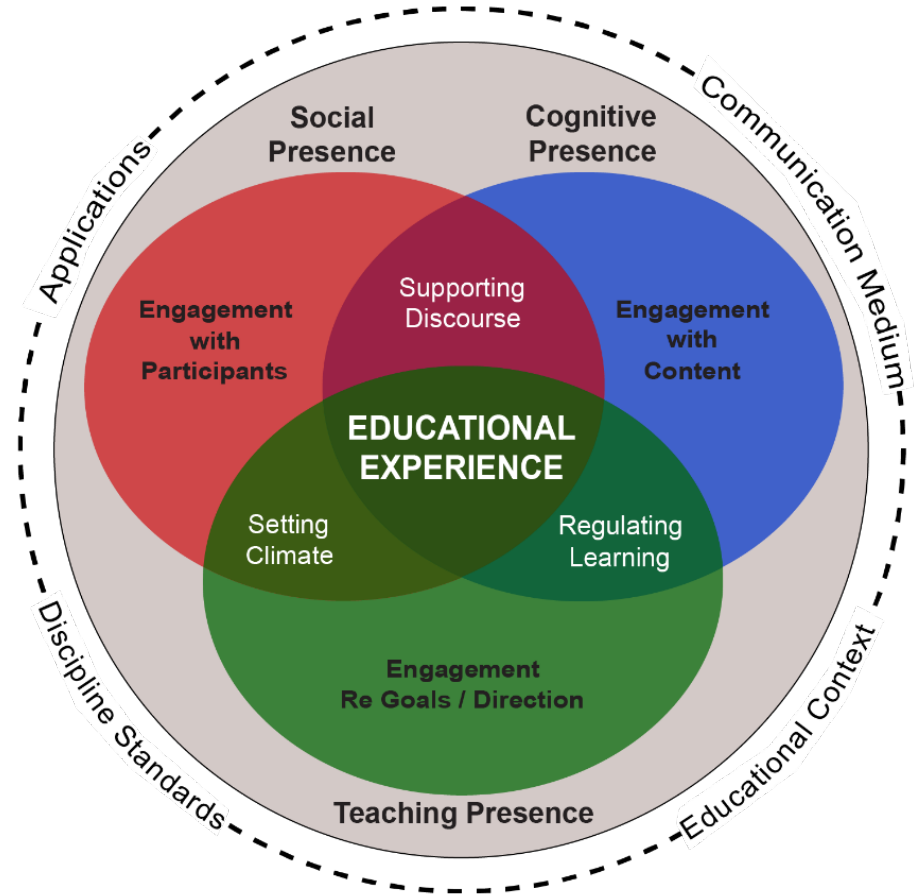




Digital Learning as a Community of Inquiry

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CONSTRUCTIVIST LEARNING





Social collaborative discourse and critical/reflective thinking



Social collaborative discourse

Critical thinking, reflection, individual analysis. ...



Teaching roles.

