

# The Role of Social Presence in Online Communities

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# Need for Research

- “Web-based learning has been the subject of numerous studies as an effective mode of content delivery for distance education (Berge & Collins, 1995; Dunderstadt, 1999; Schrum, 1998).”
- “Online communities offer a new and challenging opportunity for learners to develop a collaborative learning process (Gabriel, 1998; Garrison, 1997; Hiltz, 1994; Oren & Ram, 2000).”
- “Moderators can create learning environments where the technology becomes an instructional partner in the learning process (McDaniel, McInerney & Armstrong, 2004).”

# Need for Research

- Online staff development for teachers is becoming a new means of delivering instruction
- Online communities provide a medium for the sharing of resources and communicating with peers

# Need for Research

- Online community technology can be expensive for local school districts
- Research needs to explore the factors that may affect the quality of online instruction with teachers
- What things need to be in place to maximize the online learning experience?

# Definition of Terms

- Social Presence: “The ability of participants in an online community to project themselves socially and emotionally as ‘real people’ through the medium of communication being used.”

# Definition of Terms

## ■ Cognitive Presence

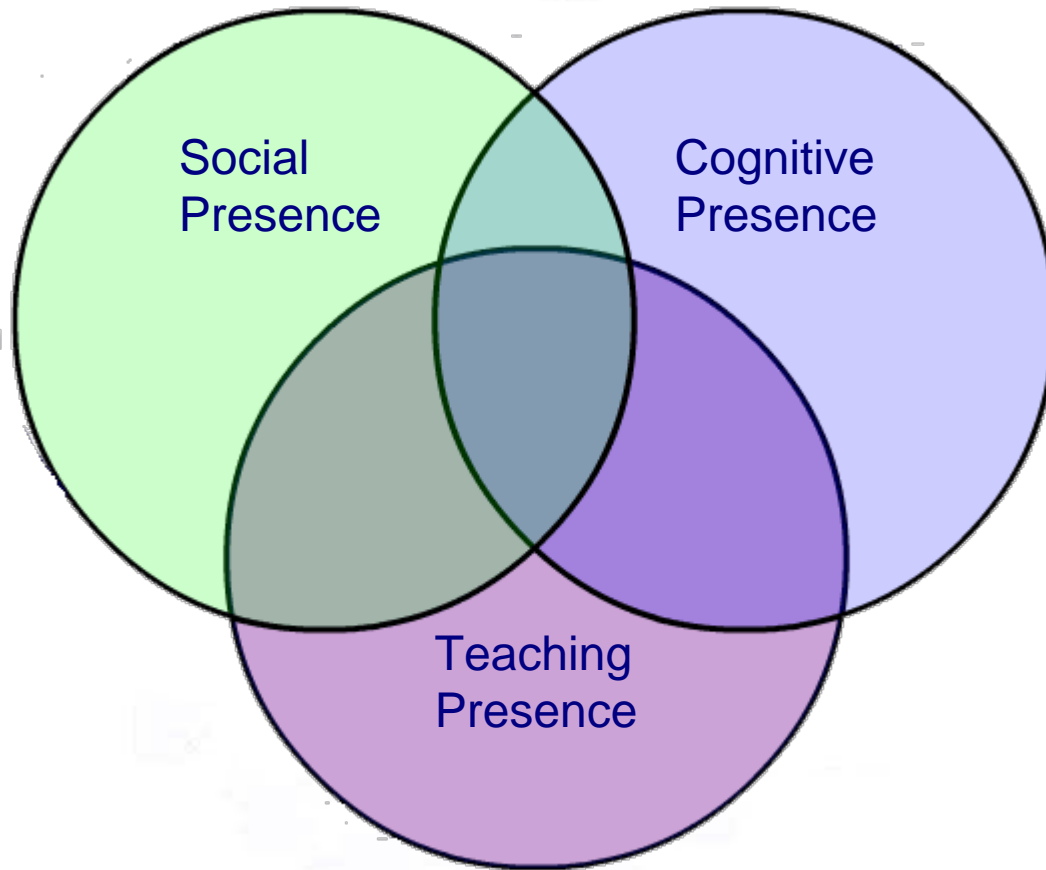
- The ability of learners can construct and confirm meaning through sustained reflection and discourse
- It is a condition of higher order thinking

