

# Using the Community of Inquiry Framework for Online Learning Design

## Practice Guide

### Why use a framework in your online learning design?

The best online courses are designed specifically for the online medium. This requires rethinking the roles of learners and instructors, and reimagining the educational experience itself; i.e. online learning is about **well-planned curriculum and course design**.

The **Community of Inquiry (CoI) framework** is recognised as the framework most relevant to online learning (Valverde-Berrocso et al., 2020). In practice, CoI will help you design a meaningful, engaging and collaborative online learning experience for you and your students.

### The Community of Inquiry (CoI) framework

The CoI framework is underpinned by collaborative constructivist learning theory associated with the work of Dewey and Vygotsky (Garrison, 2017).

Figure 1 outlines the critical elements of the framework recognising that the educational experience consists of three complex and interdependent core elements:

- Social presence
- Cognitive presence
- Teaching presence

Each of the presences is both a separate construct and a component of the other two.

Together, the three elements facilitate a community of learners providing the community with the opportunity to maintain a deep and meaningful approach to learning. This occurs through active and collaborative engagement in constructing relevant knowledge (e.g., “inquiry”) through critical reflection and shared discourse.

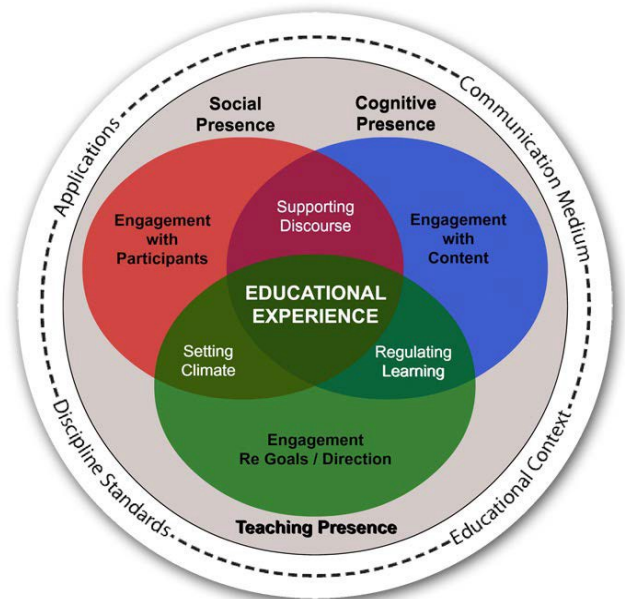


Figure 1: Image from the [Community of Inquiry blog site](#), adapted from Garrison, 2017, p.25.

The following defines each of the presences. Some practical suggestions regarding how each of the presences can be achieved is outlined later in the guide.

Teaching presence is defined as “the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (Anderson et al., 2001, p.5).

“Social presence is the ability of participants to identify with a 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 goes to the heart of the community of inquiry. It is defined by the inquiry process where learners are tasked with a problem or issue and, through iteration between discourse and reflection (public and private words), construct meaning and confirm understanding” (Garrison, 2009, p.353).

### The three core elements of Col: Categories and Indicators

For each of the core elements, Garrison et al. (1999) distinguished a number of indicators which demonstrate the existence and level of each of the presences. These indicators are then grouped into categories to show which aspect or phase of a core presence is being demonstrated by the indicator.

Examples of indicators in Table 1 below illustrate how each of the presences may be expressed online:

**Table 1: Community of Inquiry Categories and Indicators**

<i>Elements</i>	<i>Categories</i>	<i>Examples of indicators</i>
<b>Social Presence</b>	Personal/affective	Self projection of learners as real people via online introductions, expressing emotions, use of emoticons to express feelings
	Open communication	Creating a trusting learning climate, encouraging risk-free expression
	Group cohesion	Course identity, social postings, encouragement of each other, collaboration, building online community
<b>Cognitive presence</b>	Triggering event	New topic, authentic activities, cultivating a sense of puzzlement
	Exploration	Information exchange, confirming understanding, questions on topic, commencement of activities
	Integration	Connecting ideas
	Resolution	Applying new ideas
<b>Teaching presence</b>	Design & organisation	Setting curriculum & methods, course & class management
	Facilitating discourse	Shaping constructive exchange, clarification & focused questions, giving tasks & confirming understanding, steering in the right direction
	Direct instruction	Focusing & resolving issues, explanation of content, additional explanations and definitions

Adapted from Garrison (2017, p.28) and McDonald & Loch (2008).

### Social presence

Social presence is linked with motivation and satisfaction and its role in an educational context is to support the “inquiry” - that is, to create a climate that supports the construction of relevant knowledge via discussion and reflection. Online learning experiences may be supplemented by synchronous sessions (via Zoom or Blackboard Collaborate), but typically relies on asynchronous communication (for example, discussions boards or blogs). Asynchronous communication not only has been shown to allow students to successfully form social and emotional connections, but may actually facilitate critical thinking by allowing students more time to research

and reflect on the subject before engaging in a discussion. It may also encourage less extraverted students or students not comfortable with public speaking to participate (Garrison & Arbaugh, 2007).

Some practical suggestions for maintaining social presence for each of its categories follow. Where possible embedded links to LTO “how to eResources” are also provided.

