HIGH IMPACT PRACTICES: MAPPING STUDENT PERSPECTIVE TO INSTITUTIONAL PRIORITIES

Natasha Cook, M.Sc., Kerry Ritchie, Ph.D., Sofie Lachapelle, Ph.D., and Karen Menard, Ph.D.

Institutional Analysis and Research and Open Learning and Educational Support

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ABOUT THE UNIVERSITY OF GUELPH

- Founding colleges established 150 years ago
  - Ontario Agricultural College, Ontario Veterinary College, Macdonald Institute
  - Now comprises of 7 colleges
- Doctoral, research-intensive university
  - # undergraduate students = 26,572
  - # graduate students = 2,695
  - # faculty = 759

Source: 16/17 Data, Institutional Analysis and Research
A COLLABORATIVE PROJECT ACROSS CAMPUS

• **Who:** Joint initiative among various offices
  – AVP Academic
  – Institutional Analysis and Research
  – Open Learning & Educational Support
  – 5 colleges (Associate Dean Academics, Curriculum managers)

• **What:** Understanding high impact practices at Guelph from the student perspective

• **Why:** Discovering new tools to enhance retention and student success and establish a baseline on high impact practice engagement
LEARNING OBJECTIVES

• Explore ways in which student perspective data can inform the SEM process

• Consider HIPs as a tool for enhancing retention and student success

• Map student perspectives to institutional learning outcomes and priorities

• Understand student perception of high impact practices
OVERVIEW OF TALK

1. SEM at the University of Guelph

2. What are High Impact Practices (HIPs)?

3. The HIPs project at Guelph

4. Linking HIPs to SEM Goals
SEM at U of Guelph: Principles

Working in an integrated fashion, SEM adheres to the following principles:

1. Admissions and enrolment strategies are aligned with institutional mission and priorities
2. Admission and enrolment strategies include physical and human resource planning to ensure capacity and ongoing quality
3. Programs are of high quality and meet evolving student and societal demand resulting in continued student engagement beyond graduation
4. Co-curricular programs provide both a supportive and enriching student environment
5. Planning is data-driven and evidence-based
SEM AT U OF GUELPH: GOALS

The goal of SEM is to attract, retain, and graduate the optimal numbers of undergraduate and graduate students in order to meet institutional priorities. Strategies include:

1. Attract **high quality students** and move the University of Guelph to a destination of choice (increase 1st choice applicants)
2. Monitor present physical capacity and identify possibilities for future scenarios
3. Identify possibilities for **distinctive academic programs** and niche markets
4. **Widen participation and diversity and ensure access**, including wellness and financial support
5. **Enhance student experience including satisfaction and engagement**
6. Monitor and ensure appropriate co-curricular support
7. Monitor and encourage increases in high impact learning practices, including experiential learning opportunities and successful pathways into labour market for recent graduates
8. Monitor and identify appropriate balance between programs as well as between undergraduate and graduate enrolment, including international students
WHAT ARE HIGH IMPACT PRACTICES (HIPs)?

• Teaching and learning practices that are deemed transformational to student learning and have been found to contribute to student success (Kuh, 2008)
What are HIPs?

- Activities both inside and outside of the classroom
- Encompass certain characteristics or “good practices” of education

The 10 High Impact Practices (Kuh 2008):

1. First Year Seminars
2. Common Intellectual Experiences
3. Learning Communities
4. Collaborative Assignments & Projects
5. Writing-Intensive Courses
6. Undergraduate Research
7. Capstone Projects & Courses
8. Diversity & Global Learning
9. Service/Community-based Learning
10. Internships
WHAT MAKES AN EDUCATIONAL EXPERIENCE “HIGH IMPACT”?  

- Student-faculty contact  
- Collaborative work  
- Prompt and constructive feedback  
- Active learning  
- Respect for diverse learning styles  
- Time on task  
- High expectations  
- Opportunity for reflection  
- Relevance through real-world applications

Kuh & O’Donnell (2013); Chickering & Gamson (1987)
HIPs & Experiential Learning

- Experiential learning: student is directly involved in the learning experience, “learning by doing”
- HIPs can drive experiential learning opportunities

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***Experiential Learning
HIGH IMPACT PRACTICE PROJECT

Institutional Analysis and Research,
Open Learning & Educational Support

City of Guelph and Centre Wellington Fire Departments
University of Guelph Human Anatomy Laboratory
Research Objectives

What is the prevalence of high impact practices at the University of Guelph?

Secondary research questions:
- Who participates in these HIPs?
- When do students participate them by?
- Where do students participate?
- How effective are these HIPs?
HOW WAS HIP ENGAGEMENT MEASURED?

• Online survey
  – Anonymous
  – ~12,000 students contacted
• Student self-report measures:
  – Demographics and academic info (gender, ethnicity, first gen, transfer, academic year)
  – Participation in HIPs
• Link to student information system
HIP QUESTION FORMAT

- **What** HIPs are students participating in?
- **Where** do students experience HIPs?
- **How** effective was the educational experience?
2017 HIP RESULTS

Student self-report measures of engagement in HIPs
2017 SURVEY SAMPLE

• Total Sample: 11,969
  o Arts, Social Science, Engineering, Physical Science, Business, Agricultural Studies

• Response bias testing
  o Gender, Age, Semester Level, College, Degree Program, and GPA

• Response rate: 27% (n=3,183)

• 63% consented to link their responses to the student registration system
SURVEY POPULATION DEMOGRAPHICS

- **Gender:** 71% female
- **Parents’ Education:** 17% no education
- **International Student:** 9% international
- **Academic status:** 94% full-time
- **Change of status:** 12% changed status
- **Transfer students:** 9% transfers
- **Co-op students:** 20% co-op
- **Minors:** 27% declared a minor
How many hips are students reporting?