# Definition of Terms

## ■ Teaching Presence

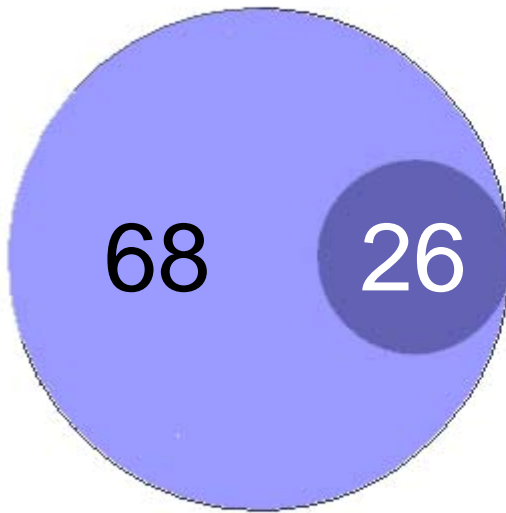
- The design, facilitation, and direction of the cognitive and social processes to guide the meaningful educational learning experience

# Definition of Terms





# Methods



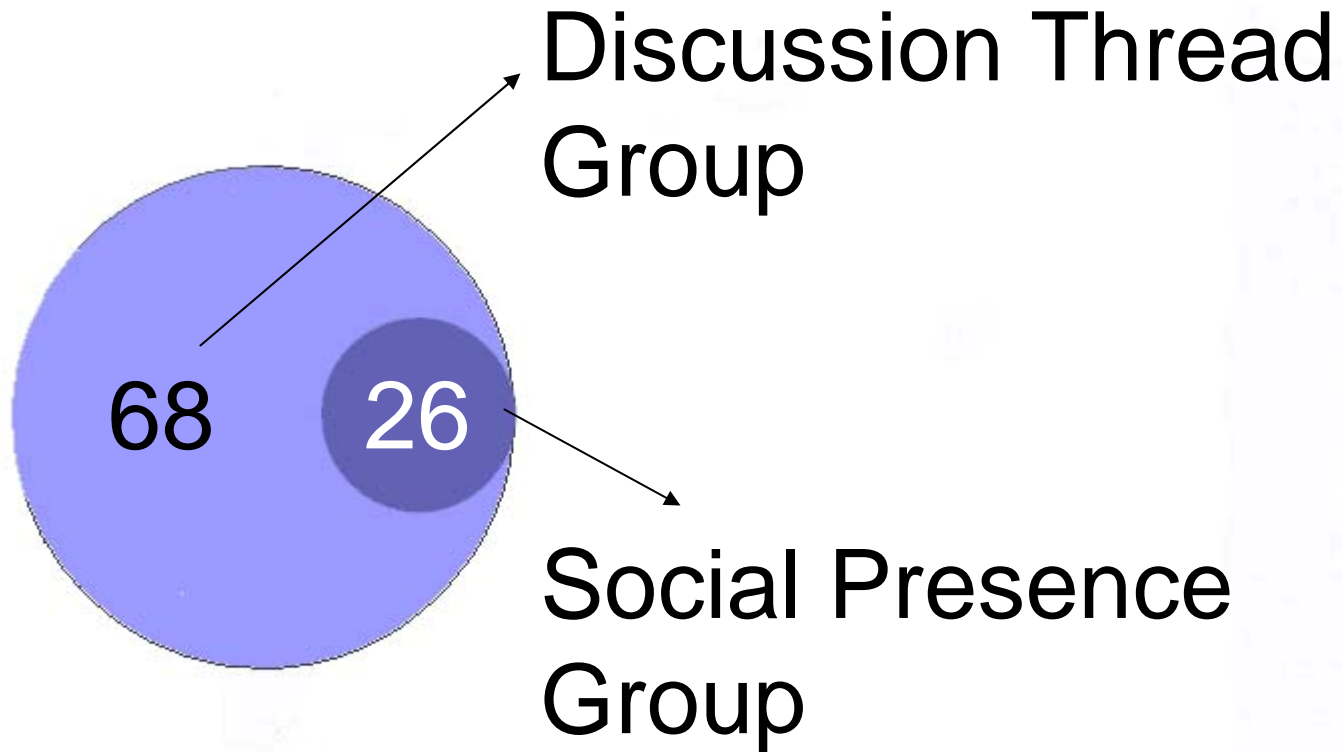
Study Design:

