

MODELS OF EXCELLENCE

CLASS LESSON PLANS FOR THE COLLABORATORY AT SAN FRANCISCO STATE UNIVERSITY

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Models of Excellence

Models of Excellence provides examples of effective class Collaboratory sessions. These examples may serve as a model for teachers designing their own sessions.

The Collaboratory, an innovative classroom at San Francisco State University, is specifically designed to enhance student participation. Teachers using this facility employ strategies to create a safe, supportive environment for student interaction and encourage open communication for all participants.

The class sessions included here contain best practices for using the Collaboratory to support student participation **verbally**, not solely through the computer. In fact, the majority of the sessions focus on the **face-to-face discussion**. Commonly in these discussions students are encouraged to elaborate, clarify, and comment on the ideas they generated during their electronic participation.

Below is a step-by-step model for all sessions:

- Step 1:** *Introduce activity* – Instructor explains objective of the session, describes background information, and explains process. (5-10 minutes)
- Step 2:** *Explain software* – Technician explains the software. (5 minutes)
- Step 3:** *Input ideas* – Students input ideas into the computer. (5-10 minutes)
- Step 4:** *Group discussion* – Instructor leads face-to-face discussion. Reviewing, clarifying, commenting, elaborating, and adding ideas. (20-40 minutes)
See pages 23-24 for examples of good discussion questions.
- Step 5:** *Closure* – Instructor reviews objective and describes next steps. (5 minutes)

A record of the information gathered during the sessions is always given to the professor who usually distributes it to students for use later in the semester.

Topic: Development of a Class Web Site

Objective: Students will brainstorm class web site contents.

Tool Used: Categorizer

Course: Geography

of Students: 3 groups of 20

Instructor: Patricia Foschi

Length: 1 hour

Lesson Plan:

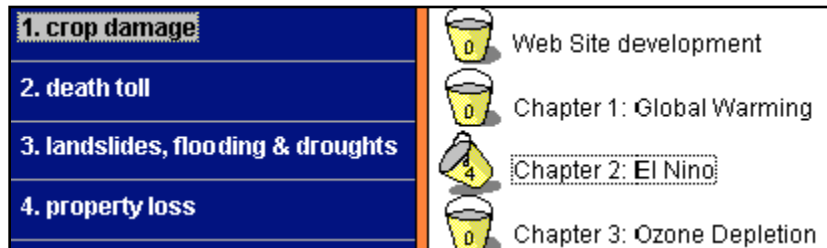
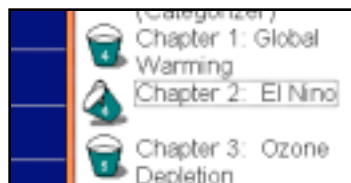
Before coming to Collaboratory, class determines chapter titles. Students arrive at the Collaboratory with specific ideas for each chapter.

9:10-9:15am

Introduction: Instructor introduces today's objective and process.

9:15-9:30am

Add web site content: Students add content ideas into the chapters.



9:30-9:55am

Review and discuss content: Instructor leads face-to-face discussion. Ideas are reviewed, added, and modified. To encourage discussion, instructor asks questions such as *“How do extreme weather conditions, like those in an El Nino year, affect human activities and systems?”*

Additional topics covered in face-to-face discussion:

- Merging chapters based on similarities.
- Removing chapters due to lack of information.
- Researching statistics – such as death toll statistics.

9:55-10am

Next steps: Information gathered is printed and used to develop web site.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Stimulates critical thinking.
- More ideas generated in less time.
- Shy students participate.
- Information is automatically recorded and printed for later use.

Topic:	Observation as a Measurement Technique	
Objective:	Students will explore different measurement techniques.	Tool Used: Topic Commenter
Course:	Social Science - Interdisciplinary Research Methods	# of Students: 20 students
Instructor:	Sherry Keith	Length: 1 hour

Lesson Plan:

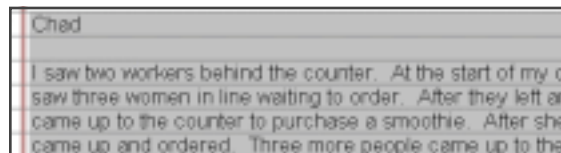
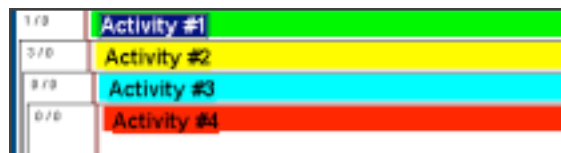
Observation Activity at Student Union: Before meeting in the Collaboratory, students (with partners) participate in an observation activity.

Unstructured observation example: Go to the pizza concession and describe what is happening and whom you see there during a 7-minute period.

Structured observation example: Go to the sandwich concession and record the gender of the customers as well as the employees during a 7-minute period.

2:10-2:20pm

Record Observations: Groups record observations on the appropriate “Activity #” card. Students include their name next to the observation.



2:20-2:55pm

Review and Discuss Observations: Students read their own observation to the group. Instructor asks questions about each observation. For example, “How do you know the women were ‘waiting in line to order?’” (See observation above.)

Additional topics covered in face-to-face discussion:

- Differences in information collected by individuals.
- Biases in information collected by observer.
- Reliability of the information collected.

