Themed Learning Communities and Service Learning Leveraged for Student Success

Presented by Michele J. Hansen and Tom Hahn
The Annual Conference on The First-Year Experience
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Overview

• What TLCs and Service Learning (two High-Impact Practices leveraged for student success) look like at IUPUI
• Assessment Methods
• Assessment Findings
• Implications
• Discussion

Presentation found at http://irds.iupui.edu
Institutional Context

Indiana University-Purdue University Indianapolis (IUPUI)

• Recognized for Learning Communities & the First Year Experience (U.S. News)
• For 13 consecutive years, U.S. News has highlighted IUPUI for offering programs that help ensure a positive collegiate experience for new freshman and undergraduates
• Large Urban Public Research University
• Student population of just over 30,000 students
• First-Time cohort just over 3,500 and New External Transfers just over 1,200 each year
• Over 250 degree programs from both Indiana & Purdue Universities, guided by the Principles of Undergraduate Learning
• Majority of First-Year students commute to campus (60%) and about 40% are Federal Pell Recipients
High-Impact Practices in the First-Year

“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)
Examples of High Impact Practices

- First-year Seminars
- Undergraduate Research
- Study Abroad
- Diversity/Global Learning
- Service Learning Courses
- Capstone Courses and Projects
- Internships
- Writing-Intensive Courses
- Learning Communities
- First-Year Seminar & Experiences
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)
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.

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

Themed Learning Communities (TLCs) at IUPUI

Essential elements of TLCs:

- Offered in first fall semester for First-Year students
- Cohort of 25 students
- 3 or more linked courses
- Instructional team (faculty member, advisor, peer mentor)
- All TLCs have an embedded First-Year Seminar
- Interdisciplinary theme & connections
- Learning beyond the classroom
TLCs at IUPUI

• 40 sections serving just under 1,000 students

Theme examples:
“Serving Others through Engineering Design”
“Like a Girl - Gender, Language, and Power”
“Changing Perceptions from the Inside Out”
“Baby I Was Born This Way”
“Dangerous Minds, Dangerous Policies”
“Philanthropy is Not Just for Millionaires”
“Exploring Majors, Careers, the Real World and YOU!”
“Molecules to Medicines”

More information available at http://tlc.iupui.edu/
Service Learning at IUPUI

Service learning is defined as a "course-based, credit bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility" (Bringle & Hatcher, 2009, p. 38).
SL Taxonomy to Guide Practice and End of the Semester Course Census

1=Not at all   2=Low intensity   3=Medium intensity   4=High intensity

1) To what extent is your community partner involved in course planning?
2) To what extent does the course syllabus describe and connect the community project to course content and assignments?
3) To what extent does the course engage students in diverse interactions and dialogue with peers and community members across a range of experiences and perspectives?
4) To what extent are civic competencies integrated into student learning?
5) To what extent do you require students to critically reflect on their service learning course experiences?
6) To what extent is assessment used for improvement of course and community project?
Service Learning Faculty Development Activities

Center for Service Learning offers seminars and ad hoc training on the following:
- Designing a service learning course
- Best practices for finding and sustaining community partnerships
- Navigating logistical issues for an effective service experience
- Facilitating critical reflection
- Assessing civic outcomes
- Visiting scholars throughout the year
Examples of IUPUI Service Learning Project

- Computer Science students have helped non-profit agencies develop and maintain databases.
- Various courses have partnered with a non-profit agency to have students work directly with formerly incarcerated women on developing computer skills and creating resumes.
- Chemistry students have worked with community organizations to test air, soil, and water quality for residents.
- Sociology students have worked with agencies that serve the homeless.
Learning Communities, First Year Seminars, and Service Learning as High Impact Practices

- This is what we know: First Year Seminars, Learning Communities, and Service Learning are HIPs - and we know HIPs matter.
- We know that HIPs work for (student populations) and we know that more HIPs are better (Finley, 2013).
- We also know that it is possible to have "low impact" HIPs. In other words, having TLCs and Service Learning isn't enough - we must do them well.
Assessment Methods

- Employ Mixed-Method designs using qualitative and quantitative methods.
- Attempt to understand how TLCs and Service Learning 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 National Survey of Student Engagement
- Conduct focus groups and individual interviews.
- Collect direct measures of student learning (e.g., embedded course assessment as part of Reaccreditation efforts)
TLCs Engaging Experiences
Fall 2014 N=757, Some Items Had Missing Cases. Students’ self-report on end-of-course questionnaire.