94 teachers enrolled in 3  
online courses

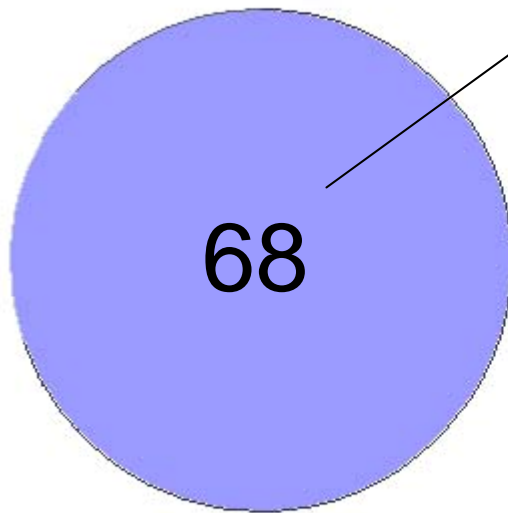
68 participants in the large  
group

26 participants in the small  
group

# Methods



# Methods

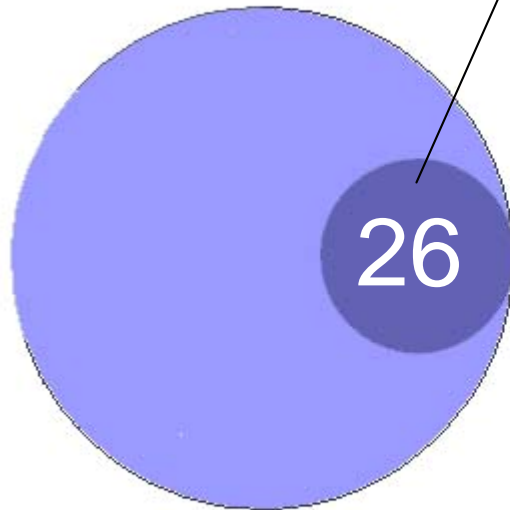


## **Discussion Thread Group**

All elementary school teachers

Allowed Content  
Analysis of their online textual discussion threads for 30 days.

# Methods



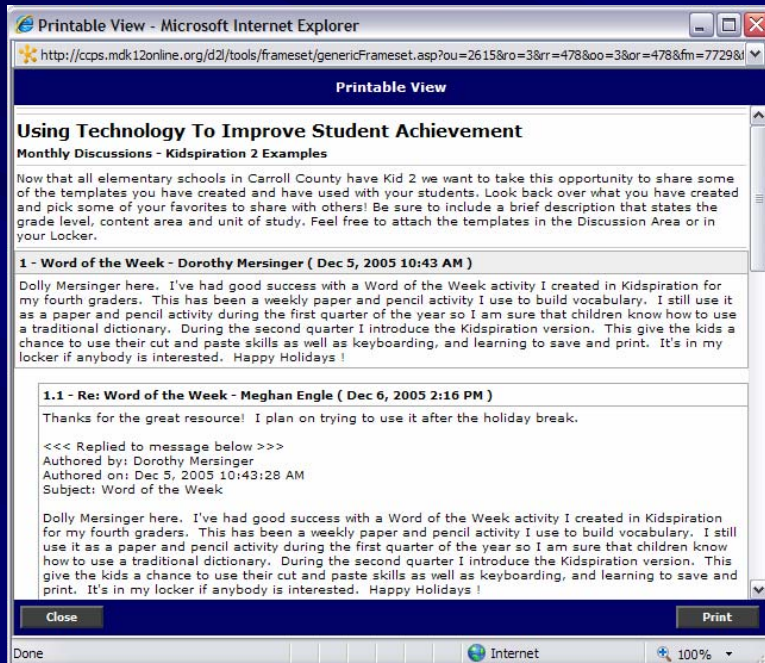
## **Social Presence Group**

Allowed Content Analysis of their online textual discussion threads for 30 days.

Completed Background & Demographics Survey

Completed Social Presence Questionnaire

# Methods



Discussion Threads

Responses were required as a part of each course

29 discussion threads were analyzed and coded using the Social Presence Model based on work by Garrison, Anderson & Archer (2003)

# Methods

- Interpretative Analysis (Neuendorf, 2002) focused on the sentences written by each teacher in their threaded discussions
- Three people examined the data and coded each sentence using the classification and indicators of Garrison, Anderson, and Archer (2001)

# Methods

Discussion Thread Coding: 3 Main Categories:

|                              |  |
|------------------------------|--|
| <b>Affective Responses</b>   | Represent the textual display of emotional conditions                              |
| <b>Interactive Responses</b> | Responses which furthers communication between the members of the online community |
| <b>Cohesive Responses</b>    | Social communication used to refer to themselves as a group or entity              |