2:55-3:00pm

Closure: Why is observation an important measurement technique?

***Benefits of Collaboratory vs. Traditional Classroom:**

- Addresses learning style differences: students write, read, explain & discuss observations.
- Facilitates concept development.
- Develops oral communication and social interaction skills.

Topic: Course Development

Objective: Students will assist in developing the course.

Course: Social Work 803

Instructor: Sheila Hembury

Tool Used: Vote

of Students: 20 students

Length: 1 hour

Lesson Plan:

10:10-10:15am

Introduction: Instructor introduces today’s objective and process.

10:15-10:30am

Identify topics to study over the semester: Students rank a list of possible course topics using a 5-point scale (“5” if they are very interested, “1” if not at all interested). If students have additional topics of interest, topics are included in the ballot before voting.

5 = Very interested 1 = Not interested	1	2	3	4	5
1. Direct Action/Grassroots Organizing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Political Action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Electoral Politics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Results are reviewed with group.

10:30-10:50am

Identify assignments: Students rank a list of assignments using the 5-point scale.

5 = Very interested 1 = Not interested	1	2	3	4	5
4. Two collages (8 1/2 x 11): DUE FEB. 4: Pictures/works that reflects you in your social work/organizer roles at this point -- values, strategies, etc. DUE MAY 13: Reflecting on your additional months of living, work experience, thinking and learning, make a new presentation of you in your social work professional roles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Keep an ongoing journal in the course. In it, reflect on the movies, videos, readings, presentation, experiences in the classroom and in your community effort (field, work, school.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Develop four position papers on the following topics. These will follow viewing videos/movies, and will be the basis for discussion in the next class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Results are reviewed with group.

10:50-11am

Next Steps: Course will be revised based on information collected.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Encourages student responsibility for learning.
- Promotes a positive attitude towards the subject matter.
- Builds self-esteem in students and facilitates class-building.

Topic: Advertisement Analysis

Objective: Students will learn how to analyze advertisements by participating in a standard market analysis survey.

Tool Used: Survey

Course: Marketing

of Students: 25 students

Instructor: Jeff Saperstein

Length: 1 hour

Lesson Plan:

7:10-7:15pm

Introduction: Instructor introduces today's objective and process.

7:15-7:20pm

Review Advertisement: Advertisement is distributed and students review.

7:20-7:30pm

Students complete survey

1. Aside from trying to persuade you to buy the product, what was the one main idea the advertiser was trying to get across?
Click in the box to enter text.

2. How important is this idea to you?
Choose up to the maximum number of selections. **Mark 1**

a. Very important

b. Somewhat important

c. Not important

7:30-7:50pm

Discuss group results: Instructor leads face-to-face discussion. To encourage discussion, instructor asks questions such as “*What do you mean by ‘good service’?*”

2. This is a first class operation, exclusive and luxurious.

3. Unforgettable experiences, go out and enjoy the beautiful world.

4. smaller, more attentive, more pampering type of cruise

5. fine, exquisite, accomodating to your most comfortable cruise experience - we can take you there

6. good service

Additional topics covered in face-to-face discussion:

- Type of audience the ad is attracting.
- Where you would find this ad.
- How to attract a different audience.

7:50-8:00pm

Closure: How is this process similar to a marketing analysis in businesses?

***Benefits of Collaboratory vs. Traditional Classroom:**

- Students participate in a real-world simulation of a market analysis survey.
- Increases student retention by learning in an active mode.
- Enhances student satisfaction with the learning experience.

Topic: Movement Analysis

Objective: Students will strengthen their movement analysis skills by analyzing various movements.

Tool Used: Survey

Course: Kinesiology

of Students: 25 students

Instructor: Martha Eddie

Length: 1 hour

Lesson Plan:

6:10-6:15pm

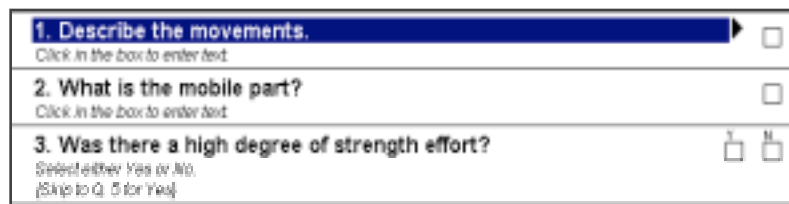
Introduction: Instructor introduces today’s objective and process.

6:15-6:17pm

Watch Video Clip: Students watch a video clip illustrating a movement.

6:17-6:25pm

Complete movement analysis survey



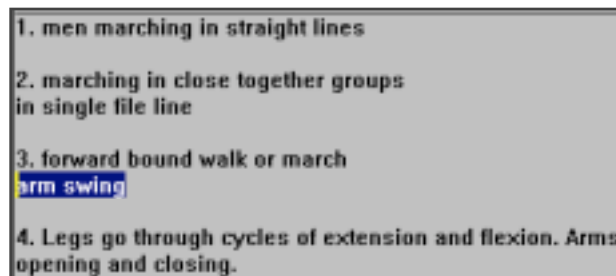
1. Describe the movements.
Click in the box to enter text.

