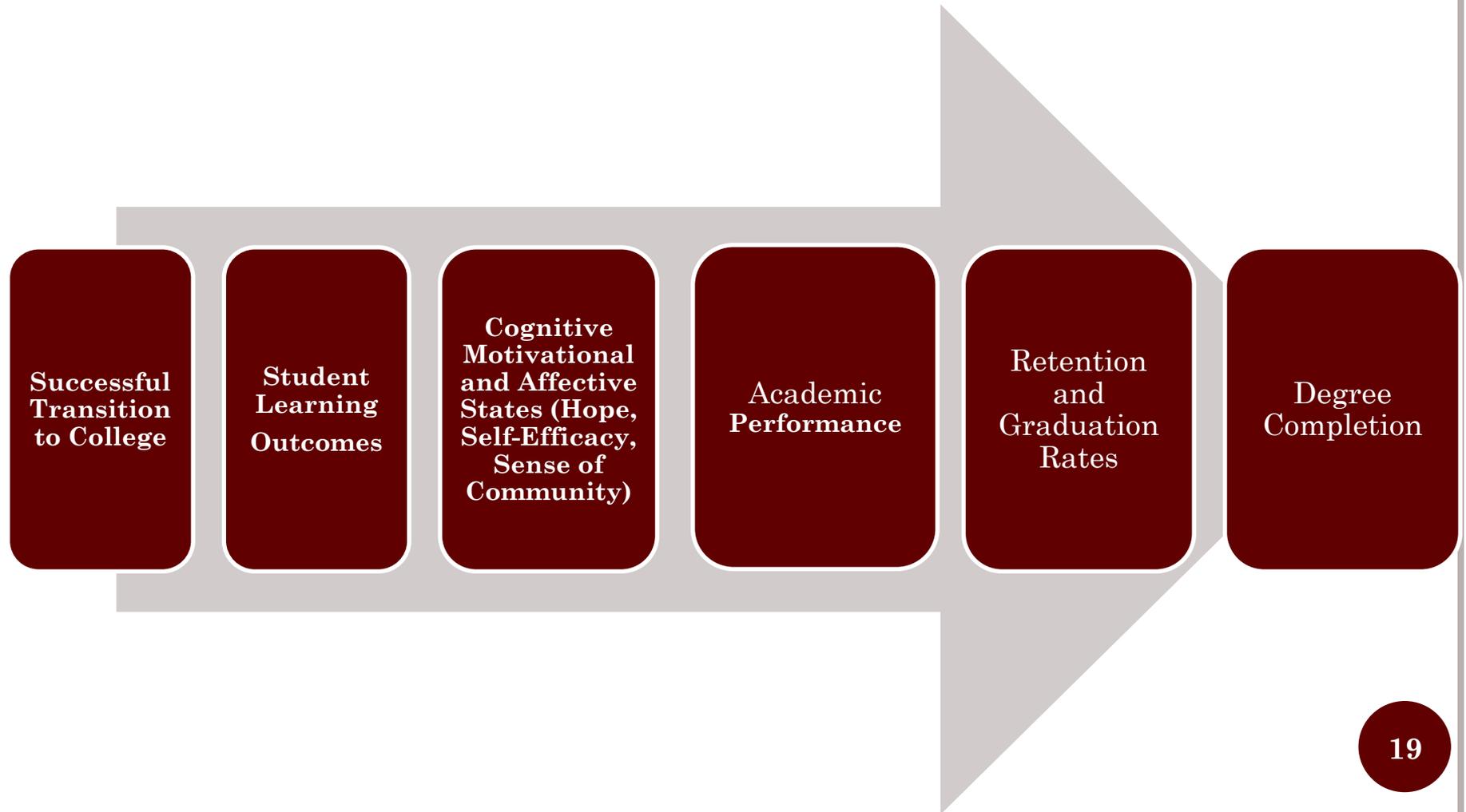
Outcomes

- Is program or instructional strategy improving student learning?

