SUFFOLK UNIVERSITY BOSTON

Center for Teaching & Scholarly Excellence

Collaborative Learning Classrooms

Collaborative Learning Classrooms (CLC)

Collaborative Learning Classrooms (CLC) are designed to facilitate student-centered learning activities that directly engage students in the learning process. This collaborative learning space can be used to develop problem-solving skills, accommodate team projects, and increase student participation. The CLC learning environment encourages learning through peer instruction and active learning, and its design encourages interaction among students and the inclusion of all student voices.

In this packet you will find:

- Some questions that can be used as a guide while planning a course in a CLC ranging from "how do I orient my students to this learning space" to "have I built in CLC-related learning objectives into my syllabus."
- Definitions and examples of collaborative learning, cooperative learning, team-based learning, and problem-based learning.
- Comparison of collaborative, cooperative, team-based, and problem-based learning
- An overview of building basic course goals and objectives.
- Verbs that can be used to build learning objectives.

For additional assistance using CLCs, please contact: For pedagogy: ctse@suffolk.edu; For technology: servicedesk@suffolk.edu.

Check out *Collaborative Learning Techniques: A Handbook for College Faculty* by Barkley, Cross, and Major. Located in the CTSE Library.

Share your successes, ideas, and tips with us. We will be continuously updating the CTSE/Technology Innovation in Teaching & Learning/Collaborative Learning Classroom web page – visit often!

Guiding Questions Checklist When Planning a Course in a CLC

	What kind of group work will best help my students learn the course materials and meet my objectives for the course?
	Are cooperative, collaborative, team-based, or problem-based learning strategies appropriate for my course?
	Have I built in CLC-related learning objectives into my syllabus?
	Have I embedded explanation about the CLC into my course syllabus?
	Have I attended a technology training session in the room?
	Do I feel comfortable using all of the technological features of the CLC?
	What can I do to ensure that I will be using the space as effectively as possible to aid student learning?
	Have I designed an orientation for my students to the room?
	What kinds of activities can I build into the course in terms of assignments or in-class work that will best utilize the unique aspects of the classroom space?
	Have I designed group projects that will best utilize the space?
	Have I created support resources to ensure effective group work and collaboration during in-class time?
	Have I designed activities for the space that will encourage students to utilize the technology for the purpose of enhancing their learning?
	Have I considered how best to collect feedback throughout the course about how the CLC space is contributing to student learning?

Course Goals and Learning Objectives for Collaborative, Cooperative, Team-Based and Problem-Based Learning

Collaborative **Goal –** Upon successful completion of this course, students will know / understand the characteristics of effective collaboration. **Objective –** Upon successful completion of this course, students will be able to consider the contributions of others.
Cooperative **Goal –** Upon successful completion of this course, students will understand the dynamics of effective group communication. **Objective –** Upon successful completion of this course, students will be able to contribute questions or concerns in a respectful way.
Team-Based **Goal –** Upon successful completion of this course, students will know / understand the importance of a shared goal. **Objective –** Upon successful completion of this course, students will be able to develop a common goal.
Problem-Based **Goal –** Upon successful completion of this course, students will better understand the importance of approaching problems in a real-life context. **Objective –** Upon successful completion of this course, students will be able to apply the problem-based learning cycle (identify facts, generate hypothesis, identify knowledge deficiencies, apply new knowledge, abstraction, evaluation) to a unique situation. (See Hmelo-Silver, 2004)

References:

Hmelo-Silver, C.E. (2004). Problem-based learning. What and how do students learn? *Educational Psychology Review* 16 (3): 235-266.

Collaborative Learning	Cooperative Learning
Definition: "in collaborative learning, the focus is on working with each other (but not necessarily interdependently) toward the same goal… toward discovering, understanding, or production of knowledge" (Davidson & Major, 2014, p. 21) **Examples:** Reports or presentations in which tasks are split among group members.	**Definition:** "students work and learn together actively in small groups to accomplish a common goal in a mutually helpful manner" (Davidson & Major, 2014, p. 14); this group work can be structured or unstructured **Examples:** Jigsaw activities Think / Pair / Share Three-Step Interview
Team-Based Learning	**Problem-Based Learning**
Definition: "TBL shifts the focus of instruction away from the teacher as dispenser of information and instead places the focus on students actively engaging in activities that require them to *use* the concepts to solve problems… *every* aspect of a TBL course is specifically designed to foster the development of self-managed learning teams" (Michaelsen, Davidson, & Major, 2014, p. 58) **Examples:** Flipped classroom model	**Definition:** "PBL fosters the ability to identify the information needed for particular applications, where and how to seek that information, how to organize that information in a meaningful conceptual framework, and how to communicate that information to others" (Duch, Groh, & Allen, 2001, p. 7); PBL is often interdisciplinary with "real world" applications **Examples:** Case method Simulated client interaction

References:

Davidson, N. & Major, C.H. (2014). Boundary crossings: Cooperative learning, collaborative learning, and problem-based learning. *Journal on Excellence in College Teaching,* 25 (3&4), 7-55.

