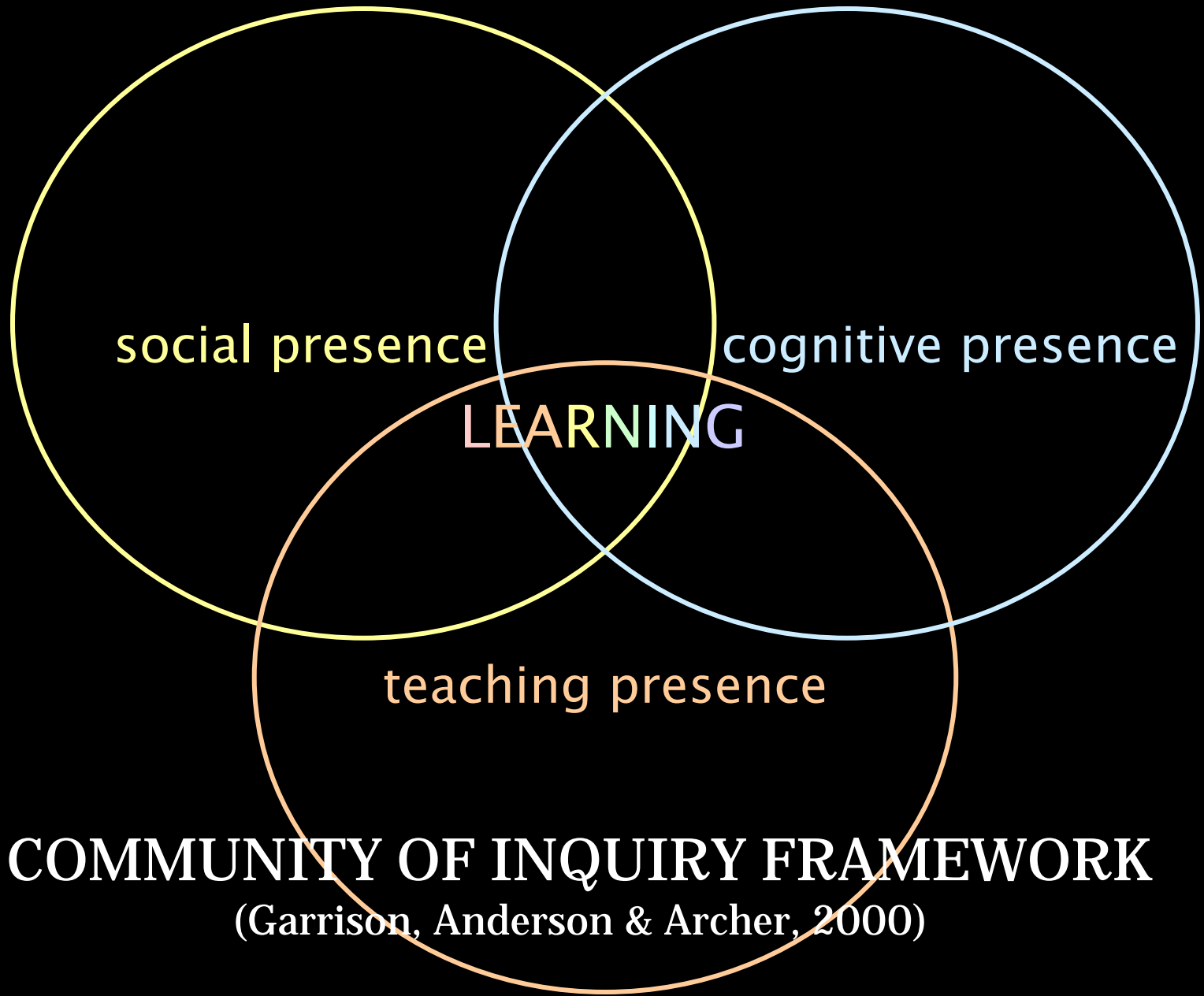




**PEDAGOGICAL APPROACHES THAT SUPPORT
STUDENT ENGAGEMENT & LEARNING**

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COMMUNITY OF INQUIRY FRAMEWORK
(Garrison, Anderson & Archer, 2000)



social presence

the ability of participants in a community of inquiry
to project themselves socially and emotionally
-- as 'real' people;

the degree to which participants in computer
mediated communication feel socially and
emotionally connected