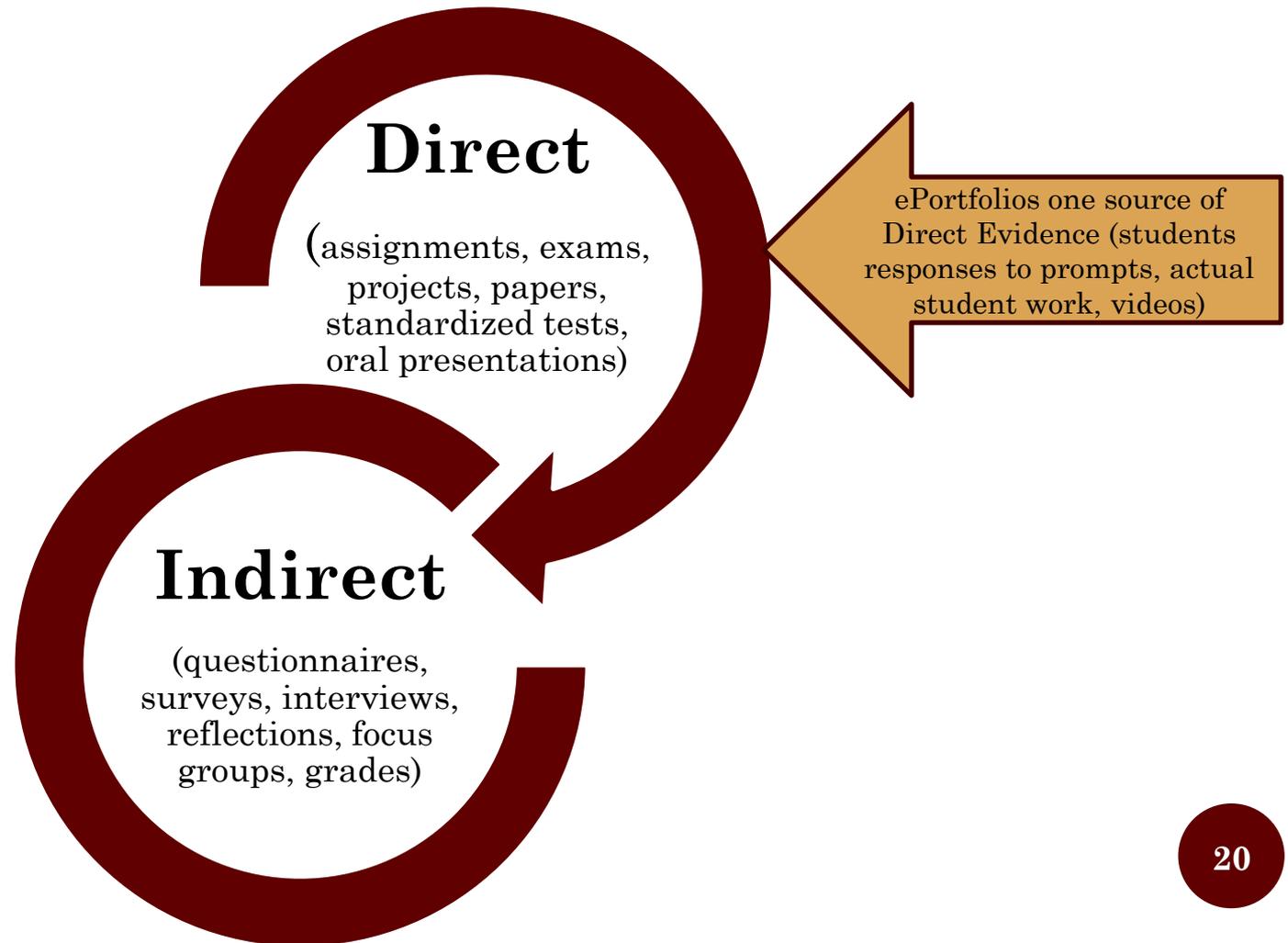
Efficiency

- Is program worth the resources that it costs to implement?

LEARNING COMMUNITIES KEY STUDENT OUTCOME MEASURES



STUDENT LEARNING MEASURES



DIRECT MEASURES OF STUDENT LEARNING

- Require students to demonstrate their knowledge and skills.
- They provide tangible, visible and self-explanatory evidence of what students have and have not learned as a result of a course, program, or activity (Suskie, 2004, 2009; Palomba and Banta, 1999).
- **Authentic** assessment tasks are often multidimensional and require higher levels of cognitive thinking such as problem solving and critical thinking.
- Can be integral aspect of student and faculty work such as integrative assignment as part of learning community course work.

ASSESSMENT OF STUDENT WORK: A DIRECT MEASURE OF LEARNING

- “No assessment of knowledge, conceptual understanding, or thinking or performance skills should consist of indirect evidence alone” (Linda Suskie, 2009).

DIRECT MEASURE OF STUDENT LEARNING

- Create an integrative assignment (e.g., paper that requires students to integrate learning experiences)
- Develop a rubric to assess levels of learning
- Team grade or compare ratings
- Revise rubric as appropriate

INDIRECT MEASURES

- Capture students' perceptions of their knowledge and skills
- They supplement direct measures of learning by providing information about how and why learning is occurring.
- Students' perceptions of the extent to which courses and assignments have enhanced their achievement of the stated learning outcomes may be obtained by using the following methods: self-assessment, peer-feedback, end-of-course evaluations, questionnaires, focus groups, or exit interviews.

Indirect Measures Example

❖ Web-Based Survey Tool for Assessing the Student Experience in Learning Communities: Washington Center

Survey Elements:

1. Students' engagement in classroom activities
2. Instructors' activities that support learning
3. Students' perceptions of gains made in their own understanding and abilities
4. Students' perceptions of the mental activities they engage in in the LC versus other courses

Sample Question:

- “Work on an assignments that require integrating ideas, strategies, or skills from classes (or disciplines) included in this learning community”

<http://www.evergreen.edu/washingtoncenter/survey/index.html>

Indirect Measures Example

- *Themed Learning Community Questionnaire (IUPUI Themed Learning Community Program)*
 - *Designed to collect feedback from students about their experiences in Themed Learning Communities*
 - *Feedback used by faculty and instructional teams to improve courses and understand students' perceptions*

Please indicate how much your experience in the Themed Learning Community helped you in the following areas:

1. Applied what I learned in one course to another course in my learning community
2. Understood connections between different disciplines and courses
3. Became more effective with communicating my thoughts in speaking
4. Became more effective with communicating my thoughts in writing

TLC END-OF-COURSE QUESTIONNAIRE

○ Integrative Thinking and Learning $\alpha = .87$

- “Understood connections between different disciplines and courses.”
- “Developed a better understanding of complex real world social problems and issues.”

