Lesson Structure

Opening:
* How will you open your class?
* What will you do to find out where the learner is?

Objectives/Outcomes:
* What will be accomplished?
* How do objectives fit into your goals?

Assessment:
* How will you know goals are met?
* What assessments did you use?

Interaction/Strategies:
* What strategies did you use?
* Why did you choose those strategies?

Questions:
* What questions will meet class goals?
* Why did you choose those questions?

Closure:
* How will you close your class and challenge your students as they leave?


Questioning Levels:

Knowledge - recall information
* What is ___?

Comprehension - use information
* Give your definition of ___?

Application - apply principles/generalize
* If ___ how many?

Analysis - infer - determine relationships
If ___ then ___

Synthesis - create - make predictions
* Create a model of your idea.

Evaluation - state opinions - judge
* In your opinion ___
* Grade or rank ___


Questioning Strategies

Plan key questions.
Ask questions at desired levels.
Apply wait time.
Expect and elicit student response.
Ask one question at a time.
Respect students and their answers.
Engage the whole class.
Avoid asking yes/no questions.
Match questions to "where students are."
Monitor the effect of your questions.
Promote student questions.


Tasks for Groups

Discuss misunderstandings.
List similarities/differences.
List items from experience.
List items from group observation.
Mark each other's problems.
Generate ideas.
Make categories.
Clarify, solve, evaluate a problem.
Diagnose.
Argue relative merits.
Share anxieties.

Base Group Basics

1. Schedule regular weekly meetings.
2. Be there; be prepared.
3. Assign roles and rotate them.
4. Have a purpose and operate on it.
5. Stay on task.
6. Share ideas and actively listen.
7. Check for understanding.
8. Hold everyone responsible.
9. Come to a consensus.
10. Agree on roles, date, and assignments for next meeting.
11. Assess how your group functions.


Interactive Strategies

TTYP (Turn to Your Partner)
1. Formulate
2. Share
3. Listen
4. Create
5. Account

NTP (Note Taking Pairs)
1. Compare
2. Add/Correct
3. Share
4. Listen
5. Account

Paired Reading (Read and Explain Pairs)
1. Read the first section.
2. Summarize the content to your partner.
3. Agree on a summary of the reading.
4. Relate content to previous learning.
5. Repeat procedure for next section.
6. Account for your work by being prepared to be called on.

Problem Solving Pairs
1. Complete the problem assigned.
2. Explain your process to your partner.
3. Paraphrase, correct, or clarify your partner’s solution.
4. Reverse the process on the next step.
5. Reach an understanding of the solution process and be prepared to be called on.

Jigsaw
1. Distribute materials. Each group member has one part of the set of material.
2. Students with same material, read, share and plan material presentation.
3. Reassemble groups. Each member presents his/her material.
4. Account for the learning that has occurred.

CATs Classroom Assessment Techniques

One Minute Paper
1. Decide on the question’s focus.
2. Select a time to administer the question.
3. Direct students to omit their names.
4. Allow 1-10 minutes for students to write.
5. Collect the papers.
6. Assess the answers/ formulate replies.
7. Provide feedback.

Application Cards
1. Identify an important theory, principle, or procedure your students have studied.
2. Decide on the application to use.
3. Remind students to use new examples.
4. Allow 3-5 minutes for written responses.
5. Collect responses and provide feedback.

Directed Paraphrasing
1. Select a theory, concept or argument studied in class; real world implications.
2. Determine audience for the paraphrasing.
3. Inform students of presentation mode: oral/written, due date, time/word length.
4. Determine assessment - group evaluations, instructor response, partner input.

Course Objective Tie-In
1. Allow 1-5 minutes for student reflection.
2. Inform class of the mode of reflection: single/paired/group and oral or written.
3. Ask students to tie the current class to past lessons, theories, and course objectives.
4. Require students to be prepared to explain tie-ins orally or to hand in written tie-ins.
5. Assess student tie-ins and understanding of new learning and teacher-effectiveness.


Strategy: Turn to Your Partner (TTYP)

Steps: 1. Formulate an answer individually.
        2. Share your answer with your partner.
        3. Listen to your partner’s answer.
        4. Create a new answer through discussion.
        5. Account for your discussion by being prepared to be called upon

Uses: 1. Open class to focus attention.
       2. When it appears attention is waning.
       3. When open-ended thinking is wanted.
       4. To highlight a key point.
       5. Assess understanding.
       6. Allow time to refocus yourself.

Social Skills: active listening
               summarizing
               paraphrasing
               asking for justification
               asking good questions
Strategy: Read and Explain Pairs
(Paired Reading)

Steps: 1. Read the first section.
2. Summarize the content to your partner.
3. Agree on a summary of the reading.
4. Relate content to previous learning.
5. Repeat procedure for next section.
6. Account for your work by being prepared to be call on at random.

Uses: 1. Allow time for instructor to refocus.
2. Cover material that you won’t present in class.
3. Obtain a better understanding of reading material.
4. To solidify understanding.

Social Skills: active listening, paraphrasing/summarize out loud, seek elaboration, demand vocalization, energize group, direct group’s work, extend other members answers, ask for justification
Strategy: Note Taking Pairs (NTP)

Steps:
1. Compare your notes with your partner's notes.
2. Add/Correct something in your notes (Both must do).
3. Share key points with your partner.
4. Listen carefully to your partner's key points.
5. Account for your discussion by being prepared to explain the key points.

Uses:
1. Open class to review what happened last time.
2. To ensure all important information/detail is in notes (i.e., a specific problem example).
3. To review a particularly important concept.
4. To get students to discuss the "whys" of each step of a problem.