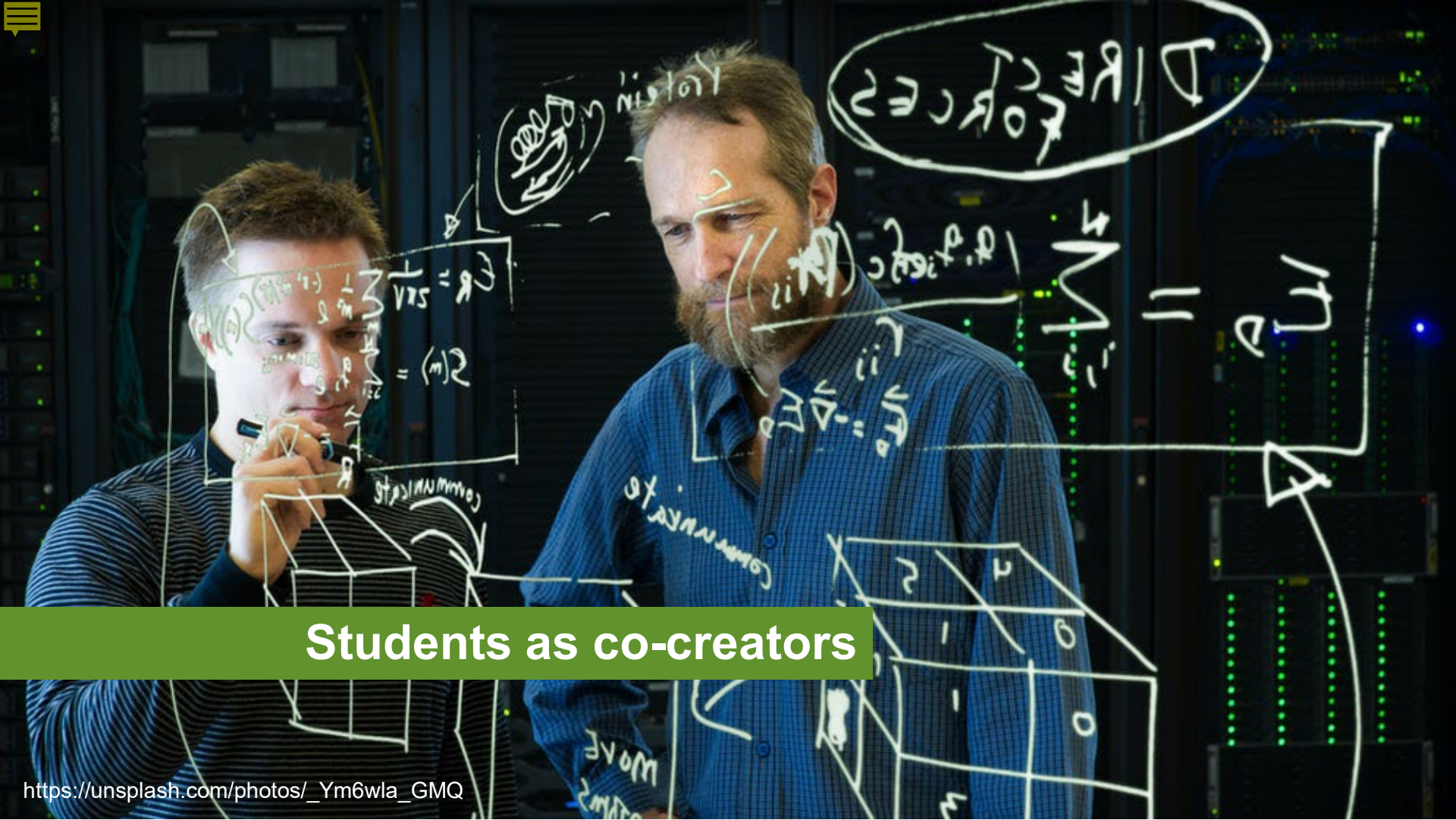
- Designing and organizing learning activities.
- Facilitating students' learning processes.
- Sharing content knowledge.
- Assessing students' performances.



Teaching and Learning happens in a Social context

Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. *American Journal of Distance Education*, 11 (3), 8–26.

Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2001). Assessing Social Presence In Asynchronous Text-based Computer Conferencing. *Journal of Distance Education / Revue De L'Éducation à Distance*, 14 (2).