○ Peer Interactions $\alpha = .74$

- “Discussed ideas from the TLC with peers outside of class.”
- “Formed one or more friendships that I will maintain after the semester.”

○ Faculty Interactions $\alpha = .80$

- “Made connections with faculty outside of class.”
- “Discussed connections between any TLC courses with faculty.”

• Communication Skills $\alpha = .74$

- “Became more effective with communicating my thoughts in writing.”
- “Became more effective with communicating my thought in speaking.”

WHICH COURSE COMPONENTS MAKE SIGNIFICANT IMPACT ON STUDENT SATISFACTION WITH LEARNING EXPERIENCES?

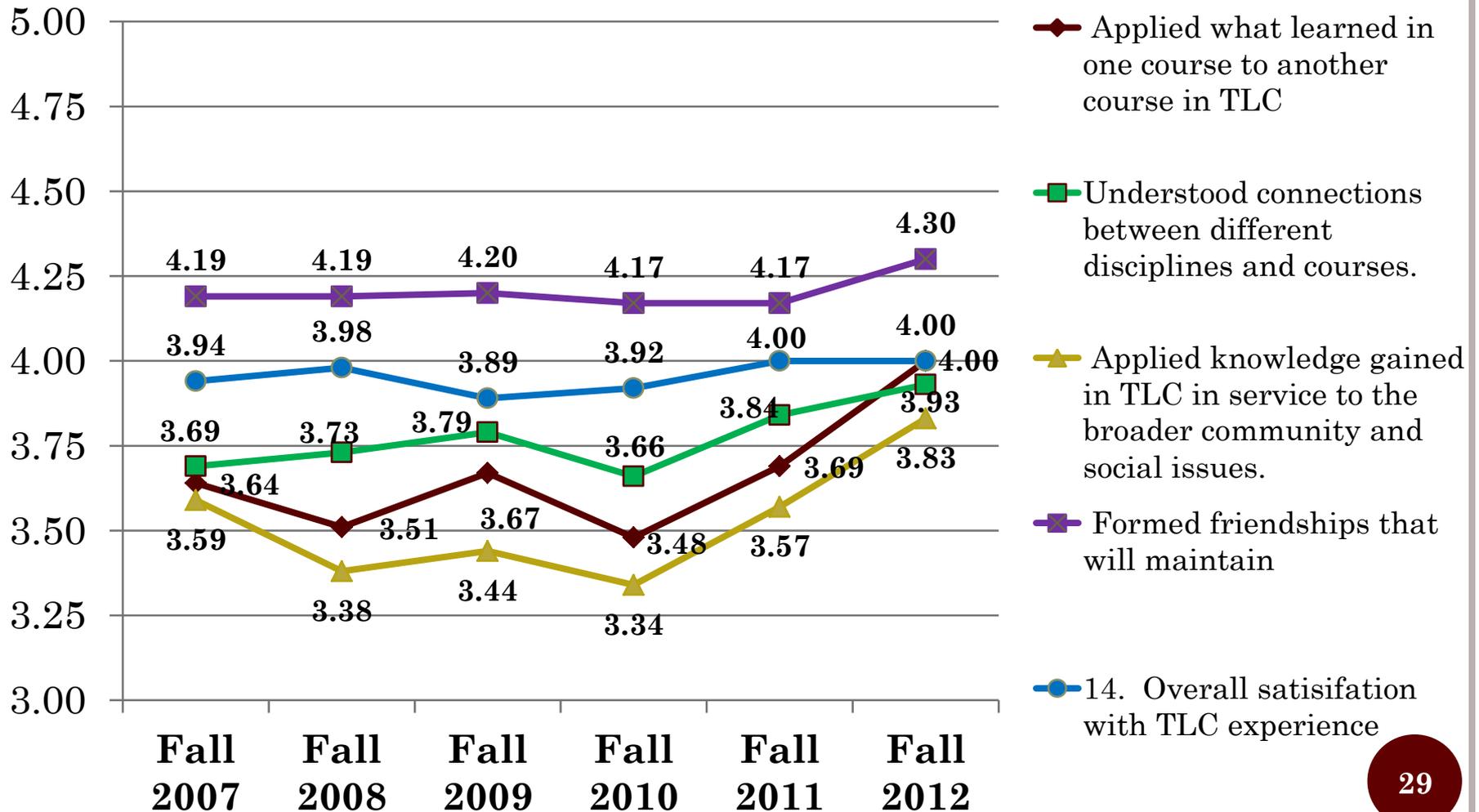
○ Integrative Thinking and Learning

- Applied what I learned in one course to another course in my learning community.
- Understood connections between different disciplines and course.
- Applied knowledge gained in learning community courses in service to the broader community and social issues.
- Became more effective in analyzing and understanding readings in essays, articles, and textbooks.
- Developed a better understanding of complex real world social problems and issues.
- Actively discussed complex issues and ideas.

