# A Blended Faculty Community Of Inquiry:
## Linking Leadership, Course Redesign, and Evaluation

Norm Vaughan & Randy Garrison
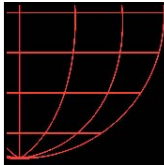
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# Overview

- Inquiry through Blended Learning Program (ITBL)
- National Survey of Student Engagement (NSSE) Framework
- Case study

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# University of Calgary
## Context

# University of Calgary

- Calgary > 1M population
- 40 yr old campus-based institution
- ~30,000 students & growing
- 80% plus HS average to get in
- Top 10 in research funding
- 81 students per class (junior level)
- Increasing student dissatisfaction

## Institutional Learning Plan

- That inquiry-based learning approaches be at the centre of the undergraduate learning experience.
- All students must have the opportunity to participate in communities of inquiry
- Learning technologies (i.e., eLearning) offer opportunities to enhance the campus experience and extend learning through the innovative use of on-line resources, asynchronous collaborative learning opportunities, and electronic communication.

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## Inquiry

- Is problem or question driven

- Typically has a small-group feature

- Includes critical discourse

- Incorporates research methods such as information gathering and synthesis of ideas

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# Community of Inquiry

- The importance of a community of inquiry is that, while the objective of critical reflection is intellectual autonomy, in reality, critical reflection is "thoroughly social and communal".
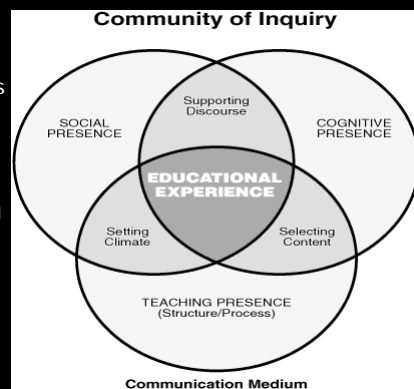
  » Lipman, 1991

# Community of Inquiry Framework

**Social Presence**
The ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities.

**Cognitive Presence**
The extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry.



**Community of Inquiry**

SOCIAL PRESENCE — Supporting Discourse — COGNITIVE PRESENCE

EDUCATIONAL EXPERIENCE

Setting Climate — Selecting Content

TEACHING PRESENCE (Structure/Process)

Communication Medium

**Teaching Presence**
The design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes.

## CoI Categories/Indicators

| ELEMENTS | CATEGORIES | INDICATORS (examples only) |
|---|---|---|
| **Social Presence** | Open Communication<br>Group Cohesion<br>Personal/Affective | Learning climate/risk-free expression<br>Group identity/collaboration<br>Self projection/expressing emotions |
| **Cognitive Presence** | Triggering Event<br>Exploration<br>Integration<br>Resolution | Sense of puzzlement<br>Information exchange<br>Connecting ideas<br>Appling new ideas |
| **Teaching Presence** | Design & Organization<br>Facilitating Discourse<br>Direct Instruction | Setting curriculum & methods<br>Shaping constructive exchange<br>Focusing and resolving issues |

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# Blended Learning Described

- Blended learning is the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies.

- Blended learning is seen as an opportunity to fundamentally redesign how we approach teaching and learning in ways that higher education institutions may benefit from increased *effectiveness, convenience and efficiency*.

(Garrison & Vaughan, 2008)

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## Why Blended Learning?

- New approaches to teaching (change culture)
- Enhance student learning
- Maximize institutional resources
- Access; convenience

## Strategic Challenges

- Awareness and understanding of inquiry and blended learning
- Student orientation (resistance)
- Commitment to fundamental redesign
- Strategic plan covering all four undergraduate years
- Teaching-research imbalance

# History of BL at U of C

- Institutional Learning Plan
- Blended Learning Position Paper
- Link to inquiry based learning
- Raising Awareness
  - Steve Sorg, UCF (2002)
  - Carol Twigg, NCAT (2004)
  - Curtis Bonk, Indiana University (2005)
  - Peter Bullen & Peter Chatterton, University of Hertfordshire (2006)
- Grant program

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# LEADERSHIP

- What are the leadership characteristics we need in higher education?