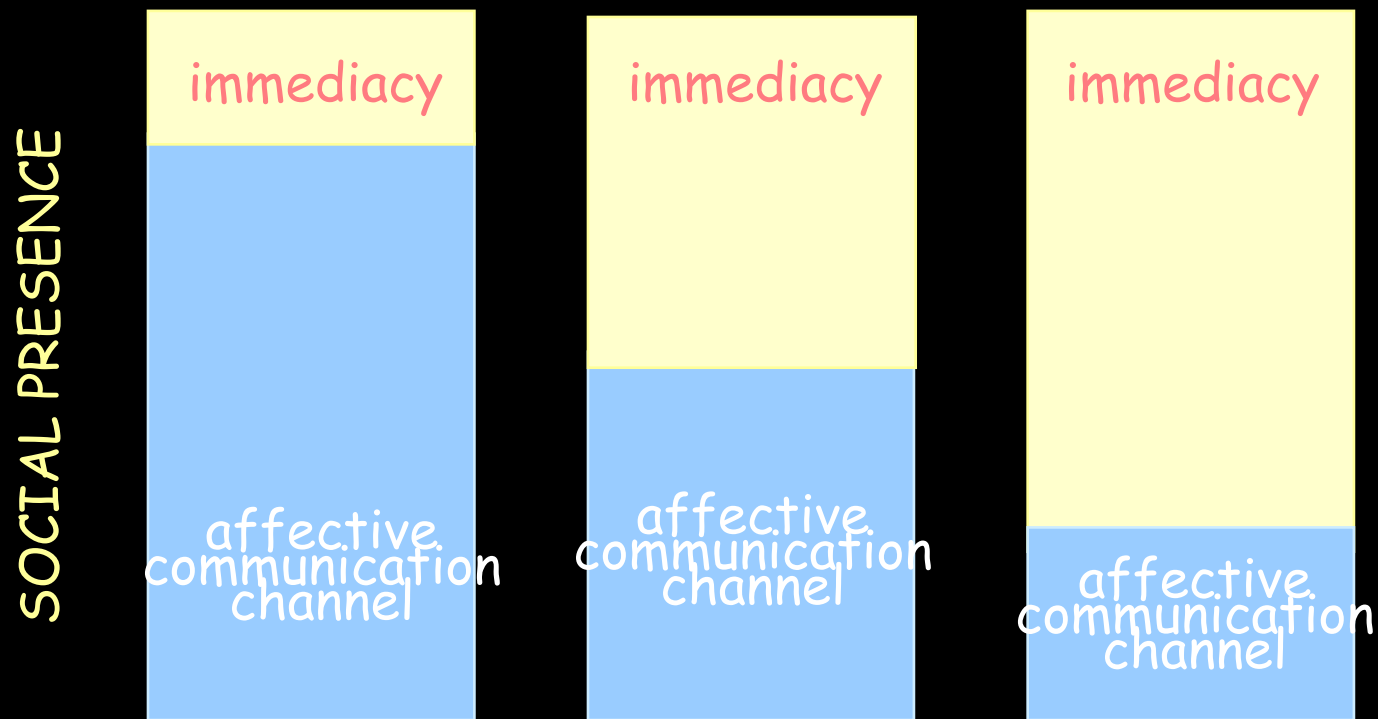
social presence

**elements – affective expression, open
communication, group cohesion**

research findings

- social presence can be (strongly) felt by participants in computer-mediated communication (Walther, 1994; Gunawardena, 1995; Tu & McIsaac, 2002; Richardson & Swan, 2003)
- and projected into text-based asynchronous discussion using verbal immediacy indicators alone (Rourke, Anderson, Garrison & Archer, 2001; Swan, 2002; 2003)

equilibrium model



(Danchak, Walther & Swan, 2001)

