

# Writing Effective PBL Problems

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# Important Considerations in Writing Problems

- Role of problem in accomplishing course objectives
- Level of course and maturity of students
- Time frame
- Staging
- Availability and access to learning resources
- Use of prompting questions





# Types of Learning Objectives

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## **Content-oriented:** subject specific

- Basic knowledge and understanding of specific concepts, techniques, etc. in the discipline

## **Process-oriented:** global skills

- Effective communication: oral and written
- Acquiring and evaluating information
- Working effectively with others
- Higher order, critical thinking



# What Factors Influence Decisions about Problems?

## Your background

- discipline
- control issues
- level of investment

## What is the course?

- students (number and level)
- sequencing of course/problems
- time/structure of class





# Step One:

## Identify Learning Objectives

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### Think of a learning objective in your course:

- CONTENT: “My students will understand the management issues that occur when you monitor your employees.”
- PROCESS: “My students will improve their understanding of the process of management decision-making.”
- PROCESS: “My students will improve their memo-writing abilities.”

### How do you usually address this learning objective? What kind of problem or activity do you usually assign?

- Typical end-of-chapter problem?
- A reading?
- Other?



## Step Two: Identify Real-World Context

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Newspaper articles, news events

Real event that you experienced

Popular press in the discipline

Make up a story – based on content objectives

Adapt a textbook problem

Research papers

Other?



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*Take 15 minutes to read through  
Stage 1 of the Ever-Ready Security Case*

You and your team should briefly discuss the  
focus questions



# Textbook Problem/Concept

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“The secretarial pool is part of the group assigned to Doug. The pool has produced very low quality work for the past several months. Doug has access to the passwords for each of the pool members’ computer accounts. He instructs the supervisor to go into each hard drive after hours and obtain a sample document to check for quality control.”

If you were the supervisor, what would you do? Is this ethical?”

Pearlson and Saunders (2006), *Managing and Using Information Systems*, John Wiley & Sons, p. 211.



# A Real Life Scenario: Ever-Ready

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- Based on my wife's experiences
- “You can't make this stuff up”
- Information given gradually throughout problem



## Step Three: Draft the problem

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- Add context by creating a realistic application of the concept.
- Be a storyteller: Add motivation, realistic characters
- Require students to go beyond memorization by researching ambiguous situations
- Require them to make a decision and defend it: what would YOU do as a manager?
- Reinforce that decision-making is not easy by making the situation ambiguous



## Drafting the Problem (cont.)

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- Good PBL problem has multi-page, multi-stage construction - leave students guessing!
- Not all information should be given in chapter or text—have students do outside research.
- Challenge students to come to consensus, reach conclusions, and make judgments, deal with ambiguity



# Staging of the Ever-Ready Case

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**Stage 1:** Judging if a problem exists. What information does Harry need before he can take action?

**Stage 2:** More information given. “Surprise” (and open-ended) conclusion. Students need to make further judgment calls



# Activities Related to Ever-Ready

- Groups summarize each stage before moving to next.
- Final stage written up by group with complete analysis.



# Mixing in Process Objectives with Content Objectives

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**Public-speaking:** Groups present their approach before moving to the next stage.

**Memo-writing:** Final deliverable is the writing of a memo that presents their decision and logic behind it.

**Research:** Teams are required to find evidence to support their conclusions.



**Teamwork:** Students must learn to work together to solve the problem.



# Get Started Writing Your Own Problem

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- During lunch, think about a problem that you often use in a class
- Using the suggestions in this presentation, think about how that problem could be adopted as a PBL problem
- Bounce ideas off of colleagues!
- Be prepared to write your first PBL problem after lunch
- Feel free to reorganize into teams that reflect your general academic disciplines.



# Reflections and Questions

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