Tips for Writing Problems and Cases
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2005

Know your audience
What do your students already know?
What interests them?
What do they read, watch, and do?

Know your curriculum
What concepts are hard to teach?
Which concepts are difficult to get students interested in?
Which concepts can you connect to real world problems and issues?
What are links between your discipline and other disciplines?

Define your objectives: What do you want the students to learn?
What level of understanding do you expect?
Lookup Bloom's Taxonomy
State objectives in terms of behaviors expected, for example
    The student will be able to calculate the amount of substrate
needed to generate 1 mole of product
NOT
The student will understand the use of equations in chemistry

What are the learning issues you want students to investigate?

Now you're ready to begin

Cases can be short or long, single scene or multiscene, can lead to labs or investigations, can include data for analysis

Outline a story that will create a compelling need to know
Make it realistic and authentic
Make it exciting, think of cliffhangers
Create characters for your story that students can identify with
Timeline

Decision points for suspense

Generate 1-2 scenes that set the stage for the problem, involve students with the characters, require observations and generate hypotheses or questions

Remember good problems and cases generate questions that need answers; they make the students want to figure out what's going on; want to learn anything they can to resolve the issue; they generate drama and suspense

Share with a colleague
        Generate Know/Need to Know
        Have them identify data, observations, hypotheses, and ideas
        Have them guess your objectives

Refine draft
        Move on to more scenes if required
        Repeat sharing with colleagues

Identify resources needed
        Labs
        Books
        Websites
        Materials
        Pictures or items that assist in making case relevant

Identify Products that you will ask students to produce to show learning
        Issues analysis and summaries
        Posters
        Authentic reports
        Posters
        Data analysis
        Problem solutions
        Design of labs

Some cases or problems have an epilogue that resolves the case or brings closure; some are left open ended

You may want to write guide questions and or facilitator prompts

Share drafts with experts

Revise, revise, revise

No case is ever finished

Pilot case

Write notes immediately after implementation:
      What worked
      What didn't
      Were there surprises?