Linking a Summer Bridge Program to Themed Learning Communities

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IUPUI Context

- Large, urban, commuter, public university
- Large number of under-prepared first-year students (24% are admitted conditionally)
- 56% of fall first-year students are first-generation college students (neither parent completed a four year college degree)
- 30% of first-time, full-time students report that they plan to work more than 20 hours per week while attending school
- 77% of first-time students commute to campus
IUPUI Curriculum

- Principles based – no core curriculum

- Principles of Undergraduate Learning (PULs)
  - Core Curriculum and Quantitative Skills
  - Critical Thinking
  - Integration and Application of Knowledge
  - Intellectual Depth, Breadth, and Adaptiveness
  - Understanding Society and Culture
  - Values and Ethics
University College

- Academic unit formed in 1998
- Houses numerous first-year programs
- Serves Over 8000 students
Essential Elements of Summer Bridge

- Seven-day program for incoming freshmen held in August before fall classes begin
- Open to students in specific majors
- Students are divided into groups of 25 based on their interest in pursuing a particular major or in exploring various major options
Essential Elements of Summer Bridge

- Provides a collegiate-level curriculum
- Creates communities of entering students
- Offered free to participants
Community Around Learning

- Uses the powerful elements of learning communities
- Builds strong peer connections
- Provides opportunities for collaborative learning
- Emphasizes multi-disciplinary perspectives
- Incorporates positive interactions with faculty, advisors, and librarians
- Provides individualized support for math
- Connects students with a school and major
Instructional Teams

- Faculty
- Advisor
- Librarian
- Student Mentor
Learning Outcomes

- Develop a comprehensive perspective on higher education
- Develop a community of learners
- Develop communication skills
- Develop critical thinking skills
- Develop study skills
- Develop college adjustment skills
- Understand the demands and expectations of college
- Understand and use university resources
- Understand information technology
Summer Academy Bridge Program

- Bridge Participants:
  - 2001: 18
  - 2007: 368
  - 2008: 436
  - 2009: 475 anticipated
IUPUI Summer Academy Bridge 2009

- Scholarship awards
- New schedule
- Renewed focus on marketing
- Link with Freshman Convocation
Essential Elements of Themed Learning Communities

- Cohorts of 25 students enroll in 3 or more linked courses connected through an interdisciplinary theme.

- First year seminar is taught by an instructional team including a faculty member, academic advisor, librarian and student mentor. Interdisciplinary faculty also join the team.

- Faculty and instructional team members work together to integrate the curricula

- Involve exciting opportunities for experiential learning (co-curricular/service learning experiences)
Examples of TLCs

**Non-major Specific:**
- For Love AND Money
  (English, Psychology, Math & Career Exploration Seminar)
- Pathways to Power: African American Perspectives and Expressions on Power in American Society
  (Sociology, Public Speaking & First Year Seminar)

**Major Specific:**
- Social Justice Past and Present: An Interdisciplinary Exploration
  (Examining Self as Teacher, History, English, First Year Seminar)
- Psychology and Religion: Science Dreams and Visions
  (Psychology as a Social Science, Religious Studies, & Psychology First Year Seminar)

Complete listings and descriptions in TLC brochure.
Out of the Classroom Experiences

Themed Learning Community Students learn through:

- **Museums** (Eiteljorg, Indianapolis Museum of Art, Indiana State Museum, Freedom Center)
- **Plays** (Madame Walker Theater, Indiana Repertory Theatre)
- **Festivals** (Heartland Film, International)
- **Service Learning** (community agencies, local schools, shelters, Juvenile Detention Center)
- Meeting with NCAA president
- Visiting a local mosque during Ramadan
- Participating in a live global discussion
- Interviewing with Channel 8 News
Themed Learning Communities

- Themed Learning Community Participants:
  - 2003: 121 students
  - 2006: 377 students
  - 2007: 578 students
  - 2008: 675 students
  - 2009: 825 students anticipated
2009 Themed Learning Community Initiatives

- **RISE** to the Challenge Initiative
  - Undergraduate **Research**
  - International Experiences
  - **Service Learning**
  - **Experiential Learning**