# Methods

## Discussion Thread Coding: Indicators:

| <b>Affective Responses</b>   | <b>Interactive Responses</b>  | <b>Cohesive Responses</b>  |
|--|---|--|
| Expression Values (VA)<br>Expression of Emotions (EE)<br>Conspicuous Punctuation (PU)<br>Use of Humor (HU)<br>Self Disclosure (SD)<br>Personal Advice (PA) | Continuing Discussion Thread (CT)<br>Expressing Agreement (AG)<br>Expressing Appreciation (AP)<br>Asking Questions (AQ)<br>Factual Responses (FA) | Vocatives (VO)<br>Greetings & Salutations (GS)<br>Group Reference (GR)<br>Phatics (PH) |



# Methods

Content Analysis Example:

“Lisa, I am in desperate need of some help!!!! What am I doing wrong? aaaaAAAAAHHHH!!!! Stop laughing Jen ☺!!!”

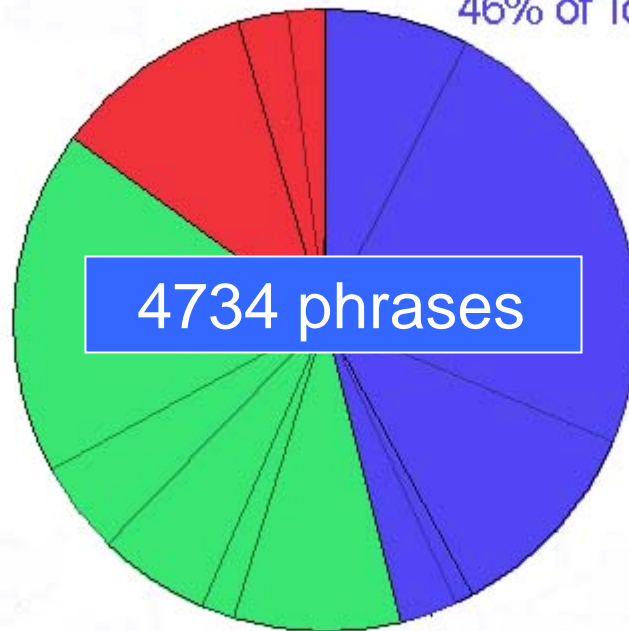
“Lisa, (VO) I am in desperate need of some help!!!! (SD, PU) What am I doing wrong? (AQ) aaaaAAAAAHHHH!!!! (EE, PU) Stop laughing Jen ☺!!!” (HU, VO, PU)

Above Example: 9 Phrases

PU: 3 VO: 2 SD: 1 AQ: 1 EE: 1 HU: 1

Group Cohesion Responses:  
16 % of Total Discussion Threads

Affective Responses:  
46% of Total Discussion Threads



Open Communication Responses:  
38% of Total Discussion Threads

## Rank Order Levels of Social Presence Indicators by Group

| Level           | Discussion Thread | Social Presence |
|-----------------|-------------------|-----------------|
| <b>High</b>     | 1) FA             | 1) VA           |
|                 | 2) VA             | 2) FA           |
|                 | 3) PU             | 3) VO           |
|                 | 4) CT             | 4) PU           |
|                 | 5) GS             | 5) CT           |
| <b>Moderate</b> | 6) AP             | 6) EE           |
|                 | 7) EE             | 7) AP           |
|                 | 8) AQ             | 8) AQ           |
|                 | 9) VO             | 9) GS           |
|                 | 10) GR            | 10) AG          |
| <b>Low</b>      | 11) SD            | 11) GR          |
|                 | 12) AG            | 12) SD          |
|                 | 13) HU            | 13) HU          |
|                 | 14) PH            | 14) PH          |
|                 | 15) PA            | 15) PA          |

Phrases were ranked ordered highest to lowest based on the number of phrases for each one

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|                 | 13) HU            | 13) HU          |
|                 | 14) PH            | 14) PH          |
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Focus was to compare the results of the Discussion Thread Group

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Focus was to compare the results of the Discussion Thread Group to the **Social Presence Group**

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High Level Indicators

Factual Responses

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High Level Indicators

Factual Responses

Values/Opinion

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**High Level Indicators**

Factual Responses

Values/Opinion

Conspicuous Punctuation



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### High Level Indicators

Factual Responses

Values/Opinion

Conspicuous Punctuation

### Low Level Indicators

Self Disclosure

## Rank Order Levels of Social Presence Indicators by Group

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|-----------------|-------------------|-----------------|
| <b>High</b>     | 1) FA             | 1) VA           |
|                 | 2) VA             | 2) FA           |
|                 | 3) PU             | 3) VO           |
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|                 | 5) GS             | 5) CT           |
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|                 | 7) EE             | 7) AP           |
|                 | 8) AQ             | 8) AQ           |
|                 | 9) VO             | 9) GS           |
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### High Level Indicators

