

I. Teaching Methods

a. Types:

i. Teacher-Centered

1. Traditional
2. Instructor is the center of activity and directs all learning experiences
 - a. Instructor explains concepts combining:
 - i. Direct Instruction
 - ii. Questioning Techniques
 - iii. Whole Class Discussion
 - b. Video Example how not too:
<https://www.youtube.com/watch?v=uhiCFdWeQfA>
 - c. How to conduct Instructor-Centered learning
 - i. Planning/Preparation:
 1. Identify your Strengths and weaknesses
 2. Design (or use/revise questions from CMv3 Curriculum) questions, based on Blooms Taxonomy, that target different levels of understanding
 3. Game plan for the whole class discussion
 - d. Video Example how too: <https://www.youtube.com/watch?v=Q9aolA-sPZw>

ii. Student-Centered / Constructivist Approach

1. Focus on Cadet – Cadets have a *more* active role in the learning experiences of the classroom
 - a. Changing Cadet role from passive to active
2. Management - Instructor must create and reinforce the standards (Instilling a sense of responsibility, etc.)
3. Model – Instructors must exhibit / recognize in Cadets the quality of self-motivation
4. Works well in tandem with Teacher-centered approach laying the groundwork and setting the classroom expectations
5. The Instructor focus is on:
 - a. Student involvement
 - b. Helping to Cadets to see the relevance of their learning
 - c. Encouraging Cadets to apply what they have learned
 - d. Vigilant Facilitator
6. Video Example of the Active Learning Method

iii. Project-Based Learning (PBL)

1. Cadets complete projects – think Service Learning Project – that demand a high-level of Cadet participation
2. All tasks are supervised by the Instructor

- a. The Instructor may need to provide additional supports to facilitate skill building in Cadets – with the purpose of supporting the overall mission (project)
 - b. From PBL Cadets can acquire
 - i. Knowledge
 - ii. Research experience
 - iii. Critical thinking skills
 - iv. Evaluate
 - v. Analyze
 - vi. Decision-making
 - vii. Collaboration opportunities
- 3. Skill builder as well as résumé builder
- 4. Video Example: Good Teamwork
<https://www.youtube.com/watch?v=VHGxgfHNjwA>
- iv. Inquiry-Based (Question driven) Learning
 - 1. The Instructor poses a ‘compelling’ question and uses it to guide the Cadets through learning experiences that see them develop and refine critical thinking and problem solving skills
 - 2. Students are free to pursue avenues of thought and research to formulate their answers for the compelling question or questions they were assigned
 - 3. Active participation is expected of Cadets and Instructors, who facilitate, alike.
 - 4. The selection of topics is usually chosen by the Instructor but Cadets be given this responsibility over time
 - 5. Inquiry-Based Learning Example (Planning Document):
<https://docs.google.com/document/d/1YNZvh202be1w9X96OI8f8WkPQUgcjivHtAZvduBrb1w/edit?usp=sharing>
- v. Flipped Classroom
 - 1. **FLIP** acronym:
 - a. **Flexible** Environment
 - b. **Learning** Culture Shift
 - c. **Intentional** Content
 - d. **Professional** Educator
 - 2. Homework changes from a review of what was just taught to preparation for the next class meeting
 - a. Extremely structured in nature
 - b. Cadet can view the learning experience (Lecture, videos, slides, etc.) prior to the class meeting – and then practice what they learned in-class with their peers and under Instructor supervision
 - c. From a Bloom’s perspective, a flipped approach has the lower orders of learning take place outside of the classroom, while the higher levels occur during the in-class session
 - i. In essence, ‘flipping’ has Cadets perform the simpler tasks outside the class and the more complex ones with assistance readily available

3. Video Description of Flipped Classroom:

<https://www.youtube.com/watch?v=iQWvc6ghTds>

vi. Cooperative Learning

1. Group work becomes the norm

a. Requires high level structuring of learning experiences

i. Group types:

1. Groupings base on similarities

2. Groupings based on differences

a. Criteria

i. Deliberate or Random

ii. Performance levels

iii. Student safety (Winning Colors)

b. Instructor must (vigilant) be standing by to intervene to keep the learning process on task

c. Examples of cooperative learning techniques:

i. Think-Pair-Share

1. Cadets are given a question / task to work on

2. Then are grouped into pairs where they compare products and discuss

3. This group may lead a class briefing on their findings

ii. Jigsaw

1. Home Group:

a. Cadets are assigned to groups but given individual tasks to complete

2. Expert Group

a. Cadets are regrouped by question / task and discuss with the purpose of learning experience

b. Cadets return to their home group and brief their findings

d. Topics of learning experience MUST be standards-based (Core topics) and if possible tailored around an inquiry type question / task

e. To summarize – the main emphasis of cooperative learning is that social interaction *can* improve learning

2. Video description of Cooperative Learning:

https://www.youtube.com/watch?v=cnkKHL_dyGE

b. In Practice:

i. Use of any of these techniques is NOT mutually exclusive – they actually work best when used as a battery

1. Example – Flipped Classrooms using Teacher –centered lectures/PPT outside of class to facilitate in class cooperative learning experiences

c. Depending on time requirements – Instructors can be grouped or as individuals demonstrate one or more of these techniques if we decide to use teaching-a-lesson as part of the in-person capstone for the week.