• Peer Interactions

- Discussed ideas from the TLC courses with peers outside of class.
- Exchanged ideas with students whose views are different from my own.
- Formed one or more friendships that I will maintain after the semester.

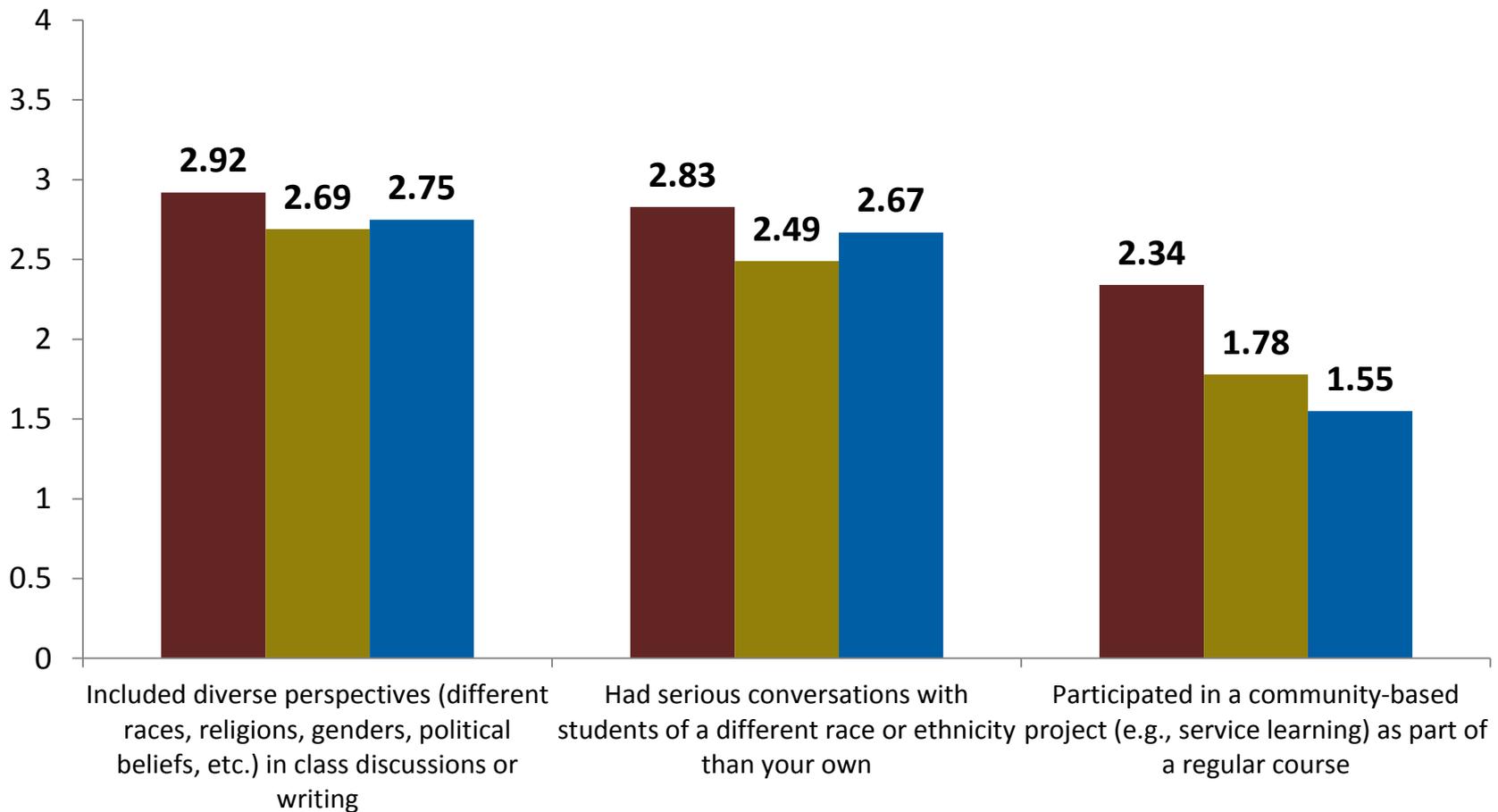
IUPUI TLCs QUALITY OF EXPERIENCES OVER TIME



Based on a 5-point response scale where 1 = “very little”, 2 = “little”, 3 = “some”, 4 = “much” and 5 = “very much”

NATIONAL SURVEY OF STUDENT ENGAGEMENT (NSSE)