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Transformational Leaders

# Leadership Constraints

- Collegiality & consensus
- Governance model
- Loyalty to discipline; silos
- Morale; budget cuts
- Conception & selection of leaders
- Lack of senior level advocate

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## What We Did

- Draft policy, set priorities
- Provide incentives/financial support
- Strategic selection of prototypes; focus on limited number of prototypes the first year
- Single POP for support, quality assurance, and project management
- Mandatory participation in ITBL 401
- Study and evaluate all projects/developments
- Create a task group to address issues, challenges, opportunities and communicate to community

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## I&BL Program

- Faculty apply for course redesign grants ($10,000 with one $30,000 grant for a major course redesign)

- Proposal reviews and selections are made by the Inquiry Learning Action Group

- Teaching & Learning Centre provides course redesign consultation and support (define course goals and expectations, redesign learning activities and assessment assignments, adapt and develop online tools, evaluate implementation, and disseminate results)

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## Inquiry Through Blended Learning

Support Program

- *Orientation* – course redesign guide and initial meeting with representatives from the Teaching & Learning Centre, Information Technologies and the Library

- *Faculty community of inquiry* – blending of face to face luncheon meetings with online learning activities to support project development

- *Project team meetings* – Teaching & Learning Centre consultant with faculty, graduate students and staff involved in each specific project

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# National Survey of Student Engagement (NSSE)

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**National Survey of Student Engagement**

Student engagement

1. Amount of time and effort that students put into their classroom studies that lead to experiences and outcomes that constitute student success

2. Ways the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities

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**National Survey of Student Engagement**

Five clusters of effective educational practice (benchmarks)

1. Active and collaborative learning
2. Student interactions with faculty members
3. Level of academic challenge
4. Enriching educational experiences
5. Supportive campus environment

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## Active and Collaborative Learning

How often have you:

- Asked questions in class or contributed to class discussions
- Asked questions online or contributed to online discussion
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare assignments

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## Student Interactions with Faculty Members

How often have you:

- Received prompt written or oral feedback from the instructor on your academic performance
- Used email to communicate with the instructor
- Discussed ideas from our readings or classes with the instructor outside of class
- Worked with the instructor on activities other than coursework (committees, orientation, student life activities, etc)

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## Level of Academic Challenge

During this course, how much of your coursework emphasized the following mental activities:

- *Memorizing* facts, ideas, or methods from the course and readings so I can repeat them in pretty much the same form
- *Analyzing* the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
- *Making judgments* about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
- *Applying* theories or concepts to practical problems or in new situations

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## Student Learning

To what extent has your experience in this course contributed to your knowledge, skills, and personal development:

- Writing clearly and effectively
- Thinking critically and analytically
- Speaking clearly and effectively
- Analyzing quantitative problems
- Using ICT
- Working effectively with others
- Voting in elections
- Learning effectively on your own
- Understanding people of other ethnic backgrounds
- Solving complex real world problems

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## CLASSE – Classroom Survey of Student Engagement

- Classroom level adaptation of the NSSE
  (ie, student engagement at classroom level)
- Student and faculty versions
- Benchmarks
  - Engagement activities
  - Cognitive skills
  - Other educational practices
  - Class atmosphere

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## Question?

What have we learned about student engagement?

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## Conclusion

Grades, persistence, student satisfaction, and engagement go hand in hand.

