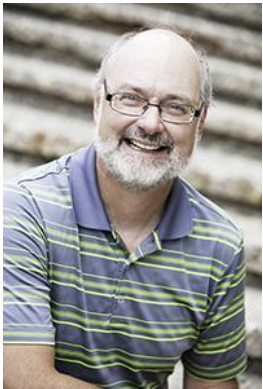


Designing an inquiry-based approach to online & blended learning

Norm Vaughan
Mount Royal University
Calgary, Alberta, Canada



Learning Outcomes

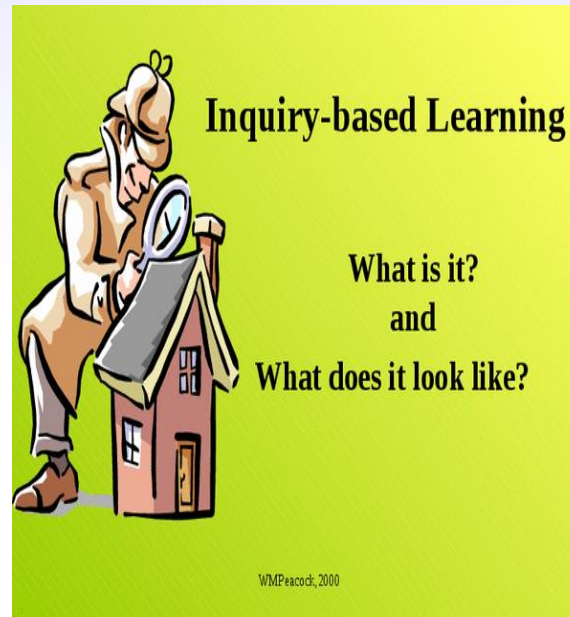
- Defining a community of inquiry
- Discussing an inquiry through blended learning approach
- Creating a planning template for a blended or online course



Community of Inquiry (CoI)

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Inquiry-based learning



Buzzword, jargon, or potentially a valid approach to learning - your thoughts?

Inquiry

- Is problem or **question driven**
- Typically has a **small-group** feature
- Includes **critical discourse**
- Is frequently **multi-disciplinary**
- Incorporates **research methods** such as information gathering and synthesis of ideas

University of Calgary



UNIVERSITY OF
CALGARY

Inquiry

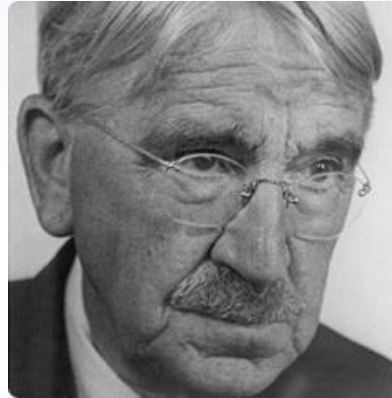
- Knowledge rests not on facts or isolated skills but on principles of inquiry.
(Joseph Schwab, 1962)



Inquiry

- . . . inquiry as a technology that creates knowledge

John Dewey, 1938



"Education, therefore, is a process of living and not a preparation for future living."

John Dewey

Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources

Januszewski & Molenda, 2008



Community

- ... community means meaningful association, association based on **common interest** and endeavor. The essence of community is **communication**

John Dewey, 1916



If we teach today's students as we taught yesterday's, we rob them of tomorrow.
- John Dewey

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”.

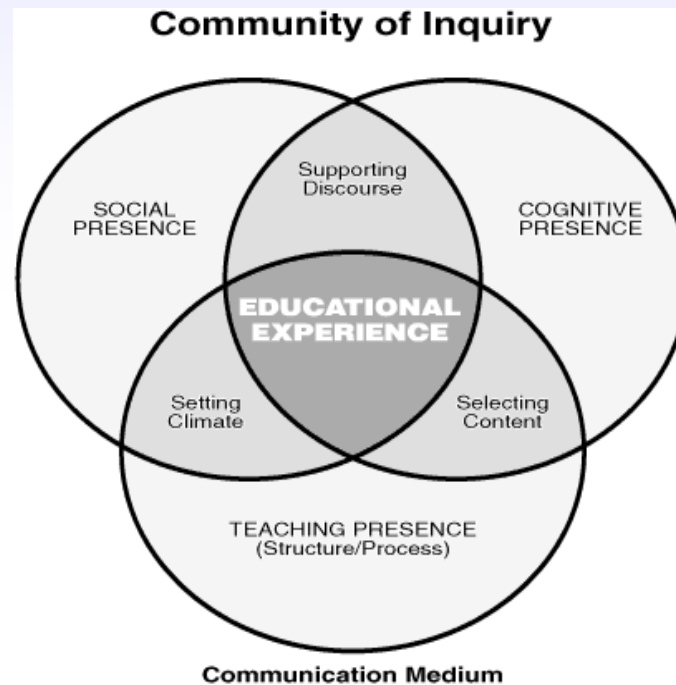
[Matthew Lipman](#), 1991



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.