- **Personal/affective:**
  - Post a welcome video before Orientation Week starts
  - Create a place for students to introduce themselves (for example, in a specially allocated [discussion](#))
    - Provide students with guidance regarding their introduction (e.g., share their personal profiles, add photos, create their [Avatar in Blackboard](#))
  - Lead by example by posting your own introduction
    - Consider using video introductions (e.g. share their context of where they live. Click the link for instructions for students: [upload video to YouTube](#) and [embed video in Blackboard](#))
  - Use ice breaker activities in your synchronous (Zoom/Collaborate) sessions
- **Open communication:**
  - Build a learning environment that supports critical reflection by making students feel safe and supported
  - Provide explicit details regarding your availability and how long it will be for you to respond
  - Communicate often and be encouraging, positive and responsive to student needs
  - Discuss virtual etiquette and request students to follow the [guide](#)
  - Consider introducing a “Pulse Check” mid-course (in weeks 5 or 6) – an anonymous survey that asks students how the course is working for them so far (please see Figure 2 below as an example).
  - Make sure you post a summary of the results and let students know what changes (if any) you will incorporate as a result of their feedback.



Figure 2: The questions used by the LTO in Week 5 Pulse Check activity

- **Group cohesion:**
  - Create an environment where students feels valued
  - To build trust, model valuing the opinions of others
  - Encourage respectful critique and safe sharing of ideas
  - Help students to develop a sense of common purpose
  - Build a team spirit by reminding students that you are all a community of learners and encourage them to help each other, to answer each other’s questions, to share resources and to respond to each other’s postings
  - Catch students “doing the right thing” (answering someone’s questions, sharing resources, offering informed opinions) and personally thank them for supporting others
  - Encourage students to incorporate their experiences and examples in their postings and consider creating a [General Discussion](#) that is a space for a wide spectrum of shared questions, comments, enquiries and suggestions. These will help you evolve and improve your course, with some of the postings potentially serving as FAQs for the next time the course is taught.

## Cognitive presence

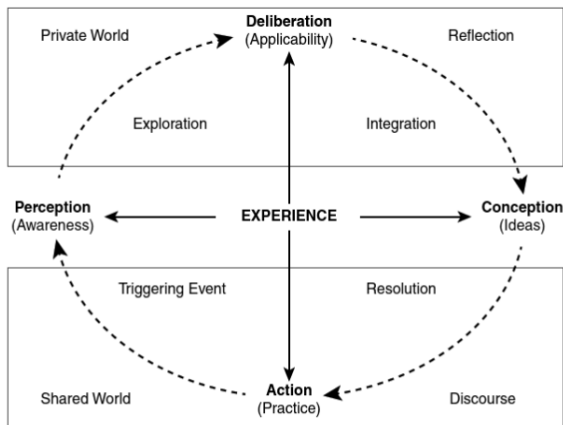


Figure 3: Practical Inquiry Model (Garrison, 2017, p.55)

Cognitive presence is enabled by the content structure and learning tasks and activities designed to engage students in reflective thinking, interacting with the content and critical thinking.

It follows the phases of the educational process captured in the Practical Inquiry Model based on the Dewey's work on reflective thinking (see Figure 3). It describes the integration of the private (personal reflection) and public (shared discourse), as well as the continuum between action and deliberation. The four phases of inquiry form the categories of cognitive presence described in Table 1 above.

Some practical suggestions for maintaining cognitive presence (based on Garrison, 2017) include:

- **Triggering event:**

- Aim to support a new topic by an activity capable of fully engaging the learners, such as a dilemma, controversy or problem that your students can relate to
- Scaffold your support throughout the course - from worked examples to only providing a general structure for the topic and inviting students to engage in task analysis by discussing issues and offering questions that they see arising.

- **Exploration:**

- Make sure that the students understand the dilemma/problem and have the necessary skills and tools to collect information and search for possible explanations
- Design elements of exploration that can be done by each student individually
- Add elements of exploration that can be done as a group activity (e.g., brainstorming)
- Encourage students to iterate between their private world (reflection) and the shared public world (group discourse).

- **Integration:**

- Support students in organising collected ideas and thoughts into a coherent structure
- Encourage students to iterate between their private world (reflection) and the shared public world (group discourse) to help shape understanding.

- **Resolution:**

- Supervise students arriving at the solution or resolution of the original problem
- If testing of a resolution is not practical, support students in using mental modelling and shared discourse
- Aim to achieve wider exposure to multiple approaches
- Encourage further questions and arising issues for continuing learning cycle.

## Teaching presence

Teaching presence is strongly linked to student satisfaction, perceived learning, and a sense of community (Garrison & Arough, 2007). To a large extent, it serves as an integrative influence that binds together social and cognitive presences to ensure coherent functioning of the COI (Garrison, 2017).

Some practical suggestions for maintaining teaching presence include:

- **Design and organisation:**
  - Make sure that the “grand design” (Anderson et al., 2001) of your course is coherent and evident to learners.
  - Develop the assessment regime, instructions, marking criteria and rubrics
  - Select teaching methods with a clear view of the whole
  - Design engaging student activities (public and private) with clear learning outcomes
  - Decide on module sequencing
  - Locate and build materials
  - Create a welcoming learning climate.
  
- **Facilitate discourse:**
  - Set up discussion forums
  - Whole-class forums - help your students shape topical discussions by highlighting what is important and emphasising critical insights
  - Monitor and manage these discussion forums to ensure that participants remain motivated, engaged and productive
  - Continuously encourage the participants
  - Stay attuned to the volume and quality of postings
  - Moderate your input - both too much or too little could have a negative effect on class dynamics
  - Group projects - provide guidance when needed but ensure that students have both control and responsibilities.
  
- **Direct instruction:**
  - Fulfil your role of providing “intellectual and scholarly leadership” (Anderson et al., 2001, p.8)
  - Present lessons and lectures (use flipped classroom approach – please see [this guide](#))
  - Step in to correct inaccurate information or misconceptions
  - Discuss specific ideas
  - Provide summaries of sessions/discussions
  - Manage conflict
    - Ensure that direct instruction does not reduce students’ control and responsibilities for sharing and constructing knowledge.

## References

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