National Survey of Student Engagement

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# Case Study

PSYC467 - Psycholinguistics

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## Student Engagement in ITBL Courses

| | Active and collaborative learning | Faculty to Student Interaction | Level of Academic Challenge | Learning |
|---|---|---|---|---|
| CPSC 203 | Low | Low | Moderate | Moderate |
| ENGG205 | Low | Low | High | Moderate |
| GEOG 361 | Low | Low | High | Moderate |
| GRST 205 | Low | Low | Low | Low |
| MDSC 361 | Moderate | Low | High | Moderate |
| POLI 343 | Low | Low | High | Moderate |
| POLI 541 | Moderate | Moderate | High | Moderate |
| PSYC 467 | Moderate | Low | High | Moderate |
| STAS 201 | Moderate | Low | Moderate | Moderate |
| MODE | Low | Low | High | Moderate |

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## Fall 2006

- Course initially consisted of three – 50 minute lecture periods per week

- Redesigned to incorporate a lab component and offered in a 120 minute time block – once a week
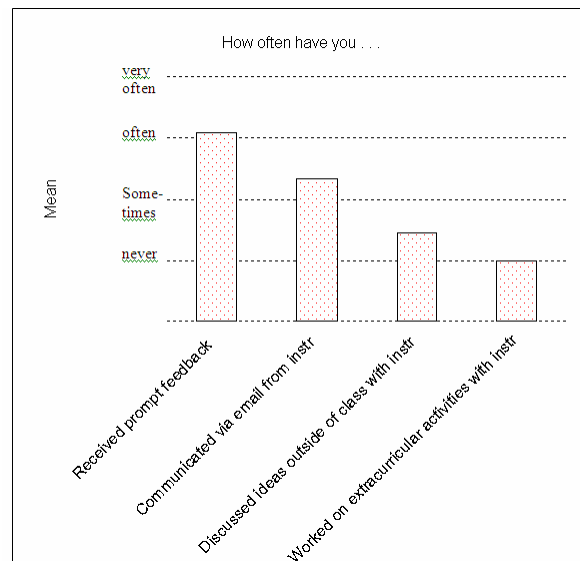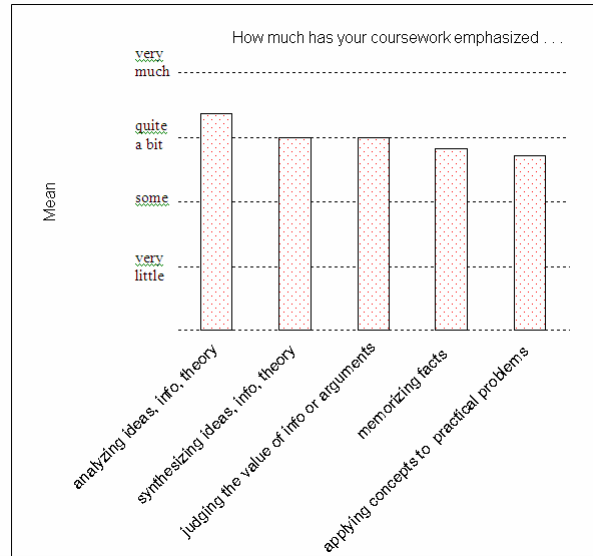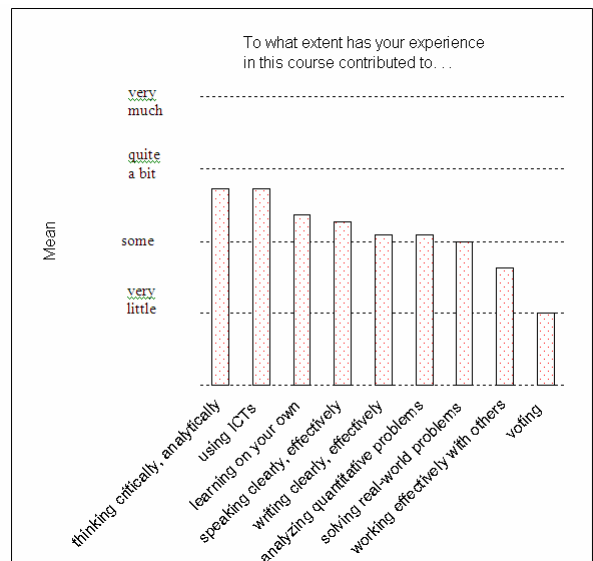
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# Active and collaborative learning



How often have you . . .