- 2009 Common Theme Project
- Personal Development Plan
“Evidence & Interpretations”
Liberal Arts Bridge + TLC

- TLC in 2007, Bridge added in 2008

- Components moved from fall semester to summer:
  - Getting Acquainted with Campus
    - Campus Resources
    - Technology
    - Faculty and Staff
  - Academic Integrity
  - Stress Management
  - Information Literacy (Part 1)
“Evidence & Interpretations”
Liberal Arts Bridge + TLC

Bridge Experiences & Assignments:

- Contemporary Art Analysis at Eiteljorg Museum
- Service Project with Exodus Refugee
- Research Project and Oral Presentations
“Evidence & Interpretations”
Liberal Arts Bridge + TLC

- Curricular components
  - Religious Studies + History + First Year Seminar

- Faculty collaboration throughout the semester

- Investigating interdisciplinary issues in the world
  - Bilingual Schools in Israel
    - Scholarly Article
    - Bridge Over the Wadi
    - Global Dialogue
Assessment
Underlying Theories Guiding Programs

- **Academic integration:**
  - The development of a strong affiliation with the college academic environment both in the classroom and outside of class. Includes interactions with faculty, academic staff, and peers but of an academic nature (e.g., peer tutoring, study groups) (Nora, 1993).

- **Social integration:**
  - The development of a strong affiliation with the college social environment both in the classroom and outside of class. Includes interactions with faculty, academic staff, and peers but of a social nature (e.g., peer group interactions, informal contact with faculty, involvement in organizations) (Nora, 1993).
Underlying Theories Guiding Programs

- **Academic Self-Efficacy**
  - Students’ evaluation of their competence to successfully execute academic tasks necessary to reach desired outcomes (Zajacova, Lynch, Espenshade. 2005; Bandura, 1993).

- **Social Learning Theory**
  - “Human behavior can be learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action." (Bandura, 1977, p. 22).
Why Assess First-Year Programs?

- Demonstrate worth and value
- Improve teaching and learning
- Learn about impacts and goal achievement
- Contribute to course development and improvement
- Obtain student feedback
Assessment Methods

Quantitative Analyses of Academic Success Outcomes: Retention and Grade Point Averages

- Quasi-Experimental Designs
- Examine participants compared to non-participants with regard to academic performance and retention while statistically controlling for background differences
- Covariates: H.S grades, SAT scores, Units of H.S math, course load, gender, ethnicity, first-generation.
- Examine participation in other programs or events (e.g., campus housing, First-Year Seminars).
- Multivariate Linear Regression, Logistic Regression, Analyses of Covariance
Assessment Methods

- **End-of-Course Questionnaires**
  - Designed to assess self-reported learning outcomes
  - Provides instructional teams with valuable feedback concerning students’ perceptions of course benefits
  - Reports display findings by instructional team and in the aggregate
  - Includes actual comments from students
  - Response rates high for in-class questionnaires 80% - 98%
Assessment Methods

- Investigate…
  - Students’ Needs
  - Program Processes
  - Critical Outcomes
Fall 2007 Cohort

- 2450 Total First-Time, Full-Time Students
- 2164 (88%) First-Year Seminar Participants
- 368 (15%) Bridge Participants
- 578 (24%) TLC Participants
- 200 (8%) Bridge-TLC Participants
Fall 2008 Cohort

- 2551 Total First-Time, Full-time Students
- 2461 (93%) First-Year Seminar Participants
- 436 (16%) Bridge Participants
- 675 (26%) TLC Participants
- 223 (9%) Bridge-TLC Participants
## Fall 2007

<table>
<thead>
<tr>
<th></th>
<th>All Students</th>
<th>Bridge</th>
<th>TLC</th>
<th>Bridge-TLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Women</td>
<td>61%</td>
<td>72%</td>
<td>70%</td>
<td>81%</td>
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<tr>
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<td>% First-Generation</td>
<td>57%</td>
<td>91%</td>
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<tr>
<td>Average Age</td>
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<td>3.31</td>
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<tr>
<td>% Campus Housing</td>
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<tr>
<td>% UCOL</td>
<td>68%</td>
<td>71%</td>
<td>69%</td>
<td>73%</td>
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## Fall 2008