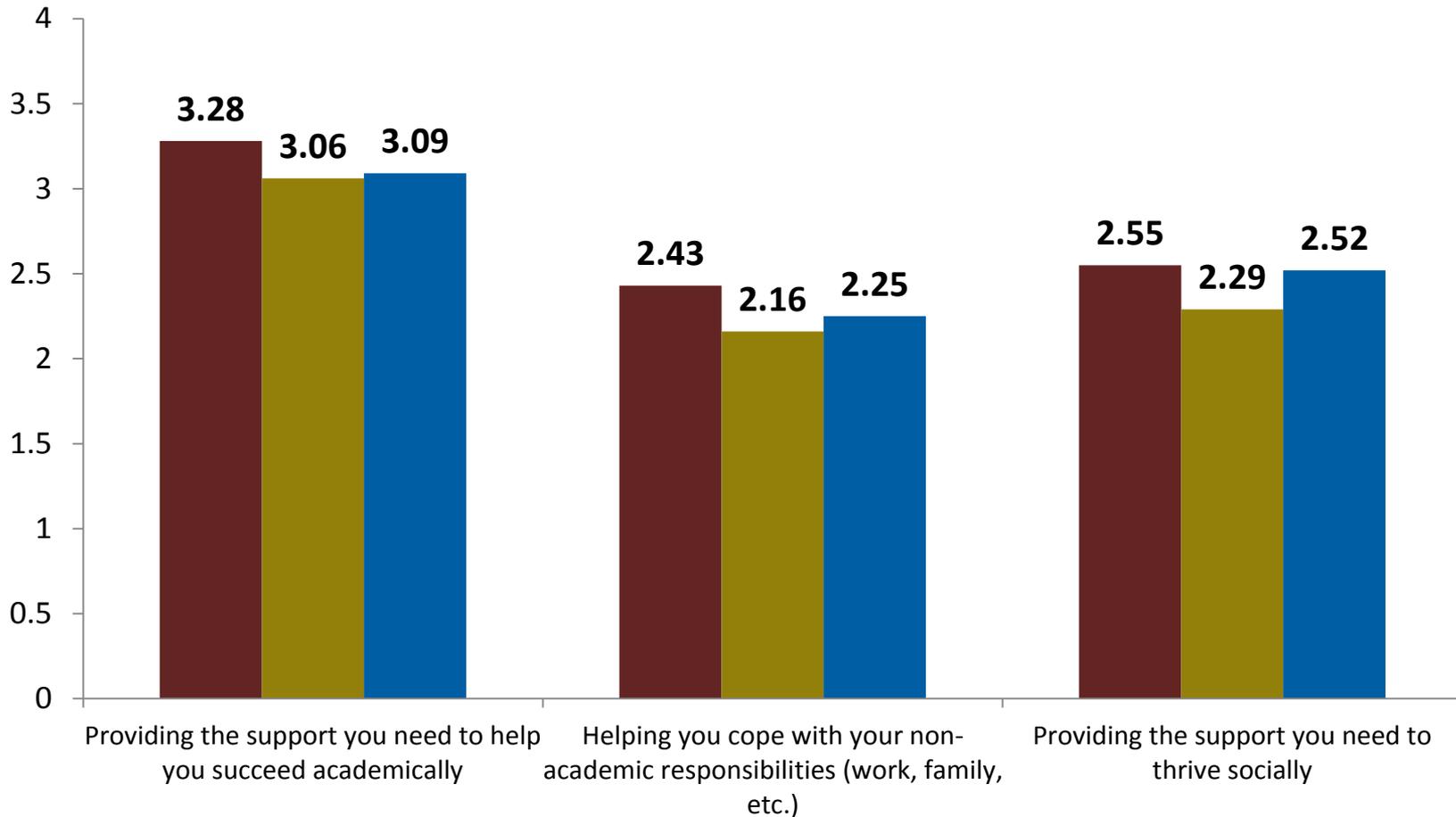
■ IUPUI TLC Participants ■ IUPUI Comparison Group (Not TLC) ■ NSSE Public Research Sample



Note: Responses based on a 4-point scale where 1 = "never," 2 = "sometimes," 3 = "often" and 4 = "very often"

NATIONAL SURVEY OF STUDENT ENGAGEMENT (NSSE)

■ IUPUI TLC Participants ■ IUPUI Comparison Group (Not TLC) ■ NSSE Public Research Sample



Note: Responses based on a 4-point scale where 1 = "very little," 2 = "some", 3 = "quite a bit" and 4 = "very much"

MIXED-METHOD APPROACHES

- Allows researchers to:
 - Triangulate findings from multiple sources.
 - Converge or corroborate findings.
 - Strengthen the internal validity of the studies.
 - Create elaborated understandings or fuller picture of abstract or complex constructs such as “engagement” or “integrative learning” (Complimentary)
 - Develop subsequent methods (Development Purposes).
 - Spark new ideas and thinking (Initiation Purposes).
 - Use qualitative and quantitative methods to assess program processes (implementation) and outcomes (Expansion Purposes)
 - Represent different values (stakeholders may value or find certain methods more credible).

DATA COLLECTION METHODS AND SOURCES

○ Quantitative

- Retention Rates
- Standardized Test Scores
- GPAs
- Psychological Outcomes
- Behavior checklists
- Surveys
- Rubrics

○ Qualitative

- Focus Groups
- Interviews
- Portfolios (can be quantitative if scoring rubrics developed)
- Naturalistic observation
- Document analyses
- Case study