Students as co-creators

A community of inquiry



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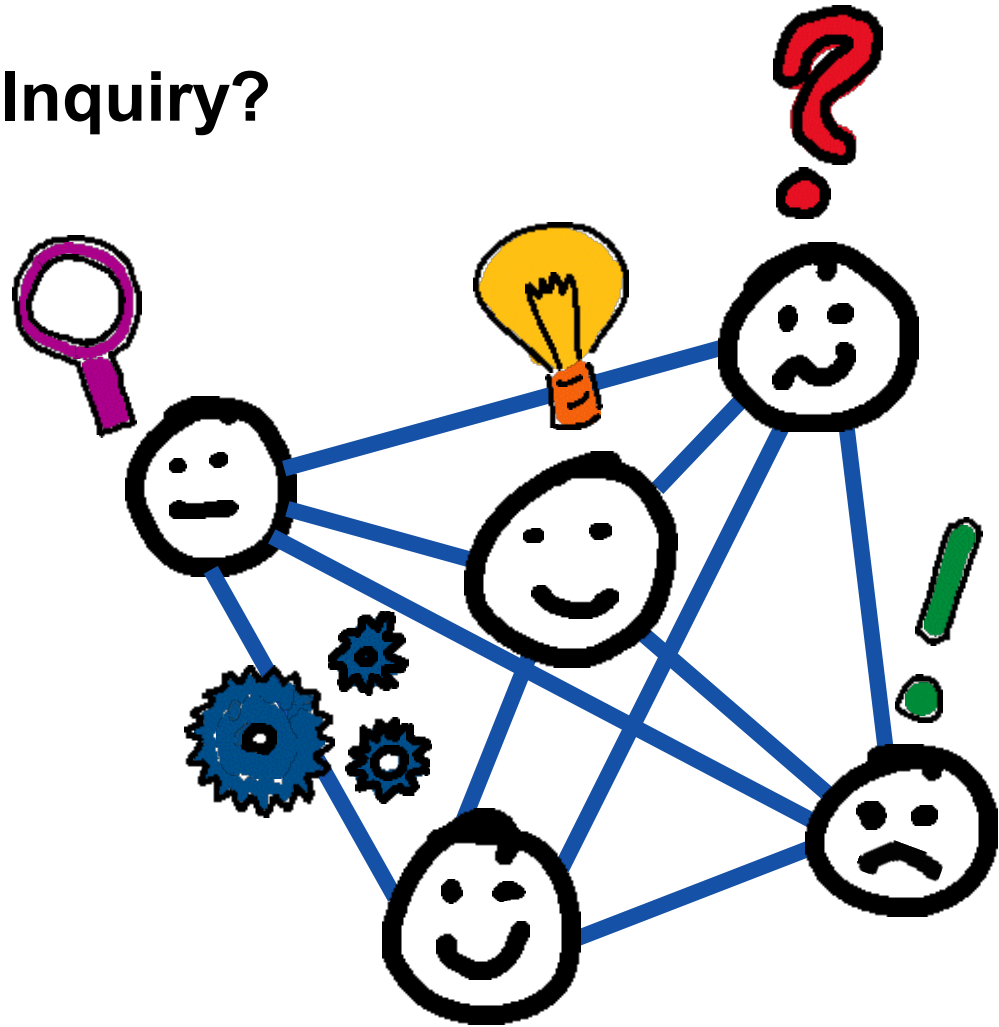
“An educational community of inquiry is an activity where students and teachers form a **community**, a group of people who have a shared purpose: they aim to learn something together. The community engages in **inquiry**, a process to develop new and augment old knowledge by employing deep meaningful individual and collaborative approaches.”
(Stenbom & Cleveland-Innes, 2023)

What is a Community of Inquiry?

Community of inquiry

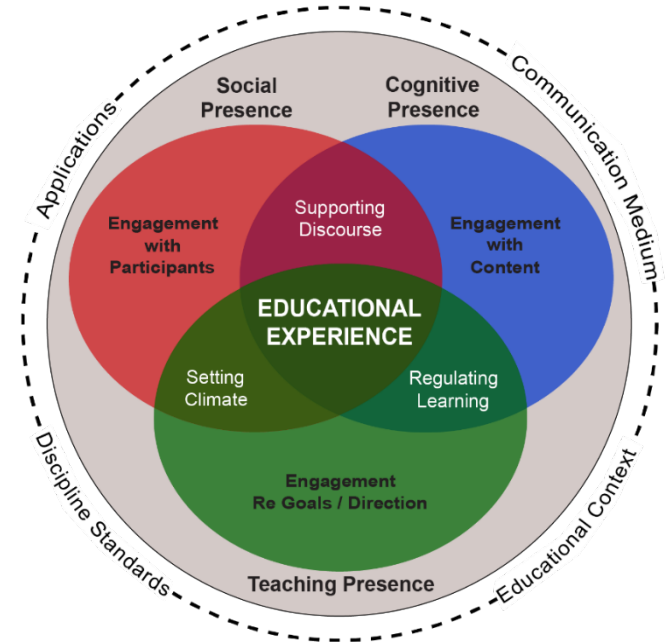
a group of individuals involved in a collaborative-constructivist process of learning.

- Involves critical thinking and discourse.
- Problem or question driven.
- Typically has a small-group feature.
- Incorporates research methods such as information gathering and synthesis of ideas.



What is the Community of Inquiry framework?