# Faculty to student interaction



How often have you . . .

# Level of academic challenge

How much has your coursework emphasized . . .

(Bar chart — Mean, y-axis from "very little", "some", "quite a bit", to "very much")

Categories: analyzing ideas, info, theory; synthesizing ideas, info, theory; judging the value of info or arguments; memorizing facts; applying concepts to practical problems

# Student learning

To what extent has your experience in this course contributed to. . .

(Bar chart — Mean, y-axis from "very little", "some", "quite a bit", to "very much")

Categories: thinking critically, analytically; using ICTs; learning on your own; speaking clearly, effectively; writing clearly, effectively; analyzing quantitative problems; solving real-world problems; working effectively with others; voting

# Winter 2007

Course redesigned for the winter 2007 semester based on feedback from the NSSE survey results

**Lecture component**

- Peer reviewed journal articles used to supplement course textbook
- Article critique assignment
  - Student groups select an article to critique each week
  - Weekly online discussions about the articles – moderated by these student groups
  - Groups then make a class presentation based on an analysis & synthesis of the online discussion
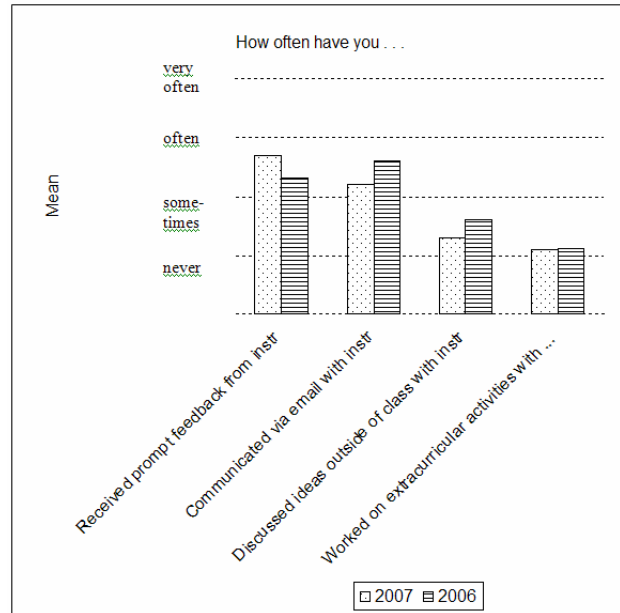
**Lab Component**