TAKE INVENTORY OF EXISTING ASSESSMENT INFORMATION

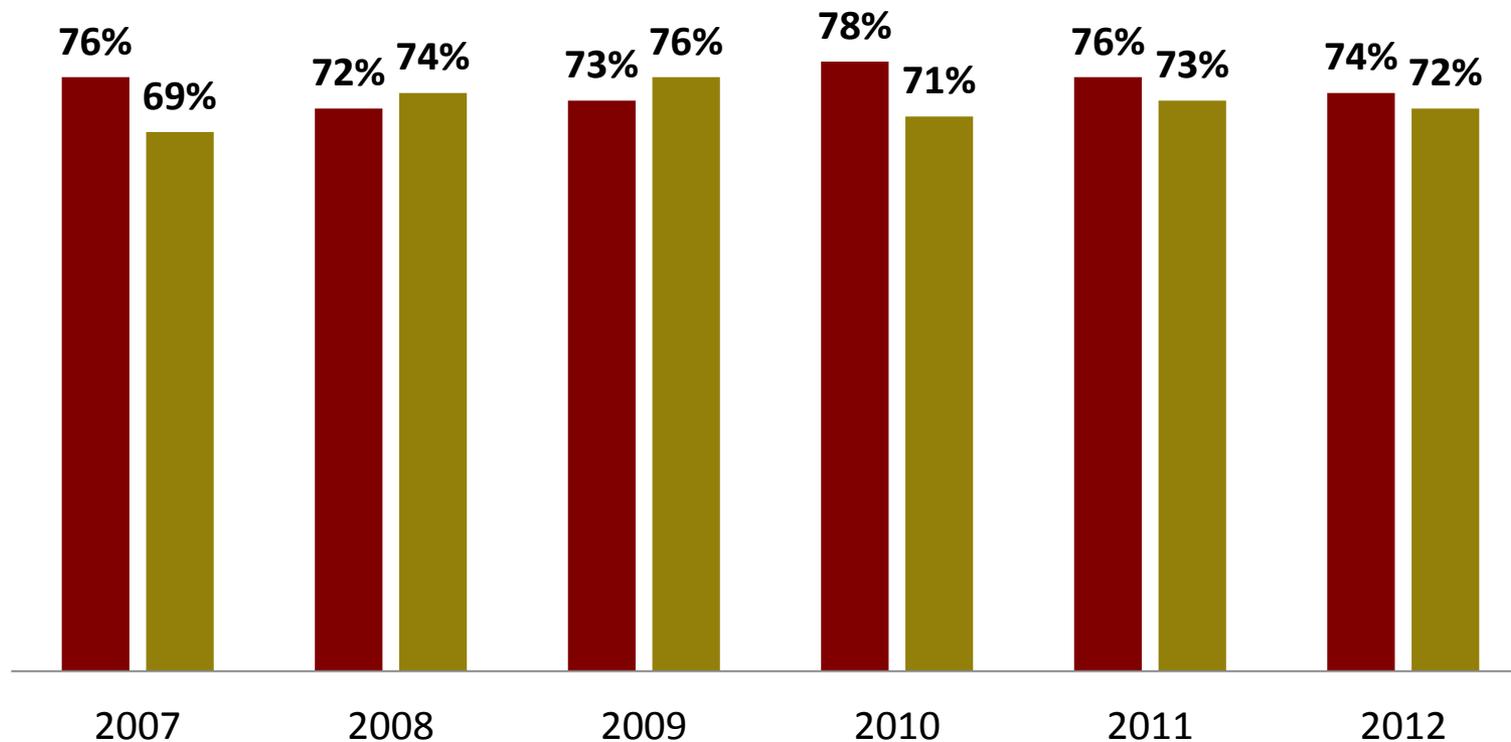
- Grades in courses
- Course exams
- Student surveys
- Faculty surveys
- Retention rates
- Degree completion rates

QUANTITATIVE ASSESSMENT

- Conduct quasi-experimental designs employing multivariate analyses of covariance, repeated measures MANCOVAs, and hierarchical regression procedures.
- Conduct analyses to determine LC effects on academic performance, retention rates, and DFW rates.
- Describe retention rates and GPAs in defined populations over semesters and years.
- Examine LC participants compared to non-participants with regard to GPA and retention while adjusting for academic preparation and background differences .
- Examine predicted vs. actual retention, course grades, and DFW rates.
- Administer student surveys to assess student needs, satisfaction, engagement, program impacts, reasons for leaving, etc.

EXAMPLE: TLC PARTICIPANTS' ONE-YEAR RETENTION RATES COMPARED TO NONPARTICIPANTS

■ TLC Participants ■ Nonparticipants



LOGISTIC REGRESSION PREDICTING ONE YEAR RETENTION

	Variable	B	SE	Wald Statistic	95% CI	p	Odd Ratio
Step 1	H.S GPA	1.15	.13	77.37	2.44, 4.06	.000	3.15
	SAT Score	.00	.00	2.21	1.00, 1.00	.137	1.00
	First Generation	-.10	.10	1.03	.74, 1.10	.310	.90
	Female	-.01	.10	.01	.81, 1.21	.932	.99
	Low Income	-.18	.10	3.34	.68, 1.01	.068	.83
Step 2	H.S GPA	1.17	.13	79.33	2.48, 4.14	.000	3.21
	SAT Score	.00	.00	2.51	1.00, 1.00	.113	1.00
	First Generation	-.11	.10	1.30	.73, 1.09	.255	.89
	Female	-.02	.10	.04	.80, 1.20	.835	.98
	Low Income	-.18	.10	3.11	.69, 1.02	.078	.84
	TLC	.28	.11	7.16	1.08, 1.63	.007	1.33