Social Skills: active listening, justifying details, offering suggestions, asking for justification
Common Questions Raised about the Use of Active Learning

(Throughout the learning sessions, participants will have time to personally reflect, discuss, and discover answers to these questions.)

1. Will the use of these strategies allow students to pass who would (should) otherwise fail a course?

2. Will the best students be held back by group activity?

3. Will the best students do all the work while the poorer students hitch a ride?

4. Do students have the maturity and background to deal with higher levels of thinking?

5. These strategies seem too time consuming. Will there be sufficient time to cover information?

6. Will the curriculum be watered down?

7. Does active learning only work when the groups are uniformly and highly motivated?

8. Can this work for all subjects/topics and in large classes?

9. How do these strategies weed out the poorer student?

10. Isn't there too much emphasis on interaction skills at the expense of learning the technical material?

11. Won't active learning increase grade inflation which is already present?
How Many Rectangles Can You Find In This Figure?

How Did I Feel?

What Did I Notice?
### Written Communication Rubric (2-24-2020)
CALS-Dean's Global Agriculture and Food Leadership Program: Roma
(adapted from a work of ISU Department of Educational Leadership and Policy Studies)

**Written Communication**: Expressing ideas clearly in writing.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Exemplary</th>
<th>Proficient</th>
<th>Marginal</th>
<th>Unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>Even, balanced information clearly and effectively supports a central purpose or thesis and displays a thoughtful, in-depth analysis of a sufficiently limited topic. Reader gains insights.</td>
<td>Information provides firm support for thesis and displays evidence of a basic analysis of a sufficiently limited topic. Reader gains some insights.</td>
<td>Information supports thesis at times. Analysis is basic or general. Reader gains few insights.</td>
<td>Paper does not successfully identify thesis. Analysis is vague or not evident. Reader is confused or may be misinformed.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>The ideas are arranged logically to support the thesis. They flow smoothly from one to another and are clearly linked to each other. Reader can follow the line of reasoning.</td>
<td>The ideas are arranged logically to support the thesis. They are usually clearly linked to each other. For the most part, but not entirely, reader can follow line of reasoning.</td>
<td>The writing is not arranged logically. Frequently, ideas fail to make sense together. Reader can figure out what writer probably intends but may not be motivated to do so.</td>
<td>The writing lacks any semblance of logical organization. The reader cannot identify a line of reasoning and loses interest.</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>The writer's purpose is readily apparent to the reader, at the start and throughout.</td>
<td>The writing has a firm purpose, but may occasionally digress from the purpose.</td>
<td>The purpose is not always clear.</td>
<td>The purpose is generally unclear.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Exemplary</td>
<td>Proficient</td>
<td>Marginal</td>
<td>Unacceptable</td>
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<tr>
<td>Voice</td>
<td>The writing is compelling. It hooks the reader and sustains interest throughout.</td>
<td>The writing is generally engaging, but occasionally perfunctory. The communication is generally focused and interesting.</td>
<td>The writing is dull and perfunctory. Though the paper may have some interesting parts, readers find it difficult to maintain interest.</td>
<td>The writing has little personality. The audience quickly loses interest and stops reading.</td>
</tr>
<tr>
<td>Tone</td>
<td>The tone is consistently professional and appropriate for the audience and for the purpose (e.g., letter, memo, proposal, application, research summary, report, scholarly communication).</td>
<td>The tone is generally professional. In general, it is appropriate for the audience and purpose.</td>
<td>The tone is not consistently professional or appropriate for the audience and purpose.</td>
<td>The tone is not professional. It is inappropriate for the audience and purpose.</td>
</tr>
<tr>
<td>Sentence Structure</td>
<td>Sentences are well phrased and varied in length and structure. They flow smoothly from one to another.</td>
<td>Sentences are well phrased and demonstrate some variety in length and structure. The flow from sentence to sentence is generally smooth.</td>
<td>Some sentences are awkwardly constructed, and they represent an occasional distraction for the reader.</td>
<td>Errors in sentence structure are frequent enough to represent a major distraction to the reader.</td>
</tr>
<tr>
<td>Word Choice</td>
<td>Word choice is consistently precise.</td>
<td>Word choice is generally good. The writer goes beyond the generic word to find one more precise and effective.</td>
<td>Word choice is merely adequate, and the range of words is limited. Some words are used inappropriately.</td>
<td>Many words are used inappropriately, confusing the reader. The writer may also use clichés and colloquial language.</td>
</tr>
<tr>
<td>Grammar, Spelling, Mechanics (i.e., Punctuation, Italics, Capitalization, etc.)</td>
<td>The writing is free or almost free of errors.</td>
<td>There are occasional violations in the writing, but they don’t represent a major distraction or obscure the meaning.</td>
<td>The writing has numerous errors, and the reader is distracted by them.</td>
<td>Errors are so numerous that they obscure the meaning of the passage. The reader is confused and stops reading.</td>
</tr>
<tr>
<td>Criteria</td>
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<tr>
<td>In addition, for scholarly communications:</td>
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<tr>
<td>Use of References</td>
<td>Compelling evidence is given to support claims and attribution is clear and fairly represented.</td>
<td>References to support claims are generally present.</td>
<td>Although occasional references are provided, the writer over-relies on unsubstantiated statements. The reader is confused about the source of the ideas.</td>
<td>References are not cited to support claims.</td>
</tr>
<tr>
<td>Use of Most Recent Edition of the Publication Manual of the XXX professional society...</td>
<td>XXX format is used accurately and consistently.</td>
<td>XXX format is used with minor violations.</td>
<td>Format of document reflects incomplete knowledge of XXX format.</td>
<td>Format of document is not recognizable as XXX.</td>
</tr>
</tbody>
</table>