<table>
<thead>
<tr>
<th></th>
<th>All Students</th>
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<th>TLC</th>
<th>Bridge-TLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Women</td>
<td>59%</td>
<td>69%</td>
<td>64%</td>
<td>76%</td>
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<tr>
<td>% African American</td>
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<td>9%</td>
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<td>56%</td>
<td>81%</td>
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<tr>
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<td>15%</td>
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<tr>
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<td>3.33</td>
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<td>3.31</td>
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<tr>
<td>% Campus Housing</td>
<td>23%</td>
<td>28%</td>
<td>24%</td>
<td>23%</td>
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2007 Bridge-Themed Learning Community Combination has Positive Effects

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Avg. Fall GPA</th>
<th>% below a 2.0 GPA</th>
<th>DFW Rate</th>
<th>Fall to Fall Retention Rate</th>
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<td>Bridge-TLC</td>
<td>200</td>
<td>2.96</td>
<td>12%</td>
<td>13.10%</td>
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<tr>
<td>Bridge Only</td>
<td>161</td>
<td>2.72</td>
<td>16%</td>
<td>18.14%</td>
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<tr>
<td>TLC Only</td>
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<td>2.71</td>
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<td>18.16%</td>
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## 2007 Bridge-Themed Learning Community Impact on Fall Semester GPA: ANCOVA Results

<table>
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<th>N</th>
<th>Avg. Fall GPA</th>
<th>Avg. Adjusted Fall GPA</th>
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<tr>
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<td>2.96</td>
<td>2.85</td>
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<td>All Others</td>
<td>2056</td>
<td>2.57</td>
<td>2.59</td>
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</tbody>
</table>

**Note 1:** Bolded items are significantly different based on ANCOVA Results ($p < .05$). Covariates included the following: H.S. GPA, SAT score, gender, and age.

**Note 2:** Comparison group includes only students enrolled in First-Year Seminars.
### 2008 Bridge-Themed Learning Community Combination has Positive Effects

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Avg. Fall GPA</th>
<th>% below a 2.0 GPA</th>
<th>DFW Rate</th>
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<td>223</td>
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### 2008 Bridge-Themed Learning Community Impact on Fall Semester GPA: ANCOVA Results

<table>
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<tr>
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<th>N</th>
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<td><strong>2.67</strong></td>
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**Note 1:** Bolded items are significantly different based on ANCOVA Results ($p < .10$). Covariates included the following: H.S. GPA, SAT score, gender, and age.

**Note 2:** Comparison group includes only students enrolled in First-Year Seminars.
## Indianapolis First-Time, Full-Time Cohort Five-Year Retention Bridge/TLC Combination

### Participants vs. Non-Participants

<table>
<thead>
<tr>
<th>Year</th>
<th>Initial Totals</th>
<th>1 Year</th>
<th>2 Years</th>
<th>3 Years</th>
<th>4 Years</th>
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<tbody>
<tr>
<td></td>
<td>% retained</td>
<td>% graduated</td>
<td>% retained</td>
<td>% graduated</td>
<td>% retained</td>
<td>% graduated</td>
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<td><strong>Fall 2003 Cohort</strong></td>
<td></td>
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<tr>
<td>Bridge/TLC Partic</td>
<td>116</td>
<td>71%</td>
<td>0%</td>
<td>56%</td>
<td>0%</td>
<td>57%</td>
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<td>All Others</td>
<td>2039</td>
<td>64%</td>
<td>0%</td>
<td>51%</td>
<td>1%</td>
<td>46%</td>
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<tr>
<td>Total</td>
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<td>64%</td>
<td>0%</td>
<td>52%</td>
<td>1%</td>
<td>46%</td>
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<td><strong>Fall 2004 Cohort</strong></td>
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<tr>
<td>Bridge/TLC Partic</td>
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<td>74%</td>
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<td>68%</td>
<td>1%</td>
<td>58%</td>
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<td>All Others</td>
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<td>0%</td>
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<td>46%</td>
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<td>1%</td>
<td>54%</td>
<td>1%</td>
<td></td>
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<tr>
<td>Total</td>
<td>2269</td>
<td>65%</td>
<td>1%</td>
<td>54%</td>
<td>1%</td>
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<td><strong>Fall 2007 Cohort</strong></td>
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<tr>
<td>Bridge/TLC Partic</td>
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<td>Category</td>
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<td>Mean</td>
<td>Std. Deviation</td>
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<td>------</td>
<td>------</td>
<td>----------------</td>
<td></td>
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<tr>
<td>Social Integration/Sense of Community</td>
<td>916</td>
<td>4.41</td>
<td>.55</td>
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<td>.64</td>
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Factors that Significantly Predict Overall Satisfaction with Summer Bridge