2. What is the mobile part?
Click in the box to enter text.

3. Was there a high degree of strength effort?
Select either Yes or No.
(Single to Q, 5 for Yes)

6:25-6:35pm

Review and discuss group results: Instructor leads face-to-face discussion by reviewing and summarizing results. Instructor asks questions or



1. men marching in straight lines

2. marching in close together groups
in single file line

3. forward bound walk or march
arm swing

4. Legs go through cycles of extension and flexion. Arms
opening and closing.

asks for demonstrations such as “*Show me how the ‘arms swing’*”

Additional topics covered in face-to-face discussion:

- Reasons for different interpretations.
- Predominant use of time.
- Movement demonstrations – such as an arc-like movement.

6:35-6:37pm

Watch clip again and review: Class watches video clip a second time to review and summarize the movement.

6:37-6:55pm

Steps above are repeated for another movement

6:55-7:00pm

Summary: Class reviews tips for analyzing movement.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Students participate in a real-world simulation of a movement analysis survey.
- Increases student retention by learning in an active mode.
- Enhances student satisfaction with the learning experience.

Topic: Field Work Review

Objective: Students will discuss and compare their field experiences.

Tool Used: Topic Commenter

Course: Community Health Nursing Practicum

of Students: 14 students

Instructor: Theresa Chen-Louie

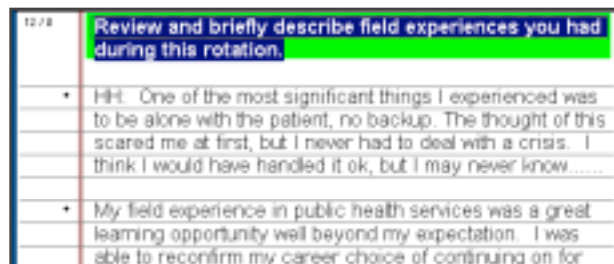
Length: 1 hour

Lesson Plan:

4:10-4:15pm **Introduction:** Instructor introduces today's objective and process.

4:15-4:17pm **Break into clusters:** Students break into their Community Health Nursing Rotation cluster.

4:17-4:25pm **Describe field experiences:** Students answer the following question: *Review and briefly describe field experiences you had during this rotation.* Next to the response, students identify their cluster name.



4:25-4:35pm **Discuss experiences with cluster:** In the small cluster, students discuss and compare experiences.

4:35-4:55pm **Entire group discussion:** Instructor leads face-to-face discussion analyzing commonalities of experiences. Instructor asks students to share experiences with group. For example: *Tell us about one specific challenge you faced when working alone with a patient. How did you overcome this challenge?*

Additional topics covered in face-to-face discussion:

- Difficulties with home visits.
- On-the-job training.
- Communication among rotation group.

4:55-5:00pm **Closure:** Instructor concludes class.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Addresses learning style differences: students write, read, and discuss experiences.
- Encourages student responsibility for learning.
- Instructor prints information for further evaluation.

Topic: Development of a Promotional Event – Fashion Show

Objective: Every students in the class will help to generate ideas and plan a fashion show with an outside merchandizing partner.

Tool Used: Topic Commenter, Categorizer, Vote

Course: Seminar in Fashion Merchandising – ADM 669

of Students: 20 students

Instructor: Connie Ulasewicz

Length: 1 hour each for 2 sessions

Lesson Plan:

Day 1 in the Collaboratory.

- 10:10-10:20a.m. **Introduction:** Instructor introduces today’s objectives and processes. Students view relevant Internet websites related to the upcoming event.
- 10:20-10:30a.m. **Warm-up:** Student warm-up with the technology, practice using Topic Commenter.
- 10:30-10:45a.m. **Idea Generation:** *Topic Commenter*
Students use the Topic Commenter card to answer the following prompt: *Tell us about how you would envision one scene for our upcoming “Ribbons and Wraps” fashion show.*
- 10:45-11:00a.m. **Review, discuss and categorize ideas:** *Categorizer*
Teacher leads discussion of ideas and helps students sort them into individual ‘scenes’ possible for the fashion show. Students begin to build consensus around the ideas, give clarification and think about how they might fit together and cover all the aspects of merchandizing they had in mind for the show. A print out of ideas within categories is produced for the following class session.

Day 2 in their regular classroom.

With a printed meeting record, the class further discusses the ideas gathered in the Collaboratory. Students form groups to work on individual scenes for analysis during the next Collaboratory session.

Day 3 in the Collaboratory.

- 10:30-10:50a.m. **Individual Scene Analysis:** *Topic Commenter*
Each of 5 scenes are placed on a card and students who have been assigned to groups, each tackle fleshing out what might happen in their scene. All students are encouraged to comment on all scenes, in CAPS if they are commenting on one that was not assigned to them.
- 10:50-11:00a.m. **Vote**

To decide the final order that the scenes should go in, students anonymously voted.

Benefits of Collaboratory vs. Traditional Classroom:

- More ideas from 100% of the class are shared in less time.
- Removes embarrassment about sharing tentative ideas.
- Facilitates whole class discussion.
- Encourages student responsibility for learning and participation.
- Enhances student satisfaction with the learning experience.
- Class record is produced so no ideas are lost or passed over.