- Individual experiments redesigned to become team based
- Data collection required outside of class time
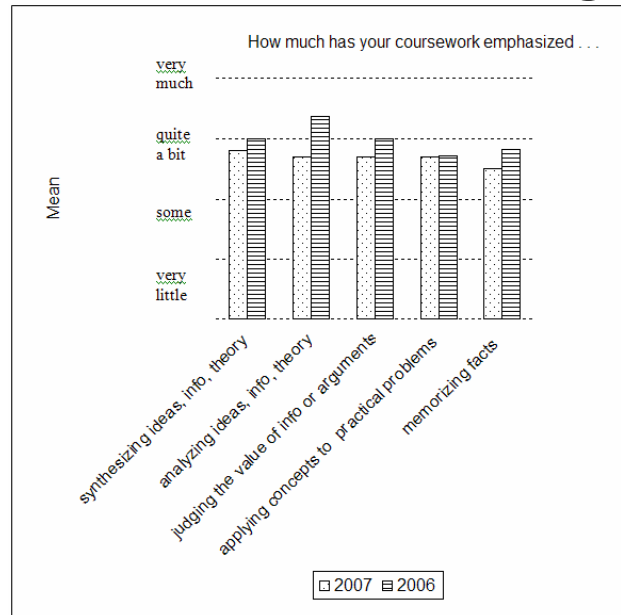- Instructor and graduate teaching assistant demonstrated and discussed their current research in the labs
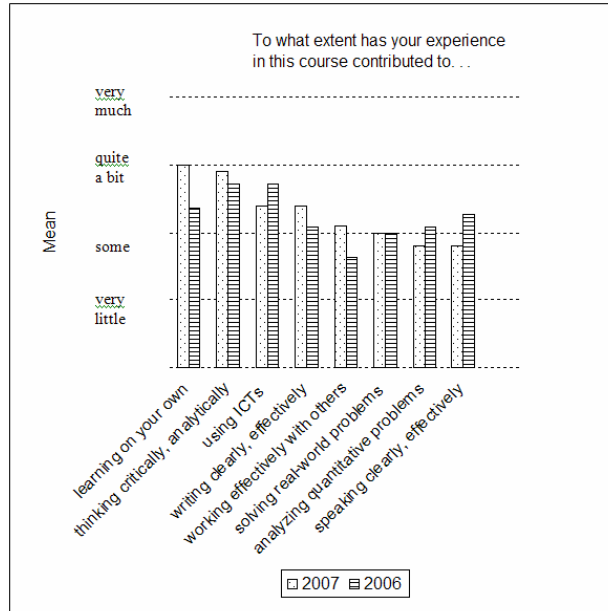
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# Active and collaborative learning



How often have you . . .

Mean: very often / often / some-times / never

worked with classmates outside of class / worked with other students during class / contributed to online discussion / made a class presentation / contributed to inclass discussion

□ 2007 ▤ 2006

# Faculty to student interaction



# Level of academic challenge

# Student learning



To what extent has your experience in this course contributed to. . .
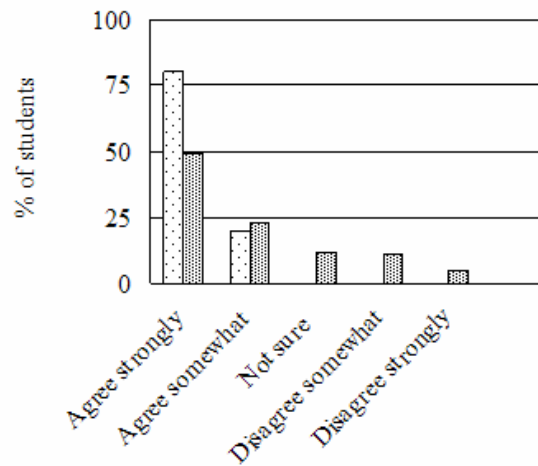
# Student satisfaction



Overall, I am satisfied with this course:

# Student Success

     Winter 2007

Drop/withdrawal = 15%    Drop/withdrawal = 0%

### Final Course Grades

A = 64%                A = 82%

B = 36%                B = 12%

C = 0%                 C = 6%

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# Instructor Feedback

- Instructors need to be more intentional about creating opportunities for active and collaborative learning
- There needs to be clear expectations, structure, and direction

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## Design Appropriate Activities

- Students must be tasked to solve a problem to move them through to integration and resolution (ie, HOL) (Murphy, 2004)

- "Faculty need to be more directive in their assignments ..." (Meyer, 2003, p. 8)
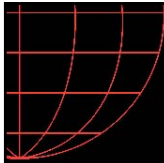
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## Conclusion

Improvement in higher education will require converting teaching from a "solo sport" to a "community-based research activity".

(Carnegie Mellon University)

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# QUESTIONS

http://tlc.ucalgary.ca/teaching/programs/itbl/

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# Blended Learning in Higher Education

**Framework, Principles, and Guidelines**

http://ca.wiley.com/WileyCDA/WileyTitle/productCd-0787987700.html

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