% TLC Students Participating in...

- Integrative Assignments: 93% (646)
- Community Service or Volunteer: 69% (480)
- Campus Activity (speaker, film, workshop): 69% (477)
- Community Event (no service such as festivals, museums): 53% (370)
TLCs and First-Year GPAs

Average Fall GPAs of TLC Participants Compared to Non-Participants

Note: TLC Participants includes students enrolled in a Fall TLC that completed the course. Nonparticipants include students enrolled in a first-year seminar that was not part of a TLC.
2014 TLC Impact on First Year GPA: ANCOVA Results

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Avg. Cumulative GPA</th>
<th>Adjusted Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC</td>
<td>859</td>
<td>2.72</td>
<td>2.78</td>
</tr>
<tr>
<td>Non-Participants</td>
<td>2212</td>
<td>2.72</td>
<td>2.71</td>
</tr>
<tr>
<td>Overall</td>
<td>3070</td>
<td>2.72</td>
<td></td>
</tr>
</tbody>
</table>

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 Participants’ One-Year Retention Rates Compared to Nonparticipants

Note: One-year retention rates are significantly higher for TLC participants compared to nonparticipants even when taking academic preparation and demographics into account for the 2007, 2010, and 2011 cohorts (HS GPAs, SAT scores, gender, income level, and admit date). Based on logistic regression results.
Indianapolis Only 2011 First-Time, Full-Time Cohort University College Students Only

Four-Year Graduation Rates Graduated from IUPUI Indianapolis

Summer Bridge
- Participants: 17%
- Nonparticipants: 12%

Themed Learning Communities (TLCs)
- Participants: 16%
- Nonparticipants: 12%

Summer Bridge - TLCs
- Participants: 16%
- Nonparticipants: 13%

First-Year Seminars
- Participants: 14%
- Nonparticipants: 8%
“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).
TLC End-of-Course Questionnaire

**Sense of Belonging and Community** $\alpha = .88$
- “Form one or more friendships that I will maintain after the Semester”
- “Feel a sense of belonging at IUPUI”

**Integrative Thinking and Learning** $\alpha = .91$
- “Understood connections between different disciplines and courses.”
- “Develop a better understanding of complex real-world social problems and issues.”

**Peer Interactions** $\alpha = .73$
- “Discuss ideas from the TLC courses with peers outside of class”
- “Exchange ideas with a student whose views were different from your own”

**Communication Skills** $\alpha = .81$
- “Became more effective with communicating my thoughts in writing.”
- “Became more effective with communicating my thought in speaking.”

**Faculty Interactions (only 1 item)**
- “Discussed course topics, ideas, or concepts with a faculty member outside of class”
Which Course Components make Significant Impact on Student Satisfaction with Learning Experiences?

**Integrative Thinking and Learning**
- Understand connections between different disciplines and courses
- Develop a better understanding of complex real world social problems or issues
- Apply what I learned in one course to another course in my learning community
- Apply knowledge gained in learning community courses to broader community or social issues
- Apply course concepts to my own life experiences

**• Sense of Belonging and Community**
- Form one or more friendships that I will maintain after the Semester
- Feel a sense of belonging at IUPUI
- Feel connected with other IUPUI students
- See myself as part of the IUPUI community

**• Peer Interactions**
- Discussed ideas from the TLC courses with peers outside of class.
- Exchanged ideas with students whose views are different from my own.
Which Course Components make Significant Impact on Intention to Persist at IUPUI?