Topic: Formulating a Research Question

Objective: Students will conceptualize a research question, examine factors associated with a specific research question, develop hypotheses from a general research question, and develop a questionnaire to collect data to assess research hypothesis.

Tool Used: Topic Commenter

Course: Black Studies 516 - Research Methods

of Students: 20 students

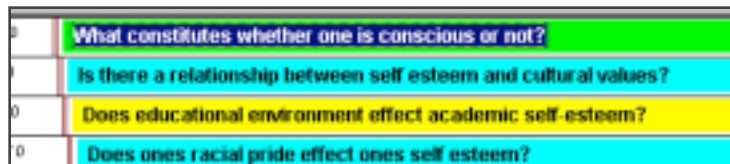
Instructor: Lawford Goddard

Length: 2 sessions/ 1 hour each

Lesson Plan –Day 1 of 2:

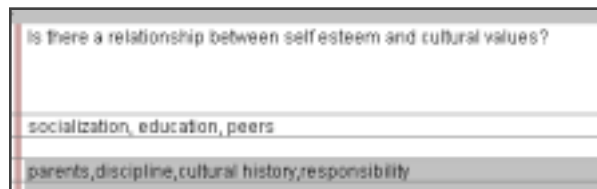
12:10-12:15pm **Introduction:** Instructor introduces objective and process.

12:15-12:25pm **List possible research questions:** Students complete the following activity: *Think of the possible things that you may want to know when the research is completed and list them in the form of a research question.*



12:25-12:40pm **Review questions:** Instructor leads face-to-face discussion. Questions are clarified, removed, and added.

12:40-12:50pm **Identify factors:** Students complete the activity: *Identify the factors that would have to be examined to answer the questions.*



12:50-1:10pm **Review factors:** Instructor leads face-to-face discussion. Factors are clarified, added, and deleted. To encourage discussion, instructor asks questions such as *“How is socialization related to self-esteem?”*

1:10-1:15pm **Summary:** Instructor reviews objective for day two.

Lesson Plan – Day 2 of 2, Formulating a Research Question:

12:10-12:15pm **Instructor reviews today’s objective and process**

12:15-12:25pm **Develop hypotheses:** Students complete the following activity: *Given the research question, restate them in the form of hypotheses that could be submitted for empirical testing.* Students identify each hypothesis by typing a “H” before the response.

•	socialization, education, peers
•	parents, discipline, cultural history, responsibility
•	H: Socialization directly affects the cultural values and self-esteem of Black adolescent females. Education directly affects the cultural values and self-esteem of Black adolescent females.
•	H: Among African Americans, there is a positive relationship between cultural values
•	H: self-esteem among blacks is directly connected to their cultural values.

12:25-12:40pm **Review hypotheses:** Instructor leads face-to-face discussion. Hypothesis are clarified, added, and deleted.

12:40-12:50pm **Develop questions:** Students develop questions for questionnaire. Students identify each question by typing a “Q” before each question.

•	H: Among African Americans, there is a positive relationship between cultural values and
•	H: self-esteem among blacks is directly connected to their cultural values.
•	Q: On a scale of 1 to 5, how much do you know about your cultural roots.
•	Q: What is your personal culture and does the values within it influence your self concept or

12:50-1:10pm **Review questions:** Instructor leads face-to-face discussion. Questions are clarified, added, and deleted.

1:10-1:15pm **Next Steps:** The information gathered will be modified and used to formally develop the questionnaire.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Stimulates critical thinking.
- More ideas generated in less time.
- Information is printed for later use.

Topic: Understanding Black American Culture Through the Study of American Black Women

Objective: Students will identify the unique artistic talents of black women studied.

Tool Used: Categorizer

Course: Black Studies 204 – Creativity in Culture

of Students: 20 students

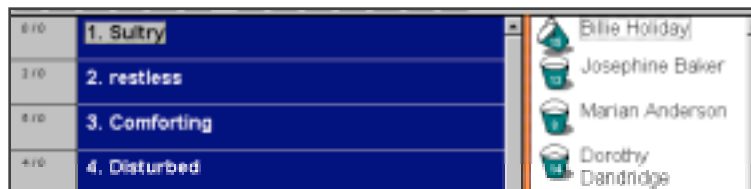
Instructor: Dorothy Tsuruta

Length: 2 hours

Lesson Plan:

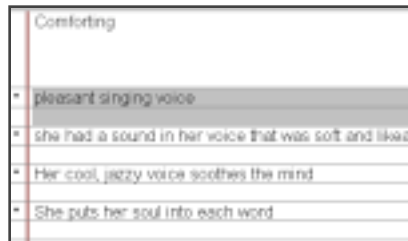
10:10-10:15am **Introduction:** Instructor introduces today’s objective and process.

10:15-10:25am **List adjective:** Students list adjectives to describe the women.



10:25-10:50am **Review Adjectives:** Instructor leads face-to-face discussion. Beginning with the first woman, adjectives are reviewed, merged, and added.

10:50-11:05am **Provide examples to support adjective:** Students add specific examples from literature to support the adjectives.



10:25-10:55am **Review and discuss examples:** Students read examples. Instructor asks discussion questions such as, “How does she ‘put her soul into each word’?”