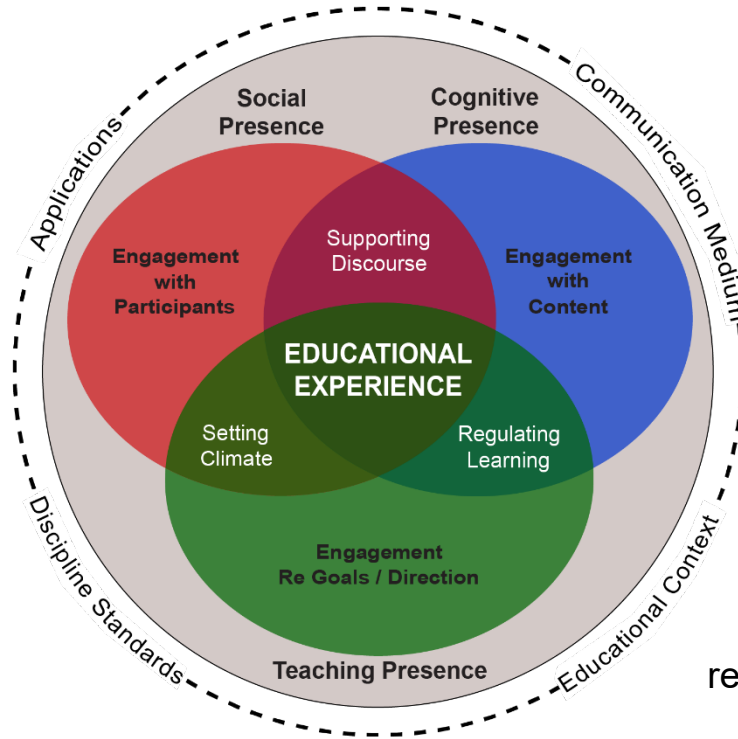
- A research framework for analyzing the processes of learning in online and blended learning.
- The framework is developed for online and blended learning contexts but has its roots in face-to-face education.
- The most influential theoretical framework for online learning.



The 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 (Garrison, 2009, p. 352).



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 (Garrison et al. 2001).

Teaching Presence

The design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes (Andersson et al., 2001).

Teaching Presence

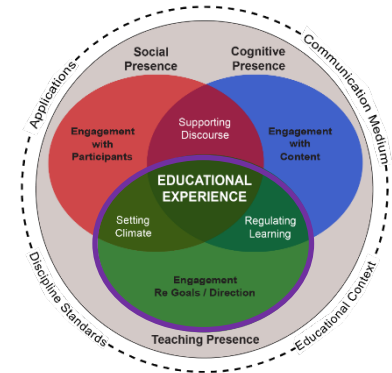
Design &
Organization

“preparing, planning, and structuring learning activities – monitoring, supporting, and guiding students’ inquiry – and directing and leading learning processes”
(Stenbom & Cleveland-Innes, 2023, p. 6)

Facilitation

Direct
Instruction

TeachING presence, not Teacher presence.





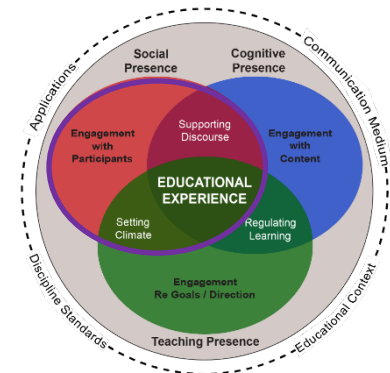
Social Presence

The degree to which students and teachers “feel socially and emotionally connected with others...” (Swan, 2020, p. 80)

