Methods of Classroom Instruction

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Topics

- Motivation for Good Teaching
- Principles of Instruction
- The Use of Questions
Motivation for Teaching Well

- You don’t want to be a “war story”
- You want to be remembered for good reasons
- Your students are a reflection of you
- You don’t want to be hit by a plane
Principles of Instruction

• Students learn

• In the class process of learning

• Principles for Learning management

• At best
  – facilitate (sometimes called teaching)

• At worst
  – Prevent you from screwing up learning
Interest

• Create and maintain interest given the “2 minute rule”

• This can be done through
  – Explaining advantages of knowing something
  – Instructor Enthusiasm
  – Appealing to many senses
  – Competition, games
  – Surprise
  – Voice variation
  – Eye contact
  – Questioning Technique
Comprehension

- You must
  - Start at the level of understanding
  - Proceed at the rate of comprehension
- Go from easy to difficult
- Review what students already know
- Review what is being presented
- Be aware of student expressions
Emphasis

- Emphasis placed on what is important
- Not everything is important
- Repetition == emphasis
- Examples == emphasis
- Review == emphasis
- Handouts == emphasis
- Did I mention the importance of emphasis?
Emphasis

- The labored use of meaningless words flusters and confuses the average student. If we say too much, all the words collide and our students don't know what to do with the data and mostly ignore it by keeping their eyes open and their mouths shut until we stop talking. I really wonder why they don't just give up, but they put up with us in hope that we will help them earn a degree and they will never have to see us again if they are lucky. They should all remember the words I quit. We will try and show them how emphasis works by hiding an important word and concept in this mess of words that seem to be an expression of my thoughts on a computer with a broken spacebar.
Participation

- There must be meaningful participation
- Questioning technique promotes participation
- Move participation around the class
Accomplishment

- Must feel like they have achieved something after the lesson
- Communicate how you felt the class did
- Praise good work but always provide feedback
Confirmation

• You must know what they know by confirming that they know it
• Avoids misunderstandings
• Ask questions
• Get students to explain
• Confirmation happens
  – At the beginning
  – In the middle
  – At the end
ICEPAC

• The principles of instruction are
  – Interest
  – Comprehension
  – Emphasis
  – Participation
  – Accomplishment
  – Confirmation

• They are mutually supporting
  – When a student participates, emphasis happens, generating interest enhancing comprehension which you confirm providing a sense of accomplishment to the student.
Questions

• Asking questions supports the principles of instruction
• Asking questions requires practice as you
  – must think quickly
  – be in front of the class
The Purpose of Questions

• Promote Mental Activity
• Arouse and maintain interest
• Guide thought
• Evaluate learning
• Promote problem solving
• Guide lesson progression
Lead off

• Directed at the group at beginning of lesson or main point
  – Designed to generate discussion.
Follow up

- Used to probe the student’s thoughts
  - Encourages further thinking.
Direct

- Asked of a specific individual
  - Restores attention
Overhead

• Asked of the group
  – Creates interest and fear
Reverse and Relay

• Returning the student’s question back at them or to others
  – Promotes discussion (but be careful)
Qualities of good questions

• Easily understood
  – Brief yet complete with clear meaning

• Composed of Common Words
  – Avoid jargon and technical language if possible

• Thought Provoking
  – Avoid obvious answers and those whose answers can be guessed

• Related to Major Teaching Points
Procedure for Asking Questions

• Ask the question
• Pause
• Indicate the student who should answer
• Listen to the answer
• Confirm the correct response
Student Questions

- Encourage questions
- Occasionally pass a question on to other students
  - Not too often!
- Reject questions not related to the lesson
- Don’t bluff
- Ensure everyone hears the question
Conclusion

• The principles of Instruction are mutually supporting concepts for managing learning
• Every lesson should contain elements of these principles
• Questions and questioning technique are a good way of achieving ICEPAC