Additional topics covered in face-to-face discussion:

- How these women would be treated today.
- Importance of using examples along with descriptive words.
- Most admired women.

10:55-11:00am **Next Steps:** The information gathered will be included on the exam.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Stimulates higher-level thinking skills including analysis and synthesis of the material.
- Checks for knowledge and comprehension.
- Information is printed and used to study for exam.

Topic:	Refining Group Projects	Tool Used:	Topic Commenter
Objective:	Students will refine group project and identify specific roles for each member.		
Course:	Black Studies 210 – Intro. to Black Literature	# of Students:	20 students
Instructor:	Dorothy Tsuruta	Length:	1 hour

Lesson plan:

Before coming to Collaboratory, class is broken into small groups, projects are identified and roles are discussed.

10:10-10:15am

Break into groups and review Today’s objective

10:15-10:25am

Describe group project and student roles: Each person describes project activity and their role in the activity.

<ul style="list-style-type: none"> • Sheri Therence (friday) Were going to play the game jeopardy. There are six catagories and five queations in each catagory. My assigned job is to make up questions for the decade of 40's to 60's on the Black woman we've studied throughout this semester. Since our original idea has been altered, some of the group members will be the contestants and the rest of the group will make up the questions for the game.
--

10:25-10:55am

Review roles and refine project: Groups review project activity and roles. Specific roles and activities are defined. Instructor circulates classroom and assists each group in this discussion by asks questions such as *“What specific questions and answers will you create?”*

Additional topics covered in face-to-face discussion:

- Timeline for completing projects.
- Equal distribution of work.
- Role of audience in presentation of project.

10:55-11am

Next Steps: Ideas are printed and distributed to groups for project development.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Encourages student responsibility for learning.
- Uses a team approach to problem solving while maintaining individual accountability.
- Facilitates conflict resolution.

Topic: Literature Review

Objective: Students will read actively and think critically, and build interpersonal skills and self-confidence.

Tool Used: Topic Commenter

Course: English 115 - Reading for Rate and Comprehension

of Students: 20 students

Instructor: Joan Wong

Length: 3 sessions/1 hour

Lesson Plan - Day 1 of 3:

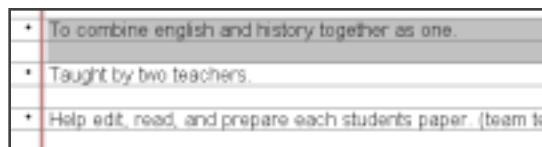
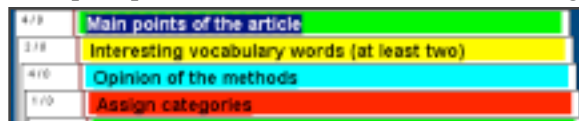
Before coming to the Collaboratory, groups of 2-3 read an article and identifies the *main points, interesting vocabulary words, opinion, and categories.*

9:10-9:15am

Introduction: Instructor introduces objective and today's process.

9:15-9:55am

Groups input and revise information according to categories on cards.



9:55-10am

Next Steps: Groups will present information in next session.

Lesson Plan - Day 2 of 3:

9:10-9:15am

Review objective and process

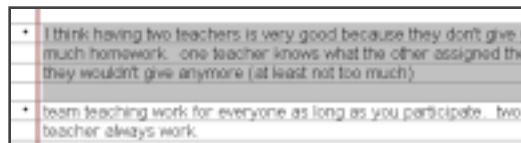
9:15-9:25am

Identify Presentation Responsibilities: Students decide individual roles for the group presentation. Presentation is reviewed.

9:25-10am

Group Presentations: Beginning with group one, students present information. To encourage discussion, instructor asks questions such as *“How do the two teachers work together in the classroom?”* (See above screen.)

At the end of each presentation, the entire class answers the following question: *How can you use this information in the essay you are writing?*



Lesson Plan - Day 3 of 3: Complete Presentations

***Benefits of Collaboratory vs. Traditional Classroom:**

- Develops presentation and communication skills.
- Stimulates critical thinking.
- Information is printed for later use.

Topic: Course Assessment

Objective: Students will evaluate the course in detail.

Tool Used: Topic Commenter

Course: English -- Reading

of Students: 20 students

Instructor: Gail Weinstein

Length: 1 hour

Lesson Plan:

4:10-4:15pm

Introduction: Instructor introduces objective and process.

4:15-4:35pm

Students evaluate course: Student answer the following 7 questions:

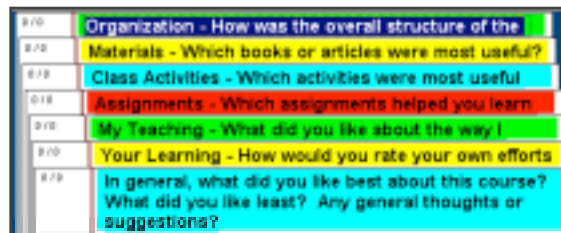
Organization: How was the overall organization of the course? Broad enough? Focused enough? Which topics were most useful? Least useful?

Materials: Which books or articles were most useful? Least useful?

Class Activities: Which activities were most useful and/or engaging? The least?

Assignments: Which assignments helped you learn the most? The least?

My Teaching: What did you like about the way I taught the class? What do you suggest to improve for the future?