Affective /
Personal

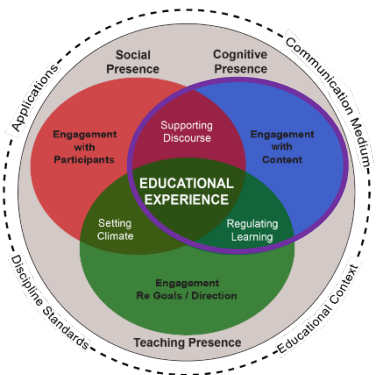
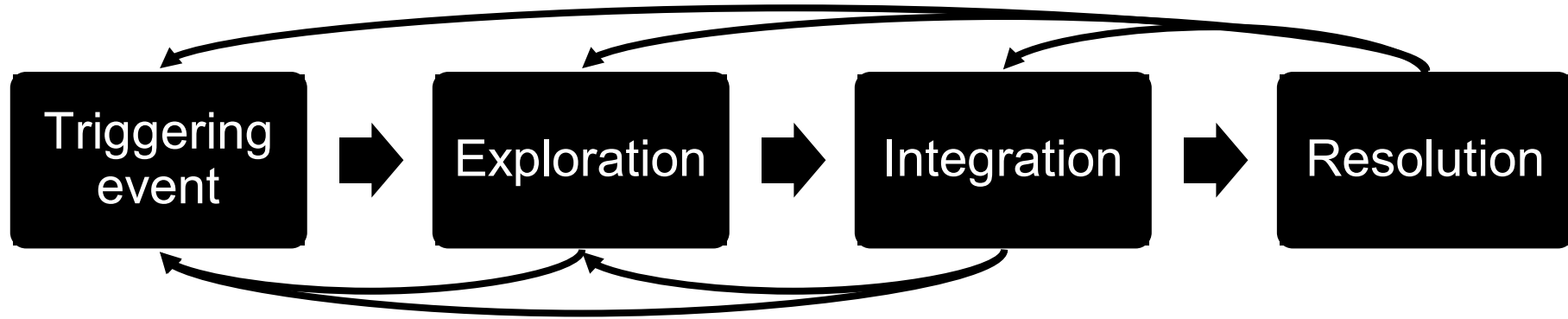
Open
Communication

Group cohesion





Cognitive presence



Where the actual learning happens. Stems from the general scientific process of learning by John Dewey.

A top-down view of a desk with a silver MacBook Air in the center. The laptop screen shows a person's head replaced by a vintage television set. To the left is a stack of books, including one with a large green number '3' and another with 'balentum' on the cover. To the right is a white desk lamp, a black smartphone, and a set of keys. A blue banner with white text is overlaid on the left side of the laptop.

Reserach methods



Transcript analysis

Coding scheme used to analyze the different aspects of a community of inquiry in transcripts (conferencing, forum discussions, chats etc.)

Elements	Categories	Indicators (examples only)
Cognitive presence	Triggering event	Sense of puzzlement
	Exploration	Information exchange
	Integration	Connecting ideas
	Resolution	Apply new ideas
Social presence	Affective	Expressing emotions
	Open communication	Risk-free expression
	Group cohesion	Encouraging collaboration
Teaching presence	Design and organization	Setting curriculum and methods
	Facilitating discourse	Sharing personal meaning
	Direct instruction	Focusing discussion



The Community of Inquiry survey

Survey instrument with 34 items that relate to an element and a category.

The participant responds using a Likert scale.

The instrument can be used to examine learning experiences (i.e., course review) and to compare different learning designs.

1. The instructor clearly communicated important course topics.
2. The instructor clearly communicated important course goals.
3. The instructor provided clear instructions on how to participate in course learning activities.
4. The instructor clearly communicated important due dates/time frames for learning activities.
5. The instructor was helpful in identifying areas of agreement and disagreement on course topics that helped me to learn.
6. The instructor was helpful in guiding the class towards understanding course topics in a way that helped me clarify my thinking.
7. The instructor helped to keep course participants engaged and participating in productive dialogue.
8. The instructor helped keep the course participants on task in a way that helped me to learn.
9. The instructor encouraged course participants to explore new concepts in this course.
10. Instructor actions reinforced the development of a sense of community among course participants.
11. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.
12. The instructor provided feedback that helped me understand my strengths and weaknesses relative to the course's goals and objectives.
13. The instructor provided feedback in a timely fashion.
14. Getting to know other course participants gave me a sense of belonging in the course.
15. I was able to form distinct impressions of some course participants.
16. Online or web-based communication is an excellent medium for social interaction.
17. I felt comfortable conversing through the online medium.
18. I felt comfortable participating in the course discussions.
19. I felt comfortable interacting with other course participants.
20. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.
21. I felt that my point of view was acknowledged by other course participants.
22. Online discussions help me to develop a sense of collaboration.
23. Problems posed increased my interest in course issues.
24. Course activities piqued my curiosity.
25. I felt motivated to explore content related questions.
26. I utilized a variety of information sources to explore problems posed in this course.
27. Brainstorming and finding relevant information helped me resolve content related questions.
28. Online discussions were valuable in helping me appreciate different perspectives.
29. Combining new information helped me answer questions raised in course activities.
30. Learning activities helped me construct explanations/solutions.
31. Reflection on course content and discussions helped me understand fundamental concepts in this class.
32. I can describe ways to test and apply the knowledge created in this course.
33. I have developed solutions to course problems that can be applied in practice.
34. I can apply the knowledge created in this course to my work or other non-class related activities.

