

Preparing to Teach



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Planning Instruction

What do I want my students to learn?	Objectives
How can I help them to learn it?	Methods / Activities / Visual Aids
How will I know when they have?	Assessment



Specific Objectives

- *“After this lesson the student will be able to.....”*



A few examples of action verbs

Build Configure Create Install	Demonstrate Measure Operate Use ... to ...	Calculate Convert Derive Solve Transform	Choose Extract Find Identify Select
Analyse Compare Contrast Distinguish	Annotate Draw Label Reproduce	Define Describe Explain List State	



Which of the following are good or bad specific objectives?

	Good	Bad
Label the reproductive parts of a flower		
Open the case of a PC		
Know how a floppy disk works		
List 5 characteristics of an economic recession		
Change the oil in a Ford Capri		
Understand the difference between 4-stroke and 2-stroke engines		
Convert temperatures between Celsius and Fahrenheit		
Solve algebraic equations		
Bake a Victoria Sponge cake		
Appreciate the importance of good manners		



Methods, Activities and Visual Aids



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Recall of Information

- By Association: previously learned material reviewed, link in new material
- By Interest: motivation, need to know, enthusiasm, active learning, variety
- By Success: encourage, praise (not indiscriminate), constructive criticism
- By Sequence: from known to unknown - ensure links clear



Recall of Information

- By Insight: enabling students to gain understanding of structures and concepts. Give overview of what is to be learned - what outcomes are expected - how a particular piece of learning fits into overall concept
- By Reinforcement: rote learning - repetition - revision. (Introduction - Conclusion)



Use questions...

- to Check knowledge
- to Hold attention
- to Gather information
- to Generate participation
- to Develop line of thought
- to Provide feedback to students - motivation
- for Social aspects
- for Class management



Visual Aids

- Chalkboard, dry wipe board
- Flipcharts
- Posters
- Slides - LibreOffice, Powerpoint....
- Handouts
- The actual objects you are teaching about (e.g. network cards)
- Models

Visual Aids

- Keep your visual aids as simple as possible - not only you will get the point home better, they are less likely to go wrong!
- Beware they can take a long time to prepare. However a good visual aid can be an extremely effective teaching tool.
- Make sure you are well practised with your visual aids and comfortable using them.
- **TEST YOUR VISUAL AIDS BEFORE USING THEM IN THE CLASSROOM!**



Computer lab practical sessions

- Hands-on activity lets students apply learned knowledge in a "safe" environment and builds confidence
- Ensure the practical task is clearly defined, and students understand fully what they are being asked to do and what the expected outcome is.
- A step-by-step worksheet gives structure and can be used as a reference guide when repeating the task later; can also have spaces to fill in observations



Computer lab practical sessions

- Ensure that the instructions are accurate - test every step beforehand on the same machines that the students will use.
- Biggest causes of delays are when students don't know what they are supposed to do, and when instructions are inaccurate
- Different students move at different speeds. Consider including extra exercises which faster students can do at the end.



Tips for lesson planners

- Keep objectives simple, and not too many
- List tasks first and then organise structure afterwards
- Vary participation



Assessment

- Why assess?
 - to check learning (feedback for student)
 - to check teaching! (feedback for teacher - pace of learning)
 - to reinforce and apply learning
 - to provide a goal (motivation/achievement)
 - to predict future performance



Quick Answer Tests

- LAYOUT
 - Heading
 - Clear instructions
 - Number questions
 - Leave realistic space for answers
 - Clear labels (on diagrams etc)
 - Information about marks



Quick Answer Tests

- LANGUAGE
 - Simple and direct
 - Ask only one thing in a question
- MARKING
 - Draw up scheme in advance