- Course Activities
- College Adjustment
- Campus Resources
- Interactions with Instructional Team Members

adjusted $R^2 = .215$, $F(9, 756)=23.97$, $p<.0001$.
Summer Bridge (Two-Week) Student Questionnaire Results

98% of 2008 students surveyed (n=414) said they would recommend the Summer Bridge program to other first-year students.

2007 = 98%
2006 = 99%
2005 = 96%
2004 = 98%
TLC Questionnaire Results 2008 (N = 455)

- 76% reported that they were “Satisfied” or “Very Satisfied” with their TLC Experience.
- 50% reported that they participated in a community service or volunteer activity.
- 73% reported that they participated in a campus activity or event outside of class.
- 51% reported that they participated in an activity or event in the Indianapolis community.
## Top 5 Self-Reported Benefits of 2008 TLCs

<table>
<thead>
<tr>
<th>Benefit</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formed one or more friendships that I will maintain after the semester.</td>
<td>454</td>
<td>4.19</td>
<td>0.97</td>
</tr>
<tr>
<td>Exchanged ideas with student whose views are different from my own.</td>
<td>452</td>
<td>3.80</td>
<td>0.99</td>
</tr>
<tr>
<td>Understood connections between different disciplines and courses.</td>
<td>455</td>
<td>3.73</td>
<td>0.85</td>
</tr>
<tr>
<td>Became more effective with communicating my thoughts in speaking.</td>
<td>455</td>
<td>3.67</td>
<td>0.91</td>
</tr>
<tr>
<td>Became more effective with communicating my thoughts in writing.</td>
<td>454</td>
<td>3.65</td>
<td>0.98</td>
</tr>
</tbody>
</table>
Implications

- The collective impact of programs may be greater than any one program or intervention.
- Programs that are tailored to meet the diverse needs of students are optimal.
- Students seem to react positively to early interventions that facilitate positive connections, interactions, and equip them with skills necessary to effectively adjust to college.
- Early interventions can have positive long term impacts.
Next Steps

- Continue to develop assessment techniques and methods to investigate impacts of multiple interventions.
- Conduct focus groups or individual interviews with students participating Bridge-TLC to enhance understanding of experiences.
- Determine if some student populations and majors are especially appropriate for Bridge-TLC combination.
- Continue to develop pedagogical strategies that strengthen the positive effects of both programs.
- Use more methods to assess direct learning outcomes.
Assessment Challenges

- Defining and measuring learning.
- Using assessment results to improve teaching and learning.
- Identifying what program components have the most positive educational outcomes and for what groups of students.
- Knowing how to best serve the most at-risk students.
- Communicating results in a timely manner so they are used when decisions are made.
- Communicating and publicly reporting the bad news.
- Assessing programs that are experiencing or will experience significant growth or change.
University College includes numerous support programs, grant initiatives, and academic courses. In order to facilitate ongoing communication with the campus community and outside constituencies concerning the effectiveness of all programs in contributing to student success, University College developed a comprehensive assessment plan, which includes qualitative and quantitative methodologies for evaluating particular program components/operations. The three-phase approach model incorporated by University College includes an assessment of needs, processes, and outcomes.

Virtually all of University College's programs, including orientation, advising, student mentoring, learning communities, academic support for gateway courses, summer bridge, and honors are completed in cooperation with other undergraduate schools and units. Assessment results are used to continuously improve programs and to ensure unit mission alignment.
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