Teaching Presence

The **design, facilitation and direction** of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. ([Randy Garrison, Terry Anderson & Walter Archer, 2000](#))

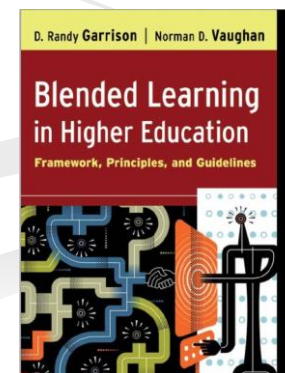
Inquiry through Blended Learning (ITBL)

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Blended Learning Described

- . . . **organic** integration of thoughtfully selected and complementary face-to-face and online approaches and technologies.
- . . . 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)



Inquiry through Blended Learning (ITBL)

- Design considerations
 1. Before a face to face (synchronous) session
 2. During a face to face (synchronous) session
 3. After a face to face (synchronous) session
 4. Preparation for the next face to face (synchronous) session

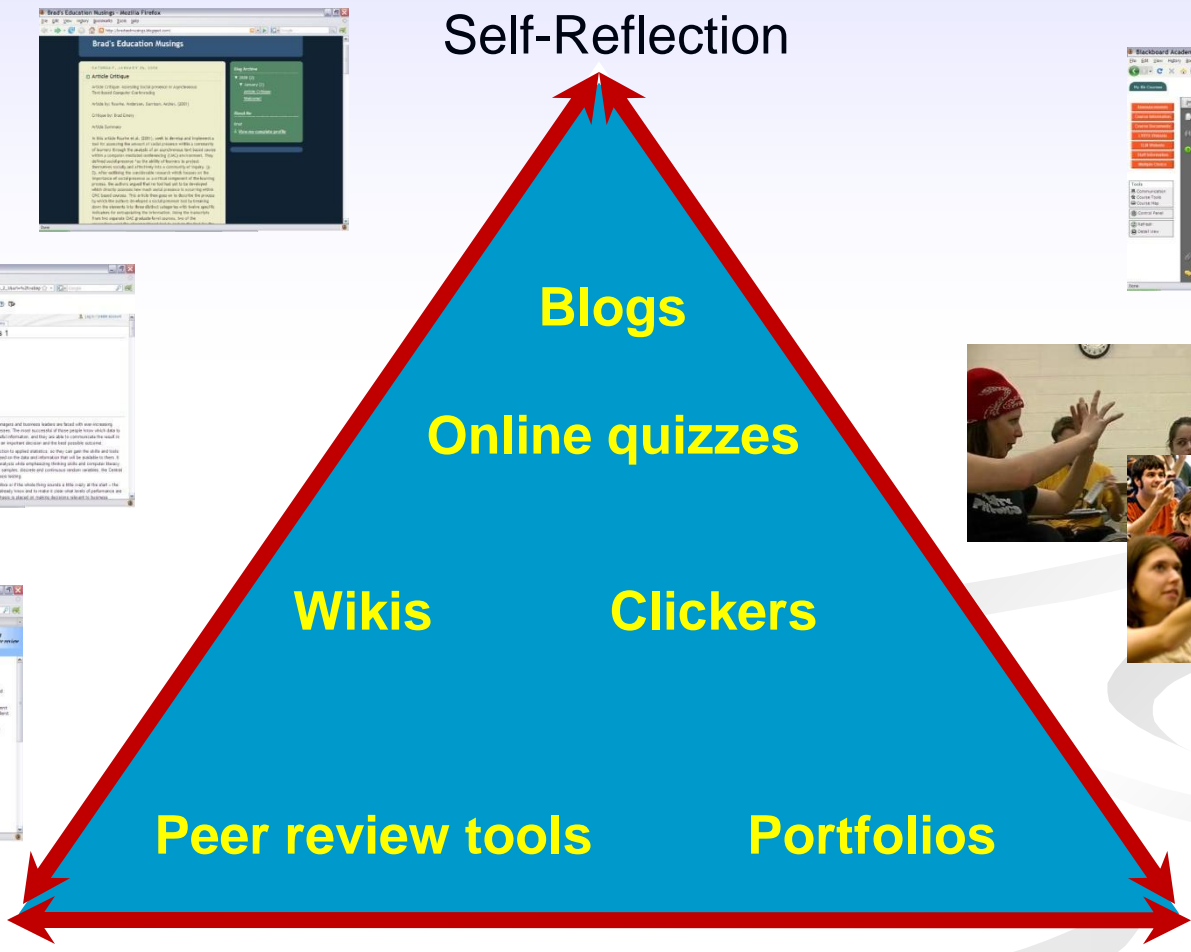
Modified Triad Approach

Learning Outcomes	Assessment Activities	Before a Synchronous Session	During a Synchronous Session	After a Synchronous Session	Tools
<p>What do you want your students to know when they have finished your course (e.g. key learning outcomes – knowledge, skills and attitudes)?</p>	<p>How will you and your students know if they have achieved these learning outcomes (e.g. opportunities for self, peer and instructor assessment)?</p>	<p>How will you help students determine what prior knowledge and experience they have with the assessment activity?</p>	<p>How will students synchronously interact and engage with the assessment activity?</p>	<p>What portion of this assessment activity will require “reflective time” for interaction and communication?</p>	<p>What tools could be used to help organize, facilitate, and direct these assessment activities?</p>