Duch, B.J., Groh, S.E., & Allen, D.E., eds. (2001). *The power of problem-based learning: A practical 'how to' for teaching undergraduate courses in any discipline.* Sterling, VA: Stylus.

Michaelsen, L.K., Davidson, N. & Major, C.H. (2014). Team-based learning practices and principles in comparison with cooperative learning and problem-based learning. *Journal on Excellence in College Teaching,* 25 (3&4), 57-84.

	Collaborative	Cooperative	Team-Based	Problem-Based
Causal research supports a positive influence on student learning		✓	✓	✓
Used most extensively in the humanities and social sciences	✓			
Used mostly extensively in STEM fields		✓		
Used most extensively in health professions				✓
Can be designed at all levels of Bloom's Taxonomy	✓	✓	✓	✓
Focus is on interdependence		✓	✓	✓
Focus on individual accountability and responsibility		✓	✓	✓
Can use assigned group roles		✓	✓	✓
Overtly teaches group interaction, reflection, and / or processing skills		✓	✓	
Teams are mostly self-managed	✓		✓	

Based on information taken from Davidson, N. & Major, C.H. (2014). Boundary crossings: Cooperative learning, collaborative learning, and problem-based learning. *Journal on Excellence in College Teaching*, 25 (3&4), 7-55 and Michaelsen, L.K., Davidson, N. & Major, C.H. (2014). Team-based learning practices and principles in comparison with cooperative learning and problem-based learning. *Journal on Excellence in College Teaching,* 25 (3&4), 57-84.

Sample Verbs For Learning Objectives

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Cite	Describe	Apply	Analyze	Arrange	Appraise
Define	Discuss	Assign	Appraise	Assemble	Assess
Give	Explain	Demonstrate	Calculate	Collect	Check
Label	Express	Dramatize	Categorize	Combine	Choose
List	Identify	Employ	Compare	Compose	Compare
Match	Locate	Illustrate	Contract	Conclude	Critique
Name	Recognize	Interpret	Criticize	Construct	Decide On/To
Recall	Report	Operate	Debate	Create	Discriminate
Record	Restate	Practice	Diagram	Design	Estimate
Relate	Review	Schedule	Differentiate	Determine	Evaluate
Select	Tell	Shop	Distinguish	Diagnose	Grade
State	Translate	Sketch	Examine	Differentiate	Inspect
Tell		Use	Experiment	Dissect	Judge
Underline			Inspect	Examine	Measure
Write			Inventory	Formulate	Monitor
			Question	Manage	Rank/Rate
			Relate	Organize	Research
			Solve	Plan	Review
			Test	Prepare	Revise
				Propose	Score
				Refute	Select
				Set Up	Value

Attitudinal Verbs

Receiving	Responding	Valuing	Organizing	Characterizing
Listen To	Reply	Attain	Organize	Believe
Perceive	Answer	Assume	Select	Practice
Be Alert To	Follow Along	Support	Judge	Continue To
Show Tolerance Of	Approve	Participate	Decide	Carry Out
Obey	Continue		Identify With	

Skills Verbs

Assemble	Diagram	Implement	Package	Refill	Sketch
Attach	Dictate	Inspect	Perform	Regulate	Sort
Balance	Direct	Instruct	Plant	Renovate	Splice
Build	Dismantle	Interview	Portion	Repair	Stratify
Bundle	Document	Lift	Position	Replace	Sterilize
Calibrate	Draw	Line	Prepare	Reproduce	Tape
Care For	Duplicate	Load/Reload	Press	Retrieve	Terminate
Clean	Edit	Locate	Process	Route	Transfer
Code	Execute	Log	Program	Save	Transplant
Collate	Fix	Make	Proofread	Search	Treat
Collect	Format	Manage	Propagate	Secure	Trim
Conduct	Gather	Measure	Prove	Select	Troubleshoot
Conserve	Grade	Mix	Provide	Separate	Verify
Construct	Grid	Mount	Prune	Sharpen	Wash
Control	Harvest	Operate	Raise	Simplify	Write
Design	Highlight	Organize	Recheck	Simulate	

Course Goals and Learning Objectives

Course Goals (intentionally broad, not necessarily measurable or observable):

1) By the end of my course, a successful student will know/understand_____
   _____
   _____

2) By the end of my course, a successful student will know/understand_____
   _____
   _____

3) By the end of my course, a successful student will know/understand_____
   _____
   _____

Learning Objectives (measurable, observable, student-centered):

1) By the end of my course, a successful student will be able to_____
   _____
   _____

2) By the end of my course, a successful student will be able to_____
   _____
   _____

3) By the end of my course, a successful student will be able to_____
   _____
   _____

4) By the end of my course, a successful student will be able to_____
   _____
   _____

Ultimately, goals and objectives should be aligned. There should be no goals without accompanying objectives and no objectives without an overarching goal that is related to it. Your next step is to start making connections between the two categories. Remember, goals and objectives can go through many revisions both before and after courses are taught so don't worry if you go through multiple drafts!