• **Sense of Belonging and Community**
  – Form one or more friendships that I will maintain after the Semester
  – Feel a sense of belonging at IUPUI
  – Feel connected with other IUPUI students
  – See myself as part of the IUPUI community
TLCs with Service Learning

Number of Student Participants

Fall 2014

- TLC: 591
- TLC Service Learning: 293

Fall 2015

- TLC: 591
- TLC Service Learning: 278
## 2014 TLC-Service Learning Impact on First-Year GPA: ANCOVA Results

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Avg. Cumulative GPA</th>
<th>Adjusted Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC-Service Learning</td>
<td>286</td>
<td>2.81</td>
<td>2.83</td>
</tr>
<tr>
<td>TLC Not Service Learning</td>
<td>584</td>
<td>2.65</td>
<td>2.64</td>
</tr>
<tr>
<td>Overall</td>
<td>870</td>
<td>2.70</td>
<td></td>
</tr>
</tbody>
</table>

\textbf{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.
### 2015 TLC-Service Learning Impact on Fall GPA: ANCOVA Results

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Avg. Cumulative GPA</th>
<th>Adjusted Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLC-Service Learning</td>
<td>272</td>
<td>2.99</td>
<td>3.00</td>
</tr>
<tr>
<td>TLC Not Service Learning</td>
<td>572</td>
<td>2.89</td>
<td>2.89</td>
</tr>
<tr>
<td>Overall</td>
<td>844</td>
<td>2.93</td>
<td></td>
</tr>
</tbody>
</table>

**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

- Understand connections between different disciplines and courses
- Apply what I learned in one course to another course in my learning community
- Become more effective with communicating my thoughts in writing

<table>
<thead>
<tr>
<th></th>
<th>TLC-Service Learning</th>
<th>TLC No Service Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand connections</td>
<td>3.95</td>
<td>3.70</td>
</tr>
<tr>
<td>different disciplines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply what I learned</td>
<td>4.10</td>
<td>3.70</td>
</tr>
<tr>
<td>in one course to another</td>
<td></td>
<td></td>
</tr>
<tr>
<td>course in my learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Become more effective</td>
<td>3.80</td>
<td>3.60</td>
</tr>
<tr>
<td>with communicating my</td>
<td></td>
<td></td>
</tr>
<tr>
<td>thoughts in writing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Outcome</th>
<th>TLC-Service Learning</th>
<th>TLC No Service Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a better understanding of complex real world social problems or issues</td>
<td>4.08</td>
<td>3.79</td>
</tr>
<tr>
<td>Apply knowledge gained in learning community courses to broader community or social issues</td>
<td>4.02</td>
<td>3.54</td>
</tr>
<tr>
<td>Apply course concepts to my own life experiences</td>
<td>3.94</td>
<td>3.67</td>
</tr>
</tbody>
</table>

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”
One-Year Retention Rates

2014 Cohort One-Year Retention Rate

- TLC-SL: 74%
- TLC no SL: 71%
- FYS All Others: 74%
Fall-Spring Retention Rates

2015 Fall-Spring Retention Rates

- TLC-SL: 94%
- TLC no SL: 91%
- FYS All Others: 88%

NSSE Results: HIP Participation First-Year Students
Learning Community, Undergraduate Research, Service Learning

Number of HIP Participated In

<table>
<thead>
<tr>
<th>Number of HIP Participated In</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>133</td>
</tr>
<tr>
<td>One</td>
<td>286</td>
</tr>
<tr>
<td>Two</td>
<td>119</td>
</tr>
<tr>
<td>Three</td>
<td>11</td>
</tr>
</tbody>
</table>

“Two” represents Themed Learning Community-Embedded First Year Seminar and Service Learning. Do not emphasize undergraduate research in FY.

Results shown for N = 11 may not be reliable.
NSSE Results HIPs – Higher Order Learning FY Students

Means Higher-Order Learning Scores by Number of High Impact Practices First Year

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.
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.
# Underserved Students Participation and Outcomes: TLCs

<table>
<thead>
<tr>
<th>Student Characteristic</th>
<th>TLC Participants</th>
<th>Nonparticipants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>One-Year Retention (any IU)</td>
</tr>
<tr>
<td>African American</td>
<td>94</td>
<td>76%</td>
</tr>
<tr>
<td>Latino(a)/Hispanic</td>
<td>74</td>
<td>74%</td>
</tr>
<tr>
<td>Afr. American, Latino,(a) Two or More Races</td>
<td>209</td>
<td>73%</td>
</tr>
<tr>
<td>First Generation</td>
<td>117</td>
<td>71%</td>
</tr>
<tr>
<td>Received Federal Pell Grant (proxy for low income)</td>
<td>435</td>
<td>72%</td>
</tr>
</tbody>
</table>