Arbaugh, J. B., Cleveland-Innes, Martha, Diaz, Sebastian R., Garrison, D. Randy, Ice, Philip, Richardson, Jennifer C., & Swan, Karen P. (2008). Developing a Community of Inquiry Instrument: Testing a Measure of the Community of Inquiry Framework Using a Multi-Institutional Sample. *Internet and Higher Education*, 11(3-4), 133-4). p.133-136.

Swan, K., Shea, P., Richardson, J., Ice, P., Garrison, D. R., Cleveland-Innes, M., & Arbaugh, J. B. (2008). Validating a measurement tool of presence in online communities of inquiry. *E-Mentor*, 2(24), 1-12.

Stenbom, S.. (2018). A systematic review of the Community of Inquiry survey. *The Internet and Higher Education*, 39, 22–32. <https://doi.org/10.1016/j.iheduc.2018.06.001>

Design methods

de·sign

/dəˈzīn/

noun

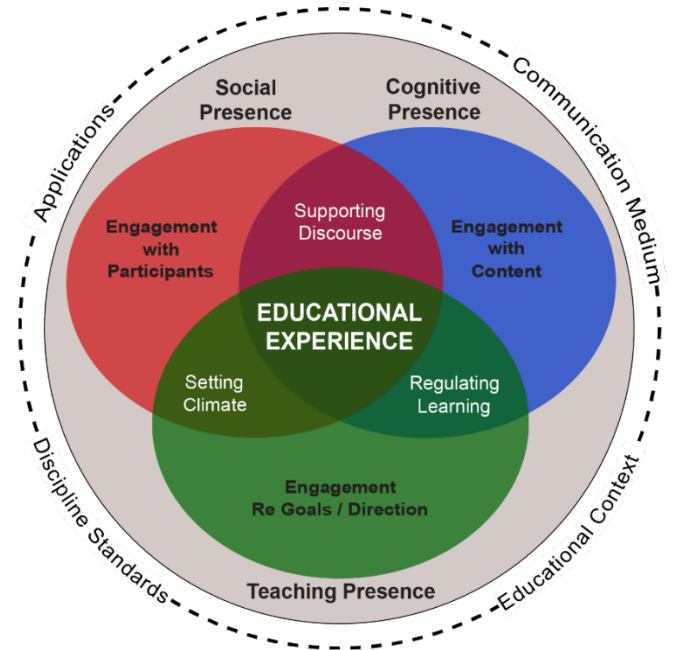
1. a plan or drawing produced to show the shape, structure, and function of a building or other object before it is made
"he has just unveiled a new museum"
synonyms: **plan, blueprint, outline, representation**



The Design of Digital Learning Environments: Online and Blended Applications of the Community of Inquiry

Edited by Martha F. Cleveland-Innes,
Stefan Stenbom, and D Randy Garrison

To be published during fall 2023.



Recommendations

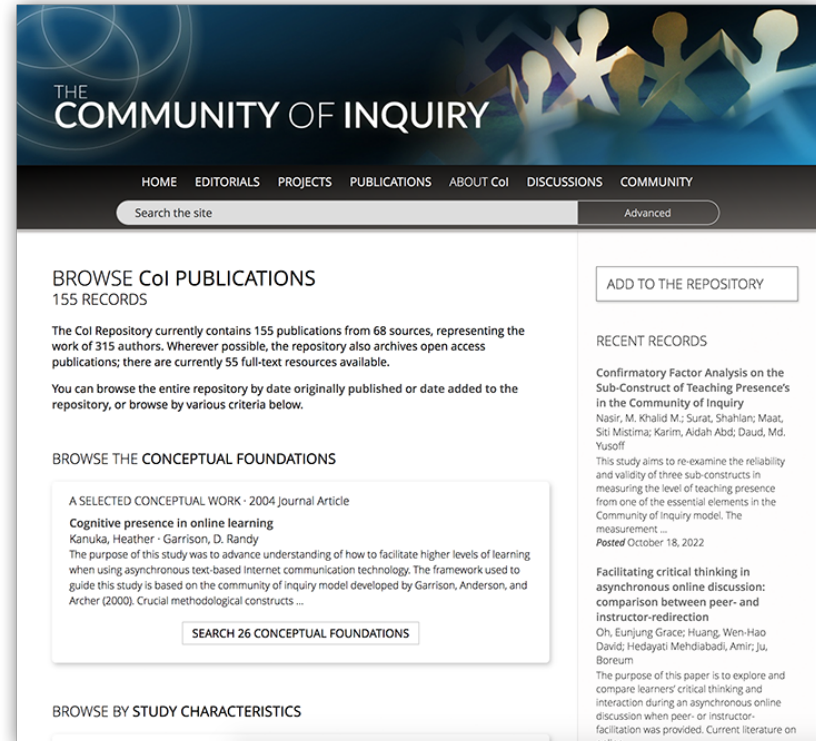
- Introducing the Col framework to students is essential to guide them effectively in the learning environment.
- The instructor's essential role when using the Col is to support the establishment of community and foster inquiry
- Developing a community of inquiry requires both time and active engagement.
- A community is composed of individual relationships that collectively contribute to the purpose, dynamics and operations of the community.
- Embrace a research-informed, evidence-based teaching practices.
- Develop teaching teams. Incorporate authentic assessment, ensuring that the learning outcomes, learning activities, and assessment activities are aligned.