Factual Responses

Values/Opinion

Conspicuous Punctuation

### Low Level Indicators

Self Disclosure

Humor

## Rank Order Levels of Social Presence Indicators by Group

| Level           | Discussion Thread | Social Presence |
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### High Level Indicators

Factual Responses

Values/Opinion

Conspicuous Punctuation

### Low Level Indicators

Self Disclosure

Humor

Phatics & Personal Advice

# Findings

## High Level Indicators

| <b>Affective Responses</b>   | <b>Interactive Responses</b>      |
|------------------------------|-----------------------------------|
| Values/Opinions (VA)         | Factual Responses (FA)            |
| Conspicuous Punctuation (PU) | Continuing Discussion Thread (CT) |

# Findings

## Low Level Indicators

| <b>Affective Responses</b> | <b>Cohesive Responses</b> |
|----------------------------|---------------------------|
| Self Disclosure (SD)       | Phatics (PH)              |
| Humor (HU)                 |                           |
| Personal Advice (PA)       |                           |

# Methods

- Social Presence Questionnaire-Secondary Analysis Tool
  - 45 total questions
  - 4-point Likert scale:  
“Always/Sometimes/Seldom/Never”
  - *“Do you express your personal feelings when you are in an online environment?”*
  - *Do you use repetitious punctuation when you communicate to others in an online environment?”*

# Methods

- Social Presence Group's responses from the Questionnaire were then compared to their actual responses written in the discussion threads.
- The goal was to see if they did what they said they did in the online communities

# Results

- *“Do you express your personal values or opinions when you are in an online environment?”*
  - From the data in the Social Presence Questionnaire, the Social Presence Group reported that 60.26% **did** express their values or opinions
- This corresponded to the high number (761/2226, 34%) of *Expressing Values* phrases written by the Social Presence Group



# Results

- “*Do you self disclose personal information when you are in an online environment?*”
  - From the data in the Social Presence Questionnaire, the Social Presence Group reported that 85.71% **did not** self disclose personal information
- This corresponded to the low number (11/2226, .005%) of *Self Disclosure* phrases written by the Social Presence Group

# Findings

## ■ The Moderator:

- Can affect the levels of social presence by assisting in the creation and enforcement of policies that govern the community
- Can also affect the social presence levels as they facilitate the threaded discussion by the types of questions they ask

# Results

- Example of a moderator question:
  - “That’s a thought. What are the important elements establishing a scientific community? I think the rule or guidelines are pretty important in creating an environment that supports learning science, so it might fit. So what do you think the first lesson should include?”

# Results

- Example of a teacher response:
  - Teacher 1: (in response to moderator) “Greetings, I have seen the elements established in the science handbook that Montgomery County has created. Wow!! What a wonderful resource!!”
  - Teacher 2: (in response to teacher 1) “Great resource, you can’t go wrong with that one!!!”

# Results

- Moderators in these online communities did:
  - Ask various types of questions related to the purpose of the community
  - Give factual answers
  - Continue discussion threads
  - Call teachers by their names
  - Use conspicuous punctuation

# Results

- Moderators in these online communities **did not**:
  - Express their emotions
  - Use humor
  - Give out personal advice to others
  - Talk about social things that were off topic
  - Self disclose personal information

# Discussion

■ Teachers in these online communities

**did:**

- Express their opinions and values
- Use conspicuous punctuation
- Continue discussion threads with others
- Provide factual answers

# Discussion

- Teachers in these online communities **did not**:
  - Self disclose personal information
  - Use humor
  - Give out personal advice to others
  - Talk about social things that were off topic



# Findings

- Aligns with current research studies:
  - Erickson (2001) Social Translucence:
  - Visibility, Awareness, & Accountability
- Teachers were visible to each other online
- They were also aware of other discussion threads
- Combined, this made them accountable for their behavior in the online community and as an employee of CCPS

# Findings

- Aligns with current research studies:
  - Preece (2000) Components of Online Communities
  - People, Purpose, and Policy
- The role of the moderator can shape textual responses and influence the levels of social presence
- Policies of the community can govern the behavior of the members

# Conclusions

- Patterns of behavior observed in this study suggested a relationship between the levels of social presence indicators **and**:
  - the types of questions posed by the moderator
  - the policies that govern the community

# Implications for future research

- More research may be needed on the preparation and training of moderators for e-communities
- As new technologies emerge, additional study of the relationships between moderator preparation and establishing social presence may be suggested

Questions?

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