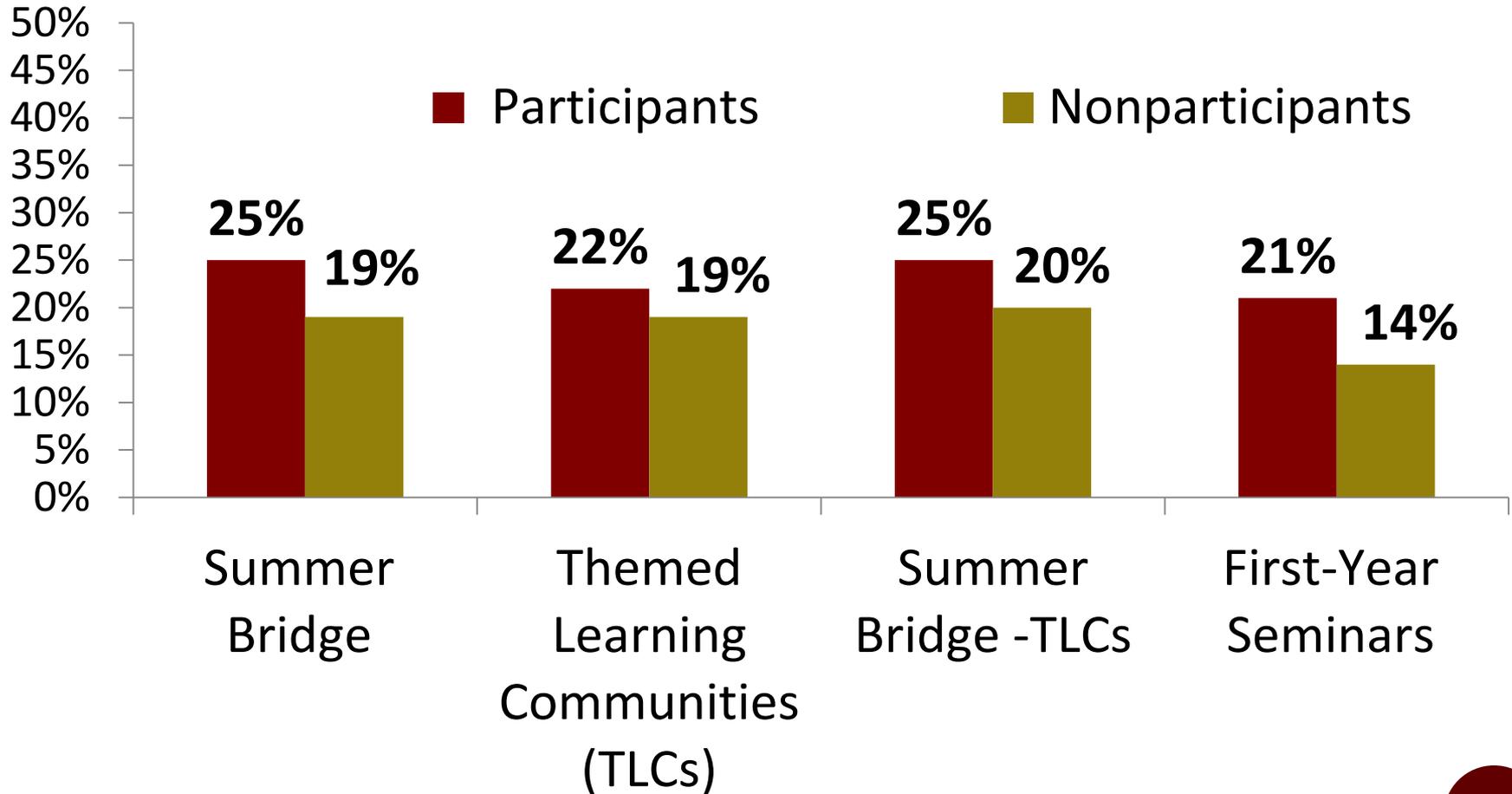
TLC participants have a 33% better odds of being retained compared to non-participants (based on the odds ratio).

ANCOVA RESULTS: TLC PARTICIPATION AND CUMULATIVE ONE-YEAR GPA

	N	First-Year GPA	Adjusted First-Year GPA*
TLC	681	2.78	2.77
Non-Participants	1528	2.61	2.61
Overall	2209	2.66	

Bolded items are statistically significant based on Analysis of Covariance (ANCOVA) results ($p < .0001$). Covariates included: HS GPA, SAT Score, Admit Date, Income Level, Gender.

IUPUI 2009 FIRST-TIME, FULL-TIME COHORT 4-YEAR GRADUATION RATES



QUALITATIVE ASSESSMENT

- Brings Awareness Of Program Implementation Differences
- Provides In-Depth Understanding of Student Responses and Interactions
- Represents Part of a Long Term Strategy of Formative Evaluation

STUDENTS' VOICES: DEVELOPED CRITICAL THINKING SKILLS

- “It helped me develop different ways of processing information”.
- “The TLC contributed to my learning by forcing Critical Thinking and helping us apply it”.
- “The TLC gave me different ways to look at a problem and different ways to solve them”.
- “My TLC experience allowed me to become a better critical thinker and therefore made learning a lot more efficient”.