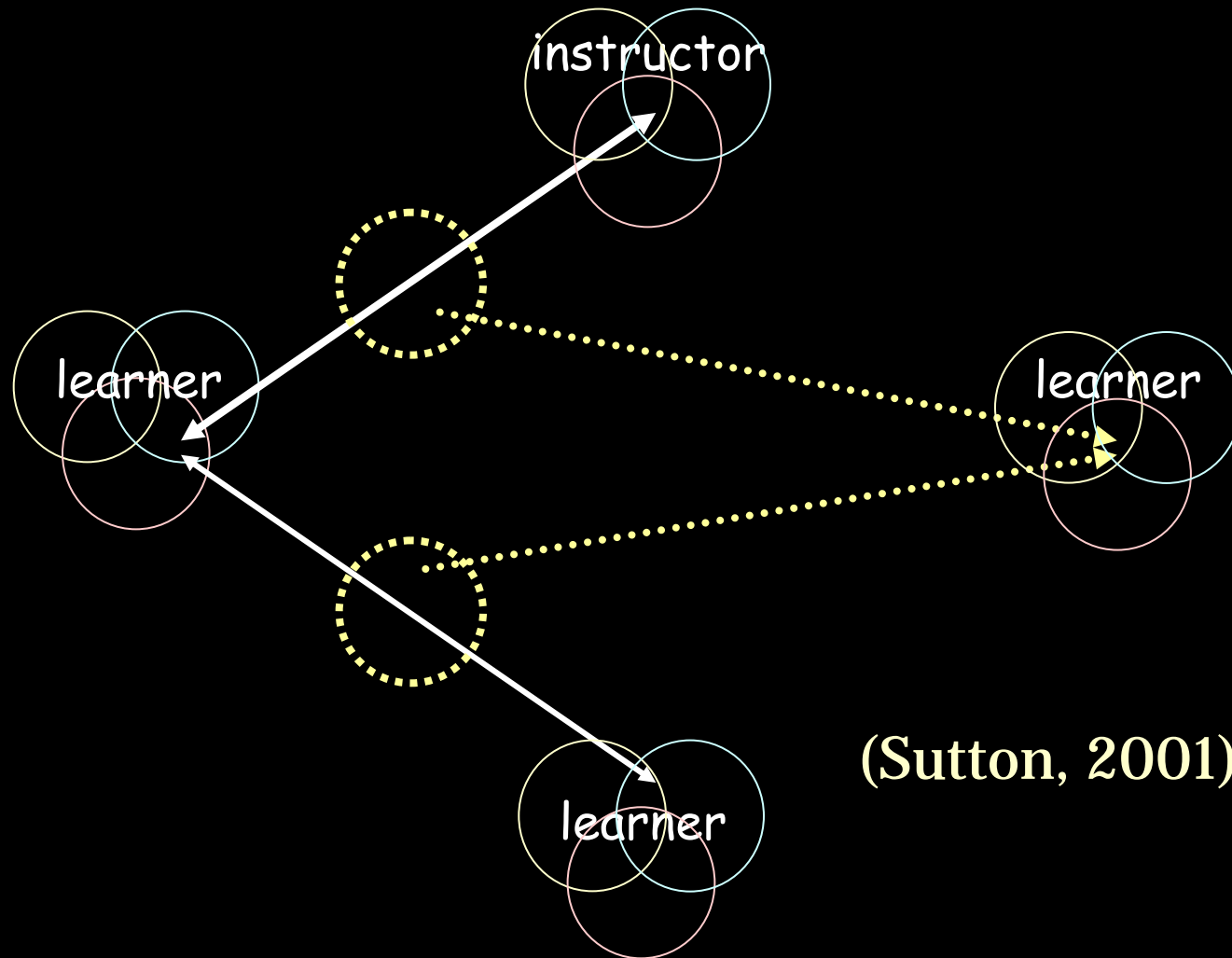
research findings

- perceptions of social presence are linked to student satisfaction in online courses (Gunawardena, Lowe & Anderson, 1997; Tu, 2002; Richardson & Swan, 2003)
- and to (perceived) learning from them (Walther, 1994; Gunawardena, 1995; Picciano, 2002; Richardson & Swan, 2003)

research findings

- differences in effects of social presence of instructors & peers (Swan & Shih, 2005)
- and interesting differences among student perceptions (Swan & Shih, 2005)
- relationship of social presence to course design factors – social context, communication, interactivity (Tu, 2000; Tu & McIssac, 2002)

virtual interactivity



(Sutton, 2001)

implications for practice: tips & techniques

- Create a “Meet Your Classmates” section of your course where you and students introduce yourselves to one another.
- Explicitly introduce students to the unique nature and learning potential of online discussion
- Establish rules of Netiquette for your course.
- Develop initial course activities to encourage the development of swift trust.
- Model & encourage the use of verbal immediacy behaviors in interactions with students.
- Encourage students to share experiences & beliefs in online discussion.