Your Learning: How would you rate your own efforts?

General: What did you like the best? The least?

In addition, the instructor keeps a 'card' open to record her own thoughts and ideas as she sees things appear on the students' feedback.

4:35-4:55pm

Review and Discuss Evaluation: Instructor leads face-to-face discussion reviewing strengths and weaknesses of course – based on student feedback. The face-to-face topics covered include: suggestions for next semester, course topics of interest to students for further research.

4:55-5:00pm

Summary: Instructor summarizes objective of course and adjourns course.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Knowing and respecting different points of view.
- Stimulates critical thinking.
- Information is printed for further evaluation of course.
- Anonymous feature encourages honest and direct responses from students.

Topic: Translations of deponent verbs

Objective: To translate sentences independently and as an entire class.

Topic Commenter

Tool Used:

Latin 202 – Intermediate Latin

of Students: 20 students

Course:

Pamela Vaughn

Length: 4 sessions/1 hour

Instructor:

LESSON PLAN - DAY 1 OF 4:

9:00-9:05am **Introduction:** Instructor introduces today’s objective and process.

9:05-9:10am **Translate first word**

9/9	conatur
7/9	conaris
7/9	coner

conatur
▪ he/she/it attempts
▪ he tries
▪ she tries

9:10-9:15am **Identify correct translation:** After all students have submitted their translations, translations are reviewed and correct translations are identified.

9:15-9:55am **Repeat the following two steps for 5 additional words.**

9:55-10:00am **Next Steps:** In the next session, students will translate sentences from Latin to English.

Lesson Plan - Day 2/3 of 4:

9:00-9:05am **Review Today's objective and process**

9:05-9:10am **Translate first sentence**



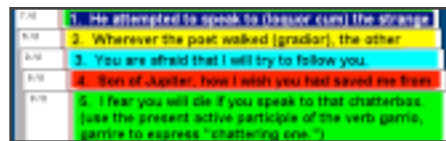
9:10-9:15am **Identify correct translation:** Translations are reviewed and correct translations are identified.

9:15-9:55am **Repeat the following two steps for 5 additional sentences.**

Lesson Plan - Day 4 of 4:

9:00-9:05am **Review Today's objective and process**

9:05-9:10am Students will translate sentences, this time from English to Latin.



9:10-9:20am **Identify correct translation:** Translations are reviewed and correct translations are identified.

9:20-9:55am **Repeat the following two steps for 4 additional sentences.**

9:55-10am **Closure:** Instructor reviews objective of activities.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Increases student retention by learning in an active mode.
- Enhances student satisfaction with the learning experience.
- Checks for knowledge and comprehension.

Topic: Gathering Project Ideas

Objective: Students will share class project ideas and gather suggestions on development.

Tool Used: Categorizer

Course: Technical and Professional Writing

of Students: 25 students

Instructor: Lu Rehling

Length: 1 hour

Lesson Plan:

Before coming to the Collaboratory: Student identify at least 2 possible project ideas.

4:10-4:20pm

Introduction: Instructor introduces today’s objective. The guidelines and criteria for project are reviewed.

4:20-4:25pm

List project ideas: Students add project ideas into the appropriate category: *Instruction, Promotion, and/or Report*. If students do not have a project idea, they answer questions in the category called “*I don’t have an idea*” Questions include “*What is your work experience? What assignment to date has been most successful for you?*” This personal inventory will help them focus on a



topic.

4:25-4:45pm

Review and discuss ideas: Instructor leads face-to-face discussion.
What project idea looks very interesting? Does it fit the criteria?
How would you flesh out this idea out and make it a project?
What project looks interesting but doesn’t quite fit the criteria?

4:45-4:55pm

Brainstorm suggestions/questions about projects: Students identify category of interest and list suggestions about specific project content.

4:55-5pm

Next Steps: Information will be printed and distributed for project idea development.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Develops higher-level thinking skills applying criteria and critiquing feasibility.
- More ideas shared in less time.
- Information is printed and distributed for later use.
- Removes embarrassment about sharing tentative ideas.

Topic: Editing Clinic

Objective: Students will practice identifying common sentence level problems and practice strategies for revising them. **Tool Used:** Categorizer

Course: Technical and Professional Writing **# of Students:** 25 students

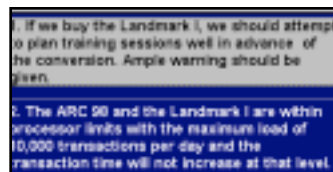
Instructor: Lu Rehling **Length:** 1 hour

Lesson Plan:

Before coming to the Collaboratory, students identify 2 sentences in their own writings that need improvement.

1:10-1:20pm

Add problem sentences: Students type in problem sentences.



1:20-1:30pm

Review 4 types of sentence problems: Class reviews the categories listed below. To encourage participation, instructor asks questions such as “*What is an example of a weak verb?*”

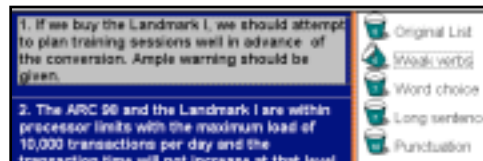


1:30-1:35pm

Students move sentences into categories

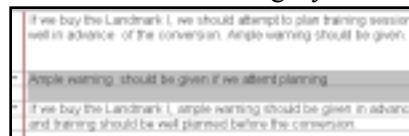
1:35-1:45pm

Review/modify “Weak Verbs” category: As a group, sentences are reviewed and verbally rewritten.