Learning Outcomes

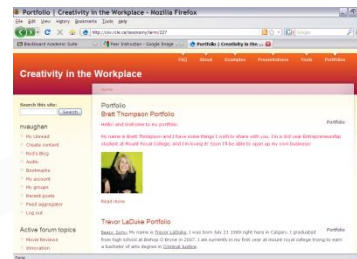
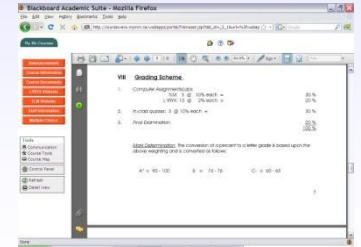
Learning Outcomes	Assessment Activities	Before a Synchronous Session	During a Synchronous Session	After a Synchronous Session	Tools
Communicate effectively, using the language and concepts of teaching and learning					

Assessment Triad Approach



Peer Feedback

Teacher/Expert Feedback



Assessment Activities

Learning Outcomes	Assessment Activities	Before a Synchronous Session	During a Synchronous Session	After a Synchronous Session	Tools
Communicate effectively, using the language and concepts of teaching and learning	Online quizzes -10% Journals - 20% Clicker quizzes -10% Wiki Summaries - 10% Peer review - 15% Portfolio - 35%				

Design Considerations Before Face to Face (synchronous) Session

Nature of Inquiry	Learning Activities	Technology Tools
<p>Learner</p> <ul style="list-style-type: none"> • Create a <i>triggering event</i> • Advanced organizer <ul style="list-style-type: none"> • Stimulate connections <p>Teacher</p> <ul style="list-style-type: none"> • Determine learners prior knowledge or experience with the topic or issue 	<ul style="list-style-type: none"> a) Reading/Writing b) Listening/Writing 	<ul style="list-style-type: none"> i) Communication ii) Posting or linking to pre-reading assignments iii) Digital learning objects iv) Self assessment quizzes v) Anonymous surveys vi) Discussion Forum

Before a Synchronous Session

Learning Outcomes	Assessment Activities	Before a Synchronous Session	During a Synchronous Session	After a Synchronous Session	Tools
Communicate effectively, using the language and concepts of teaching and learning	Online quizzes -10% Journals - 20% Clicker quizzes -10% Wiki Summaries - 10% Peer review - 15% Portfolio - 35%	Pre-class reading with an individual online quiz in Blackboard (4 concept questions and 1 what did you not understand question)			Social bookmarking application Quiz tool in Blackboard

Design Considerations During Face to Face (synchronous) Session

Nature of Inquiry	Learning Activities	Technology Tools
<ul style="list-style-type: none">• Defining the <i>triggering events</i> (key questions)• Beginning to <i>explore</i> the questions	a) Talking/Listening	<ul style="list-style-type: none">i) Displaying quiz or survey resultsii) Displaying and discussing digital learning objectsiii) Displaying assignments and creating/discussing assessment rubricsiv) Conducting in-class quizzesv) Small group work

During a Synchronous Session

Learning Outcomes	Assessment Activities	Before a Synchronous Session	During a Synchronous Session	After a Synchronous Session	Tools
Communicate effectively, using the language and concepts of teaching and learning	Online quizzes -10% Journals - 20% Clicker quizzes -10% Wiki Summaries - 10% Peer review - 15% Portfolio - 35%	Pre-class reading with an individual online quiz in Blackboard (4 concept questions and 1 what did you not understand question)	Study group discussions about the concept questions. Mini-lecture from the instructor to reinforce the concepts and diagnose student misconceptions		Social bookmarking application Quiz tool in Blackboard

Design Considerations After Face to Face (synchronous) Session

Nature of Inquiry	Learning Activities	Technology Tools
<ul style="list-style-type: none"> Further <i>exploration</i> and a start towards <i>tentative integration</i> through the ability to connect theory to practice/ application 	<ul style="list-style-type: none"> a) Reading/Writing b) Talking/Listening + Reading/Writing <p>Preparation for next synchronous session</p> <ul style="list-style-type: none"> a) Reading/Writing 	<ul style="list-style-type: none"> i) Anonymous surveys ii) Communication iii) Individual and group project work

After a Synchronous Session

Learning Outcomes	Assessment Activities	Before a Synchronous Session	During a Synchronous Session	After a Synchronous Session	Tools
Communicate effectively, using the language and concepts of teaching and learning	Online quizzes -10% Journals - 20% Clicker quizzes -10% Wiki Summaries - 10% Peer review - 15% Portfolio - 35%	Pre-class reading with an individual online quiz in Blackboard (4 concept questions and 1 what did you not understand question)	Study group discussions about the concept questions Mini-lecture from the instructor to reinforce the concepts and diagnose student misconceptions	Assigned study group summarizes the class discussion on the course wiki Students use these co-constructed summaries for their research projects and portfolio	Social bookmarking application Quiz tool in Blackboard Course wiki Peer review tool ePortfolio

Questions?



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T3E 6K6

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