tips & techniques

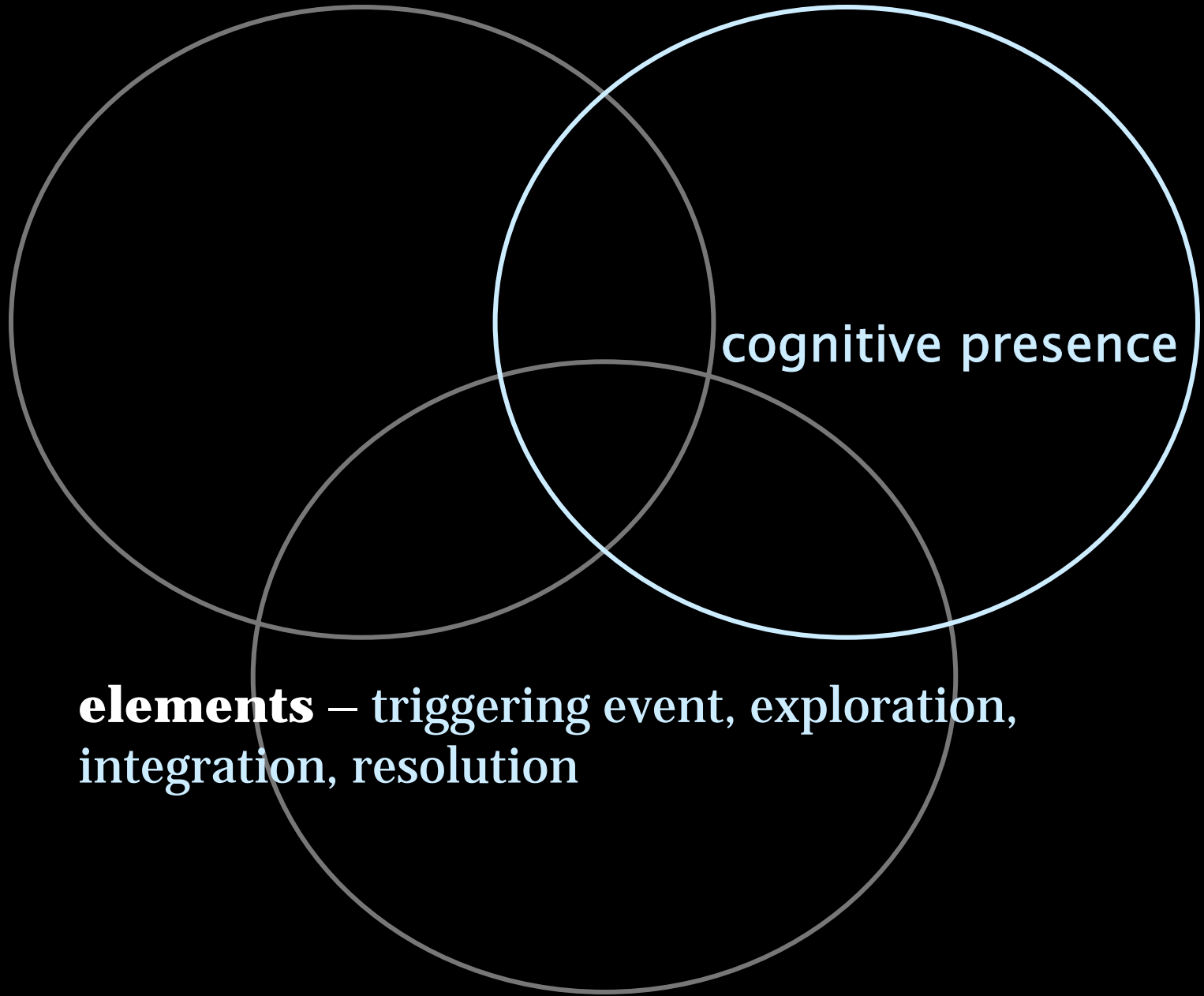
- **Make participation in discussion a significant part of course grades.**
- **Require discussion participants to respond to their classmates postings &/or to respond to all responses to their own postings.**
- **Make students responsible for sustaining discussion threads.**
- **Make students summarize discussion threads.**
- **Require students to incorporate materials from the discussions in their assignments.**
- **Use tracking mechanisms to reward reading as well as responding to messages.**
- **Use short videos of yourself to introduce the course and particular topics.**

tips & techniques

- Journal or otherwise interact with your students on an individual and personal basis.
- Use audio to embed feedback on assignments within them.
- Design community building activities.
- Design collaborative activities – problem solving tasks, projects, small group discussion.
- Consider including real time communications using applications such as chat, collaborative whiteboards, interactive video.
- Consider incorporating Web 2.0 applications in course activities, especially social software such as blogs, wikis, *YouTube*, *Flickr*, *MySpace*, *Second Life*, etc.