(Cleveland-Innes & Stenbom, 2023)

The Community of Inquiry website

www.thecommunityofinquiry.org

- Publications repository
- Discussions
- Editorial
- Projects
- About Col



The screenshot shows the homepage of the Community of Inquiry website. The header features the title "THE COMMUNITY OF INQUIRY" in white text on a dark blue background with a graphic of stylized human figures holding hands. Below the header is a navigation menu with links: HOME, EDITORIALS, PROJECTS, PUBLICATIONS, ABOUT Col, DISCUSSIONS, and COMMUNITY. A search bar is located below the navigation menu, with the text "Search the site" and a button labeled "Advanced".

The main content area is divided into two columns. The left column contains the following sections:

- BROWSE Col PUBLICATIONS**
155 RECORDS
- The Col Repository currently contains 155 publications from 68 sources, representing the work of 315 authors. Wherever possible, the repository also archives open access publications; there are currently 55 full-text resources available.
- You can browse the entire repository by date originally published or date added to the repository, or browse by various criteria below.
- BROWSE THE CONCEPTUAL FOUNDATIONS**
- A SELECTED CONCEPTUAL WORK - 2004 Journal Article
Cognitive presence in online learning
Kanuka, Heather · Garrison, D. Randy
The purpose of this study was to advance understanding of how to facilitate higher levels of learning when using asynchronous text-based Internet communication technology. The framework used to guide this study is based on the community of inquiry model developed by Garrison, Anderson, and Archer (2000). Crucial methodological constructs ...
- SEARCH 26 CONCEPTUAL FOUNDATIONS
- BROWSE BY STUDY CHARACTERISTICS**

The right column contains the following sections:

- ADD TO THE REPOSITORY
- RECENT RECORDS**
- Confirmatory Factor Analysis on the Sub-Construct of Teaching Presence's in the Community of Inquiry
Nasir, M. Khalid M.; Surat, Shahlan; Maat, Siti Mistima; Karim, Aidah Abd; Daud, Md. Yusoff
This study aims to re-examine the reliability and validity of three sub-constructs in measuring the level of teaching presence from one of the essential elements in the Community of Inquiry model. The measurement ...
Posted October 18, 2022
- Facilitating critical thinking in asynchronous online discussion: comparison between peer- and instructor-redirection
Oh, Eunjung Grace; Huang, Wen-Hao David; Hedayati Mehdiabadi, Amir; Ju, Boreum
The purpose of this paper is to explore and compare learners' critical thinking and interaction during an asynchronous online discussion when peer- or instructor-facilitation was provided. Current literature on online...

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Workshop: Designing digital learning environments using the Community of Inquiry framework.

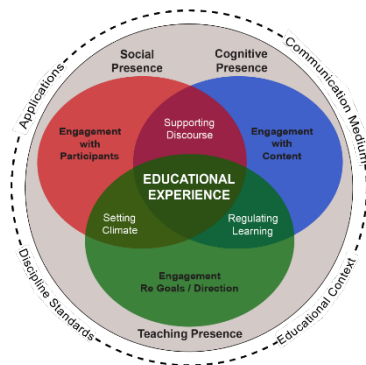




THANK YOU!



www.stefanstenbom.se



www.thecommunityofinquiry.org