Bolded items significantly different based on independent samples t-test or chi-square results.
## Underserved Students Participation and Outcomes: TLC Service Learning

<table>
<thead>
<tr>
<th>Student Characteristic</th>
<th>TLC Service Learning Participants</th>
<th>TLC Participants (No Service Learning)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>One-Year Retention</td>
</tr>
<tr>
<td>African American</td>
<td>26</td>
<td>73%</td>
</tr>
<tr>
<td>Latino(a)/Hispanic</td>
<td>33</td>
<td>70%</td>
</tr>
<tr>
<td>Afr. American, Latino, Two or More Races</td>
<td>70</td>
<td>74%</td>
</tr>
<tr>
<td>First Generation</td>
<td>117</td>
<td>71%</td>
</tr>
<tr>
<td>Received Federal Pell Grant (proxy for low income)</td>
<td>139</td>
<td>71%</td>
</tr>
</tbody>
</table>

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

• Employed a stratified random sample by gender and ethnicity.
• Conducted 14 semi-structured focus groups lasting an hour. Students were also asked to complete a short questionnaire.
• IRB approved $15 incentive (provided on student with university issued IUPUI JagTags)
• Conducted one semester or one year and one semester after the students participated in a TLC.
• All focus groups were transcribed verbatim.
• Used Atlas.ti qualitative software to code and identity emergent themes in an effort to provide rich and detailed insight into the levels of students’ unique experiences.
Participants

48 total participants

Gender
- Female: 37
- Male: 10
- Missing: 1

Ages
- Ages 18-19: 28
- Ages 20-21: 20

Ethnicity
- African American: 7
- Asian American: 1
- Latino/Hispanic: 5
- White: 34
- Other: 1
Major Themes Emerged
Service Learning in Context of TLC

• Broadened Perspectives
• Enhanced appreciation of diversity and differences
• Interactions with community members had a profound impact on students’ mindsets and ways of conceptualizing social issues
TLC Service Learning

“I went to the day care center and it’s a homeless shelter for families with children...it really just opened my eyes. There are different perspectives. I worked in the play room so I got to play with all the kids there and actually had a lot of fun with it and really enjoyed it. So that’s – it changed my perspective about the homeless ---not just dirty and begging on the streets”
TLC Service Learning

“We served food we learned that homeless people don’t look homeless at all –we learned to try not to be as judgmental as people like. Our TLC class was a diversity class. Really learned not to judge people…”
TLC Service Learning

“Did service learning at food bank. I think that going there just opened up your eyes on how many people are in need of different things.”

“Being able to be with a group of peers all wanting to be nurses and trying to figure out how to help other people. I think it gave us a broader idea of nursing…you don’t have to just be in a hospital to do nursing it doesn’t matter how small the event in order to help someone. Gathered friendships and connections with the food bank and with the people that your working with.”
“Main point that Dr. ____ wanted to get across the main objective for going to these different places was patient contact – since most of us were going into either radiography or nursing or something like that he wanted us to in contact with people that you don’t necessarily see every day....”

“We volunteered for four or five hours working with the patients. I led a sing along – which was really funny because most of them can’t hear anywhere but it was fun for them. It was enjoyable for them. And then we wrote an essay, a reflection about our experiences....the Biology tie in was how does Alzheimer disease work – covering the nervous system so it worked out really well.”
TLCs Service Learning

“We went to the Ronald McDonald house and cleaned up. It was fun because I got to create closer ties with the group members and we were able to see the children that were there. They were happy even in their situation. That made me want to volunteer more. It is an opportunity to meet new people and do that makes you feel good inside.”
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.
Implications for Practice

- Faculty development
- Providing students with opportunities for reflection
- Integrative learning assignments
- Intentionally linking themes with SL experiences
- Using assessment results for program improvements
Lessons Learned From Local Assessment and National Literature

HIPs in First Year

• 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.
Discussion and Questions!?
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Contact us with questions or requests for information!