STUDENTS' VOICES: INTEGRATED EXPERIENCES

- “The courses are very connected which really puts the concepts in perspective”.
- “It helped me better see the relationships between different disciplines”.
- “My TLC experience allowed me to tie together my classes for a more meaningful learning environment. It helped me connect three seemingly different courses”.
- “It really helped me learn topics and ideas that were used in all classes and made it easier with connecting similar ideas”.

STUDENTS' VOICES: COLLEGE TRANSITION ASSISTANCE

- “It gave me an idea of how to approach college and the demand that comes with it”.
- “Being an out of state student, it has helped me to adapt to the culture and different education styles here in the U.S.A.”
- “It made me feel more comfortable with my transition to college and allowed me to meet people in my major”.
- “TLC helped me see how I need to grow out of my high school self into a college student & prepared me for the rest of college”.

TO FOSTER USE OF RESULTS AND FACULTY INVOLVEMENT IN ASSESSMENT

- Name interdisciplinary committees (develop an advisory committee with faculty members represented).
- Encourage faculty research on LCs so they can contribute to the scholarship of teaching/learning and publish in their disciplines.
- Read and discuss current literature on learning/assessment.
- Attend conferences together.
- Bring experts to campus.
- Share good practices.
- Work together on learning communities.
- Present assessment findings to intact groups and facilitate action planning.

NATIONAL LITERATURE

- Learning communities have been advocated as effective interventions for enhancing:
 - Student Retention (Tinto, 2003)
 - Engagement levels (Yancy, Sutton-Haywood, Hermitte, Dawkins, Rainey, and Parker, 2008; Zhao and Kuh, 2004),
 - Student learning and academic success (Hegler, 2004; Henscheild, 2004; Kuh, 2008; Stassen 2003),
 - Opportunities for service learning (Oates and Leavitt, 2003),
 - Critical thinking and integrative learning (Lardner and Malnarich, 2008, 2008/2009, 2009).

LEARNING COMMUNITIES AS AN EFFECTIVE HIGH IMPACT PRACTICE

- ★ Be intentional in linking courses.
- ★ Support students in traditional gateway courses and “weed-out” courses that have high rates of failure.
- ★ Consider tying an extended orientation or integrative seminar to the learning community.
- ★ Use instructional teams.
- ★ Invest in faculty development to ensure that courses are fully integrated, with coordinated materials, assignments, out-of-class trips, and grading rubrics.
- ★ Use engaging pedagogies.

Jayne E. Brownell and Lynn E. Swaner, 2010



CURRENT RESEARCH ON LEARNING COMMUNITY PROGRAMS

- Most published studies focus on retention, persistence, GPAs, and engagement (National Survey of Student Engagement – NSSE)
- Few empirical studies on metacognition, deep learning, and integrative learning.
- Most research is correlational and there have been few rigorous studies conducted on learning community effectiveness.

ASSESSMENT RESOURCES

- The National Resource Center for Learning Communities
 - <http://www.evergreen.edu/washingtoncenter/resources/learningcommunities.html>
- Published literature and research (Journal of Learning Communities Research and Practice)
- National Institute for Learning Outcomes Assessment (NILOA)
 - <http://learningoutcomeassessment.org/NILOAResources.html>
- AACU Valid Assessment of Learning in Undergraduate Education (VALUE) Rubrics
 - http://www.aacu.org/value/rubrics/index_p.cfm
- IUPUI UC Research, Planning and Evaluation
 - Evaluation Toolkit <http://research.uc.iupui.edu/>
- Assess List Serve
 - To subscribe to ASSESS please follow the directions on <http://www.coe.uky.edu/lists/helists.php>

CHECKLIST FOR EFFECTIVE ASSESSMENT PLANS

- ❑ Includes comprehensive assessment activities to determine if each major objective is attained (student learning outcomes, academic success, attitudes, behaviors, etc.)
- ❑ Proposes instruments that are valid, reliable, and aligned with intended goals, student learning outcomes and proposed curricula (e.g., assessment and curricula are carefully aligned).
- ❑ Includes direct as well as indirect measures of student learning.
- ❑ Includes measures designed to assess cognitive, affective, and social outcomes.
- ❑ Includes a combination of quantitative and qualitative methods.
- ❑ Employs research designs with acceptable internal validity (e.g., research designs such as pre-post with appropriate comparison groups).
- ❑ Uses built-in points of contact with students or clients (feasibility).
- ❑ Contains summative and formative components.
- ❑ Involves key stakeholders in assessment planning.
- ❑ Contains sustainable assessment procedures.

PLANNING FOR LEARNING AND ASSESSMENT

T.W. BANTA

1. What general outcome are you seeking?	2. How would you know it (the outcome) if you saw it? (What will the student know or be able to do?)	3. How will you help students learn it? (in class or out of class)	4. How could you measure each of the desired behaviors listed in #2?	5. What are the assessment findings?	6. What improvements might be based on assessment findings?

CLASSROOM ASSESSMENT

- Establish goals and student learning outcomes.
- Design assignments.
- Encourage student motivation.
- Design the course.
- Communicate with students about their work.
- Use student classroom work as well as other measures for assessment in departments or general education programs.
 - Barbara E. Walvoord

CONTACT INFORMATION

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QUESTIONS!