% of Student Respondents

No. of HIPs Reported

% of Student Respondents

0% 5% 10% 15% 20% 25%
WHO IS EXPERIENCING HIPs?

Bachelor of Arts and Science (BAS): 88%
Bachelor of Computer Science (BComp): 45%

Average #HIPs:
- Highest: 3.25 for BScEnv (n=72)
- Lowest: 1.62 for BComp (n=132)

Note: Bachelor of Commerce (BComm) is underrepresented in the sample

Proportion of Students Reported >=2 HIPs

- BAS: 118
- BScEnv: 59
- BSc: 368
- BEng: 296
- BComm: 393
- BScAgr: 70
- BLA: 33
- BBRM: 35
- BASc: 181
- BA: 499
- BComp: 60
**What HIPs are students participating in?**

**Most common HIPs:**
Common intellectual experiences (CIE), Learning communities (LC), Collaborative assignments and projects (Collab)

**Least common HIPs:**
Capstones, Community-based learning, Diversity/global learning

*Note: one experience could be counted as more than one HIP*
WHERE ARE HIPs BEING EXPERIENCED?
WHERE ARE HIPs BEING EXPERIENCED IN CLASS?

Example: Undergraduate Research in Applied Sciences

- PSYC*2360 - Introductory Research Methods
- PSYC*3250 - Psychological Measurement
- PSYC*3380 - Non-experimental Research Methods
- PSYC*3370 - Experimental Design and Analysis
- PSYC*3900 - Psychology Research Internship
- PSYC*4870 - Honours Thesis I
- PSYC*4880 - Honours Thesis II
WHERE ARE HIPs BEING EXPERIENCED OUTSIDE OF CLASS?

Example: Undergraduate Research

- URA/USRA: 38%
- Work Study: 26%
- Volunteer: 17%
- Co-op: 4%
- Other: 16%
**How Effective was the HIP Experience?**

Most students agreed that Research and FYS emphasized student-faculty contact.

- **Research**: 80% Agree, 10% Neutral, 10% Disagree
- **Collab**: 80% Agree, 10% Neutral, 10% Disagree
- **LC**: 70% Agree, 20% Neutral, 10% Disagree
- **FYS**: 70% Agree, 20% Neutral, 10% Disagree

The chart shows the percentage distribution of responses for each category.
**How effective was the HIP experience?**

More students agreed that LCs emphasized peer-led discussion (82%) VS student-faculty contact (52%).

![Bar Chart]

- **Research**
  - Agree: 70%
  - Neutral: 10%
  - Disagree: 20%

- **Collab**
  - Agree: 80%
  - Neutral: 10%
  - Disagree: 10%

- **LC(Peer-led)**
  - Agree: 90%
  - Neutral: 5%
  - Disagree: 5%

- **FYS**
  - Agree: 70%
  - Neutral: 10%
  - Disagree: 20%
**DID THE HIP EXPERIENCE HAVE A POSITIVE IMPACT?**

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<th>Educational Experience</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
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**Learning Outcomes and HIPs**

**Top LOs**
- Communication
- C/C Thinking
- P/E Behaviour

**Average Ratings of Learning Outcomes**

- Professional/Ethical Behaviour
- Communication
- Global Understanding
- Literacy
- Critical/Creative Thinking

**Proportion**
- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
QUALITATIVE DATA

• Why did the HIP not have a positive impact on the students’ experience at Guelph?

Themes:

• Group work ➤ 140 references
• Instructor ➤ 90 references
• Course structure ➤ 78 references
• Lacks personal gains ➤ 39 references
• Too high expectations ➤ 37 references
• Course material ➤ 27 references
• Class environment ➤ 14 references
QUALITATIVE DATA CON’T

• What did students comment on at the end of the survey?
  o Experience with HIPs: “I have had great experiences with these high impact practices at the University of Guelph. I think that more integration of these practices within courses would greatly benefit students.”
  o Awareness of HIPs: “Guelph has much to offer, unfortunately I did not learn of these opportunities until my fourth year.”
NEXT STEPS

- Dissemination of survey results
  - Institution report
  - College reports

- Modeling effects of HIPs
  - Academic performance and persistence

- Educational developers
  - Create resources for faculty
  - Review gaps in curriculum and identify areas with needs
  - Use HIPs project in the broader discussion on learning outcomes assessment
**HIPs Project at U of Guelph**

- Provides a baseline measure on HIPs related to student experience and satisfaction, with a particular attention to access

- Allows us to identify gaps and areas for improvements and opportunities and respond to government priorities

- Allows us to identify student engagement and satisfaction with some HIPs and begin a deeper conversation on specific concerns or frustrations identified – ex. group work

- Engage programs on student perception of specific HIPs within their curriculum – contribute to a cycle of curricular improvements

- Contributes to research on HIPs in the context of a Canadian comprehensive university
GETTING BACK TO THE SEM GOALS AT GUELPH

4. Widen participation and diversity and ensure access, including wellness and financial support
5. Enhance student experience including satisfaction and engagement
6. Monitor and ensure appropriate co-curricular support
7. Monitor and encourage increases in high impact learning practices, including experiential learning opportunities and successful pathways into labour market for recent graduates
CONTACT INFORMATION

Natasha Cook
Research Associate, Institutional Analysis and Research
University of Guelph
ncook@uoguelph.ca

Karen Menard,
AVP, Institutional Analysis and Research
University of Guelph
kmenard@uoguelph.ca

Sofie Lachapelle
Interim Dean, College of Arts
University of Guelph
slachap@uoguelph.ca