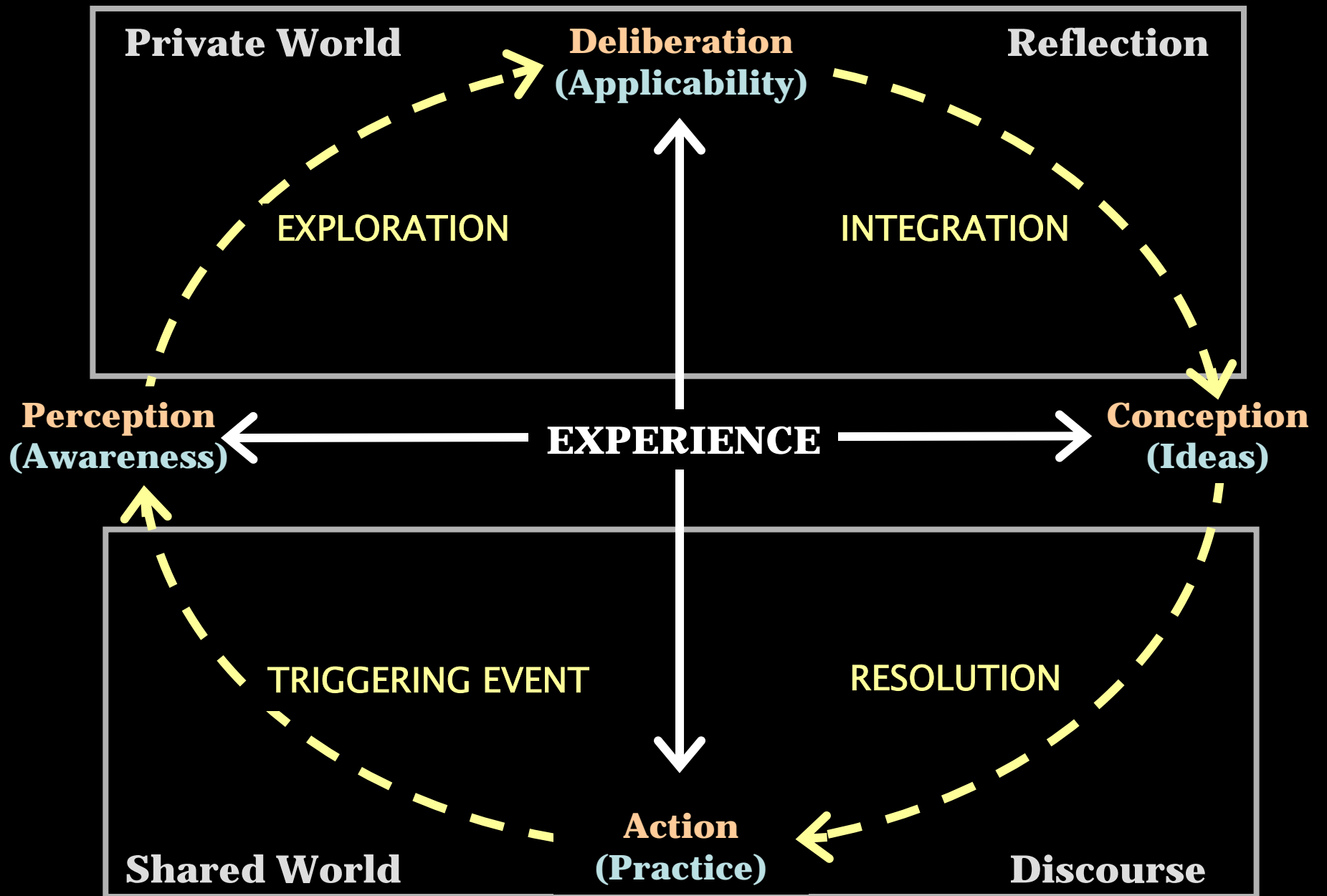
cognitive presence

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



cognitive presence

elements – triggering event, exploration,
integration, resolution



practical inquiry model (Garrison, Anderson & Archer, 2000)

research findings

- online discussion is more equitable and more democratic (Harasim, 1990; Levin, Kim & Riel, 1990)
- online discussion is more reflective and mindful (Hiltz, 1994; Poole, 2000)