1:40-1:45pm

Rewrite a sentence and identify best rewrite: Students rewrite one sentence in each category. The group identifies the best sentence rewrite.



1:50-2:35pm

Repeat above steps for each category

***Benefits of Collaboratory vs. Traditional Classroom:**

- Addresses learning style differences: students write, read, and discuss sentences.
- Encourages student responsibility for learning.
- Involves higher-level thinking skills including analysis and synthesis of material.
- Removes embarrassment about sharing problems.

Topic: “Plain English Please”

Objective: Students will rewrite idiomatic sentences to make them more easily understandable for non-native English readers.

Tool Used: Categorizer

Course: Technical and Professional Writing

of Students: 25 students

Instructor: Lu Rehling

Length: 1 hour

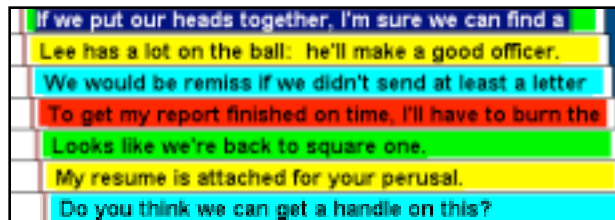
Lesson Plan:

4:10-4:25pm

Discussion on Idiomatic Phrases: Instructor leads face-to-face discussion on idiomatic phrases.

4:25-4:35pm

Rewrite sentences: Students review 10 sentences and rewrite them in “plain English.” Class is broken into three groups - each group starting at different sentences. (Left side of room starts at the top of list, right side of room starts at bottom of list, and back of room starts in the middle of list.)



Lee has a lot on the ball: he'll make a good officer.
• Lee has many good qualities. He will make a good officer.
• Because Lee is smart and understands things quickly, he will make a good officer.
• Lee is talented and will make a good officer.
• Lee rocks! (Okay, this one was just for fun!)
• Because Lee is intelligent and a hard worker, he will make a good officer

4:35-4:55pm

Review and Discuss Sentences: Instructor leads face-to-face discussion. Class reviews each sentence and identifies the best-rewritten sentence.

Additional topics covered in face-to-face discussion:

- Tips for avoiding idiomatic phrases.
- Additional idiomatic phrases.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Enhances student satisfaction with the learning experience.
- Increases student retention by learning in an active mode.
- Shares variety of ideas quickly.

Topic:	Creating a Testable Hypothesis	
Objective:	Students will collect information from primary literature for the development of a testable hypothesis and experimental design.	Tool Used: Categorizer
Course:	Biology	# of Students: 15 students
Instructor:	Leticia Márquez-Magaña	Length: 1 hour

Lesson Plan:

9:10-9:15am	Introduction: Instructor introduces activity and explains process.
9:15-9:20am	Introduce observation: Instructor presents the following scientific observation (phenotypic/physiological observation): “ <i>Flagellin protein is not found in Bacillus subtilis cells lacking a Hook-basal body complex</i> ” - using Visualizer.
9:20-9:25am	Students generate topics privately: Students privately brainstorm a list of research topics based on scientific observation.
9:25-9:30am	Submit and review group list: Students submit ideas onto the group list and individually review group list.
9:30-9:40am	Comment on topics: Students make comments on all questions/topics. Comments include suggestions on what and how to research the questions/topics.
9:40-9:45am	Review comments: Students individually review comments and suggestions.
9:45-9:55am	Organize topics into categories: Instructor leads discussion. Categories are created and questions/topics are moved into the appropriate categories.
9:55-10am	Assigning categories to students for further research: Students are assigned a specific category for further research. Students are given a print out of information for further research.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Stimulates critical thinking.
- More ideas generated in less time.
- Information is automatically recorded and printed for further research.

Topic: **Developing a Thumb-Nail Sketch**

Objective: Students will brainstorm details of thumbnail sketch for a scientific poster presentation and translate details into a visual framework. **Tool Used:** Categorizer

Course: Biology **# of Students:** 20 students

Instructor: Leticia Márquez-Magaña **Length:** 1 _ hour

Lesson Plan:

9:00-9:05am **Introduction:** Using the Visualizer, instructor introduces today’s objective and process.

9:05-9:20am **Brainstorm details for thumb nail sketch:** In small groups (of 2 or 3), students brainstorm information to include in the thumb nail sketch – including *Abstract, Introduction, Hypothesis, Experimental Design, Discussion, Conclusions, etc.*

9:20-9:35am **Small group discussion:** Small groups discuss the information gathered. Information is added, deleted, and modified.

9:35-9:50am **Create thumb nail sketch:** Information is printed and used to create thumbnail sketch - created in PowerPoint.

9:50-10:00am **Develop presentation:** Thumbnail sketch is printed and informal presentation is developed.

10:00-10:30am **Group presentations:** Small groups present thumbnail sketch to the entire group. Class gives feedback on presentation.