scaffolding online discussion

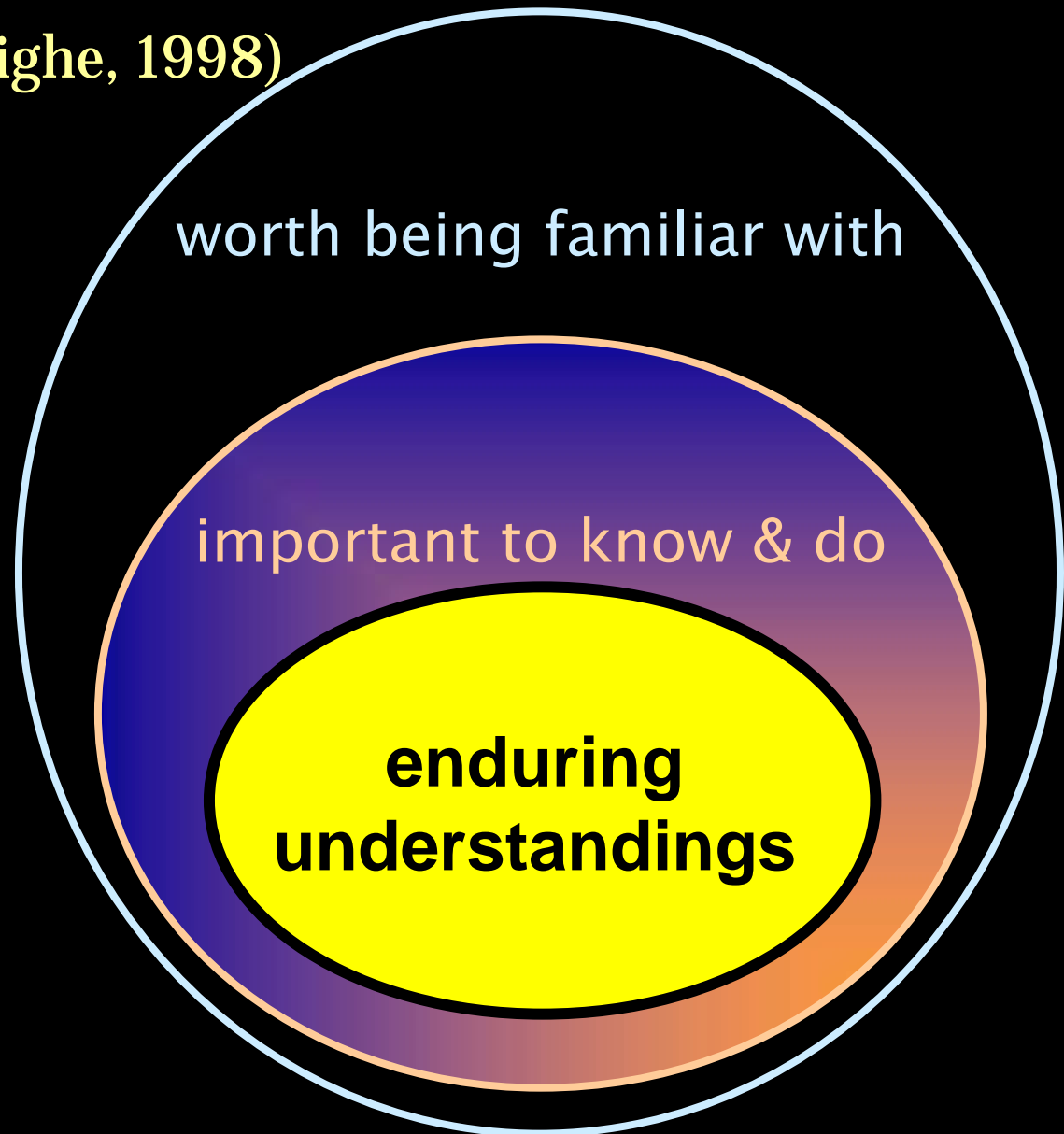
- concept & process scaffolds (Wong-Busby, 2006)
- peer review -- Bloom's taxonomy (Ertmer, Richardson, Belland, Coulthard, Camin & Mong, 2006)
- subject line (Pelz, 2004)
- assessment (Swan, Schenker, Arnold & Kuo, 2007)

research findings: content

- learning concepts vs. learning techniques (Parker & Gemino, 2001; Picciano, 2002)
- multiple perspectives (Picciano, 2002)
- disciplined inquiry – reflection and interaction (Benbunan-Fich & Hiltz, 1999; Garrison, 2003)
- automated mastery learning (Twigg, 2003)

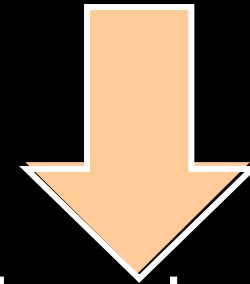
big ideas

(Wiggins & McTighe, 1998)

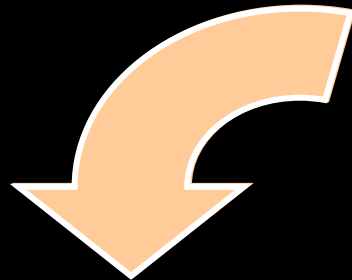


backwards design

(Wiggins & McTighe, 1998)



1. identify desired results



2. determine acceptable evidence



3. plan learning experiences & instruction

implications for practice: tips & techniques

- Identify big ideas you want students to take away from your course and develop major course activities around their assessment.
- Identify important knowledge, skills & attitudes students should learn and develop additional course activities around their assessment.
- Provide multiple representations of the knowledge you want students to learn and multiple activities for practicing desired skills.

tips & techniques

- Encourage experimentation, divergent thinking & multiple perspectives in online discussion through provocative, open-ended questions.
- Model, support & encourage diverse points of view in online discussion.
- Require discussion summaries that identify steps in the knowledge creation process.
- Use content & process scaffolds to support discourse behaviors.
- Use peer review of discussion postings to shape responses.
- Use online discussion & writing activities to support conceptual learning and divergent thinking.

tips & techniques

- Use self-testing, practice assignments, simulations & other interactive activities to support skill development & convergent thinking.
- Develop grading rubrics for discussion & course activities that reward desired cognitive behaviors.
- Provide frequent opportunities for testing & feedback.
- Automate testing & feedback when possible.
- Develop general learning modules with opportunities for active learning, assessment & feedback that can be shared among courses &/or accessed by students for remediation or enrichment.