***Benefits of Collaboratory vs. Traditional Classroom:**

- Addresses learning style differences: students write, read, and discuss thumbnail sketches.
- Encourages student responsibility for learning.
- Enhances student satisfaction with the learning experience.

Techniques for Asking Questions

As the facilitator, the most important **tool** you have for leading discussions is “**the question.**” Below are fundamental techniques to consider when asking questions to participants.

1. **Allow participants time to answer the questions you’ve asked.** SILENCE is important “thinking” time. But to overcome or prevent too long of a silence, try the following:
 - a. **Repeat the questions in another way.**
“How do I ask a question when I want a specific person to answer? (pause) If I want one person to answer rather than anyone in the group, how should I ask that question?”
 - b. **Follow the questions with an example or a scenario. Then repeat the question.** “How do I ask a question when I want a specific person to answer? (pause) Let’s say I know Charlie has a lot of experience with this process and I want him to explain Step 2 in the process. How would I ask that question?”
 - c. **Ask a commitment question first. Then ask your primary question.**
“How many of you have been members of a process them? (show of hands) From your experience, Joan, what were some of the values of that experience?”
 - d. **Have them write down answers to the question, then solicit their responses.**
“Why do you think teams might do a better job of problem solving than individuals might do? Jot down a couple of ideas, then we’ll discuss them.”
2. **Learn to ask non-challenging questions as opposed to aggressive and demanding ones.** Use phrases like “in your opinion...”, “based on your experience...”, “what do you think...”
3. **Include scenarios or examples within questions and, where it fits, use participants as players in the scenario or example.**
“Let’s talk about preparing for a customer interview. Suppose Pete is the customer and May, one of Pete’s suppliers, has an interview scheduled with Pete for early next week. What are some of the things you think Mary should do to prepare for that interview?”
4. **Avoid calling on or relying on few reliable, vocal participants.**
If you rely on them, so will the rest of the group and you will get very little participation. Direct questions away from them and make eye contact with other members of the group.
5. **Be conversational in your approach to asking questions as you would in any conversation that you’re really interested in the answer.** Listen carefully and respond to the participants in a way that indicates that you heard them precisely. Ask another question based on the members’ responses or use their words in your response to their answers.
6. **Acknowledge every response even if it’s wrong or off the wall.**
7. **Go out of your way to make sure your questions are clearly stated.** Add leaders or cues before your questions. “In a group discussion in which you want full participation, why are open-ended questions important?”

Reference:

Facilitation Skills Workshop, **Practical Management, Inc., August, 98.**

SAMPLE DISCUSSION QUESTIONS

Uses	Samples
To clarify information or comments	<ul style="list-style-type: none"> • Can you give us an example of this point of view? • Helen, how would you interpret or paraphrase this point? • How does this new policy differ from (or compare with) the old policy?
To keep group interchange going/bring out information and ideas	<ul style="list-style-type: none"> • Interesting point, Bob. How do the rest of you react to that? • Are there additional points that should be considered? • Now that we've heard the positive, what are some negative points that should be discussed?
To keep discussion on target	<ul style="list-style-type: none"> • Interesting point. Can you relate that to the earlier point made? • Whoa! What was the original question asked?
To get non-participants involved	<ul style="list-style-type: none"> • Jane, from your experience as a teacher, how would this behavior affect other students in the classroom? • John, what's your opinion? • Cathy, where have you seen this occur?
To assess and evaluate information	<ul style="list-style-type: none"> • Given this information, what conclusions can we draw? • How does this information stack up against your experience? • Do the facts justify the conclusions? Why? Why not?
To lead discussion to the next topic	<ul style="list-style-type: none"> • Now, how does morale relate to job performance? • Now that we've established the causes, what is the next logical step?
To determine understanding/get feedback	<ul style="list-style-type: none"> • What is the first step in this process? • Can you give me an example of the second step? • Would you express the third step in your own words? • If you were faced with a disciplinary problem, how would you apply these three steps? • Have you seen this procedure used in non-work situations? (explain) • Why is it necessary to follow these steps in sequence?
To get agreement, solution or conclusion	<ul style="list-style-type: none"> • What possible conclusions can we draw from this information? • Do any of you disagree with what's been said to this point? • What is the end result of this? • When you add it together, what does all of this mean to us as educators?

Reference:

Facilitation Skills Workshop, **Practical Management, Inc., August, 98.**

Index:

The software tool used for each session is listed at the top right of every page. The following is a brief description of these tools.

Tool	Description	Session Page Numbers
<i>Categorizer</i>	This tool helps your group generate a list of ideas and supporting comments. Your group can then create categories for the ideas and easily sort the ideas and comments into the desired categories.	4, 10, 14, 20, 21, 22, 23, 24
<i>Topic Commenter</i>	This tool offers participants the opportunity to comment on a list of topics.	5, 9, 10, 12, 15, 16, 17, 18
<i>Survey</i>	This tool is designed to quickly and easily gather, tabulate, and analyze valuable information. This tool accumulates detailed analyses of thousands of responses immediately upon collection.	7, 8
<i>Vote</i>	This tool provides a variety of methods which help the group evaluate a list of ideas to develop consensus or reach a decision. The results can be displayed in statistical and graphic formats.	6, 10