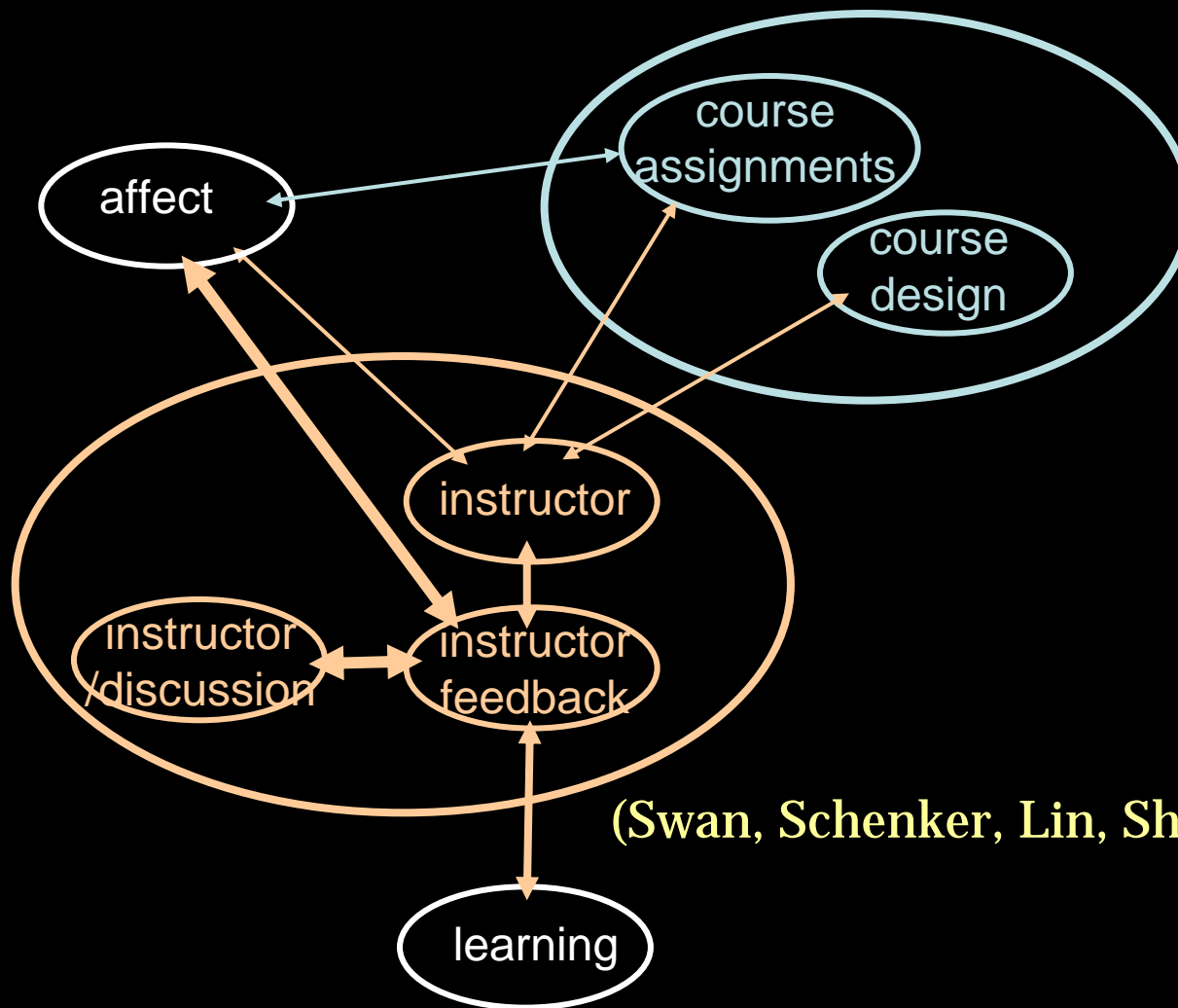
**the design, facilitation and direction of cognitive
and social processes for the purpose of realizing
personally meaningful and educationally
worthwhile learning outcomes**

teaching presence

elements –
design and organization, facilitation, direct instruction

teaching presence

content analysis– “additional comments:”



(Swan, Schenker, Lin, Shea & Aviv, 2006)

research findings

- strong correlations between learner's perceived & actual interactions w/ instructors and their perceived learning (Swan, Shea, Fredericksen, Pickett, Pelz & Maher, 2000; Jiang & Ting, 2000; Richardson & Swan, 2003)
- strong correlations between all three elements of teaching presence and student satisfaction and perceived learning in online courses (Shea, Fredericksen, Pickett & Pelz, 2003; Shea, Pickett & Pelz, 2004)

teaching presence: instructors

	SUMMER 2002 (n=1140)				SPRING 2003 (n=6088)			
	satisfaction		per. learn.		satisfaction		per. learn.	
	r	p	r	p	r	p	r	p
design & organization	.64	<.01	.59	<.01	.64	<.01	.60	<.01
facilitating discourse	.64	<.01	.58	<.01	.61	<.01	.58	<.01
direct instruction	.64	<.01	.61	<.01	.63	<.01	.61	<.01

(Shea, et al., 2003, 2004)

teaching presence: students

	SUMMER 2002 (n=1140)				SPRING 2003 (n=6088)			
	satisfaction		per. learn.		satisfaction		per. learn.	
	r	p	r	p	r	p	r	p
(design & organization)								
facilitating discourse	.36	<.01	.37	<.01	.41	<.01	.43	<.01
direct instruction	.39	<.01	.39	<.01	.40	<.01	.43	<.01

(Shea, et al., 2003, 2004)

restrained presence
(Vandergrift, 2002)

importance of instructors restraining
themselves in online discussion to encourage
student voices

collaborative principles (Wu, 2003)

importance of applying principles of collaborative learning to online discussion & small group activities -- structuring interaction in authentic tasks, applying questioning strategies, role assignment, interdependence, reflection

research findings: course design

- clear structure
- navigational transparency
- consistency
- communication potential
- active learning

(Romiszowski & Cheng, 1991; Eastmond, 1995; Irani, 1998; Swan, Shea, Frederickson, Pickett, Pelz & Maher, 2000; Picciano, 2002)

course design principles

- clear goals and expectations
- multiple representations of knowledge
- active learning
- feedback
- flexibility / learner control
- faculty guidance & support

(Janicki & Liegle, 2001; Chickering & Ehrmann, 1996;
Keeton, Scheckley & Griggs, 2002)

changing instructor roles

(Coppola, Hiltz & Rotter, 2001)

- cognitive, affective, managerial
- cognitive role shifts to one of deeper complexity
- affective role requires faculty to find new tools to express emotion
- managerial role requires greater attention to detail, more structure, additional student monitoring

implications for practice: tips & techniques

- Provide frequent opportunities for both public and private interactions with students.
- Provide students with timely & supportive feedback.
- Restrain from being overly “present” in online discussions, rather facilitate student interaction.
- Apply collaborative learning principles to support small group discussion and collaborative projects.
- Design diverse, graded activities to be completed every week.

tips & techniques

- Design courses for learner choice, flexibility & control.
- Design and review courses for clarity & consistency.
- Ensure courses are well organized and that the organization is clear to students & easy to navigate.
- Clearly state course goals and instructional expectations.
- Provide a detailed course schedule including due dates for all assignments.
- Provide students with explicit and redundant instructions for all course activities.

tips & techniques

- Provide clear grading guidelines including rubrics for complex assignments.
- Review changing faculty roles and reflect on your own cognitive, affective & managerial behaviors.
- Develop forums or learning communities for online faculty to share experiences & support one another.



COMMUNITY OF INQUIRY SURVEY

Survey with 5–category Likert–type items:
10 teaching presence, 9 social presence,
12 cognitive presence



THE SLOAN CONSORTIUM

A Consortium of Institutions and Organizations
Committed to Quality Online Education

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Teaching Presence Design & Organization

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.



Teaching Presence Facilitation

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.



Teaching Presence Direct Instruction

11. The instructor helped to focus discussion on relevant issues in a way that helped me to learn.
12. The instructor provided feedback helped me understand my strengths and weaknesses.
13. The instructor provided feedback in a timely fashion.



Social Presence

Affective Expression

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.

Open Communication

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.



Social Presence Group Cohesion

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.



Cognitive Presence Triggering Event

- 23. Problems posed increased my interest in course issues.
- 24. Course activities piqued my curiosity.
- 25. I felt motivated to explore content related questions.

Exploration

- 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.



Cognitive Presence Integration

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.

Resolution

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.