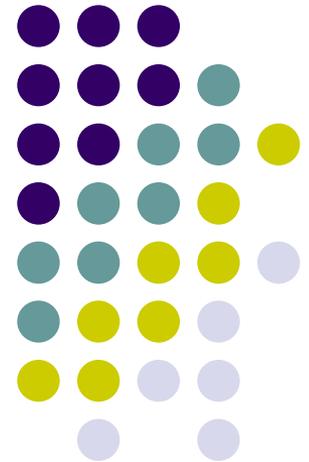
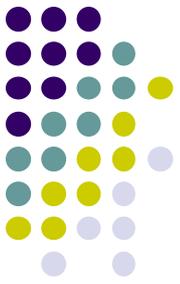


Strategies for Critical and Effective Reading and Writing

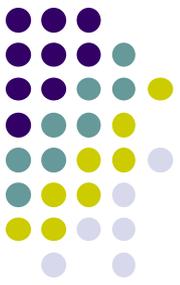


Today's Lecture



- Critical Thinking
- Effective Reading Strategies
- Writing strategies





What is critical thinking?

- Purposeful goal-directed thinking
- Aims to make judgments based on evidence/fact rather than guesswork/opinion
- Reflective and reasonable thinking that focuses on what to believe and do (Ennis, 1985).
- Memorizing does not require critical thinking—application does!



“Learning without thought is labor lost.” Confucius

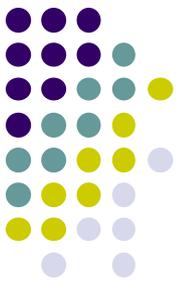
Are you a critical thinker? Do you:



- Base judgments on facts and reasoning?
- Support views with evidence?
- Evaluate the credibility of sources?
- Turn mistakes into learning opportunities?
- Ask “why” and “why not”?
- Seek themes, patterns?
- Follow hunches?

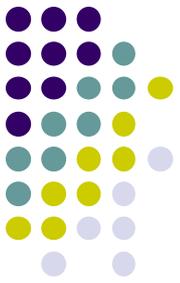


Critical Thinking Skills: You can improve yours!

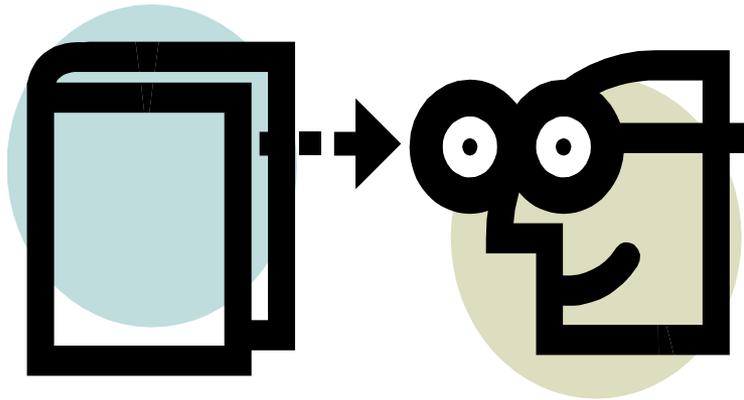


- ***Learning is developmental***
 - No limits to the development of the human brain or capacity to learn—the neuron’s ability to make and strengthen connections is lifelong.
- ***Students can improve critical thinking skills with practice***
 - Gather objective information
 - Put info in context
 - Don’t jump to conclusions





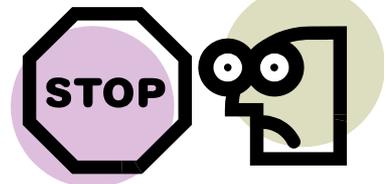
Reading Strategies



Passive Reading Habits: Take the Quiz!



- Do you memorize exact phrases?
- Do you try to memorize everything?
- Do you review by re-reading the textbook word for word?
- Do you review ideas without knowing what questions they answer?
- Do you review without knowing how you are expected to apply the info on a test?
- Do you set aside lots of time for one review right before the test?





Preparing to Read

Learn how to use your textbook: Find the index, appendices and glossary.



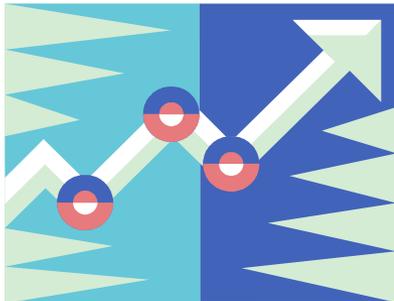
Preview the material by reading:

- Chapter title and intro
- Headings and subheadings
- Boldfaced/italicized words
- Visual cues
- Chapter summary and review questions



As You Read

- Pay special attention to **main ideas** and **supporting details**
- Reexamine **graphs, charts** and **illustrations**. Be sure to read captions under visual aids



- Ask yourself questions:
“Do I **understand** what I’m reading?”
“Does this make **sense** to me?”
- Annotate:
 - Highlight
 - Write notes
 - Make a table or visual



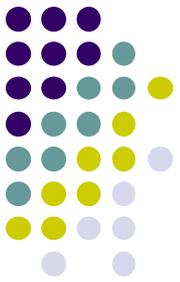


After You Read

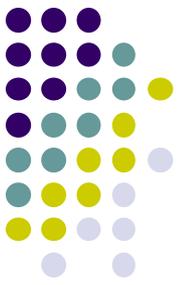
- Think about what you've learned. Can you **answer the chapter questions?**
- Can you apply what you've learned to the **Computing programme?**
- Can you restate the main ideas ***in your own words?***
- Mark down any points you don't understand in the margins or notebook—ask your instructor to explain next class!



In Other Words...



- **Reading the text several times is not enough!**
- **You must actively participate while you read.**
 - **Think about what you already know**
 - **Identify topics you don't understand with questions**
 - **Reorganize information for better retention**
 - **Pick out points you think will be on the test—apply what you are reading**

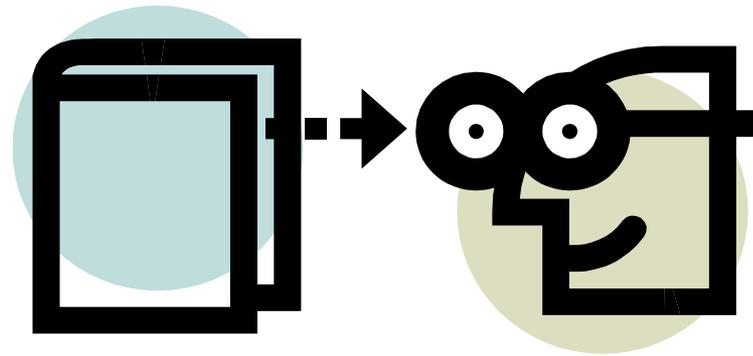


Discussion

- Are you most often an active or a passive reader? Explain.
- Share an active reading strategy that has worked for you in school or work.
- What are the differences between active reading and studying?

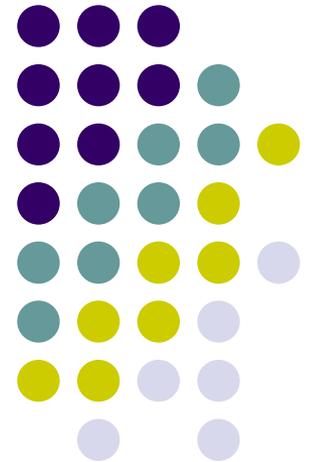


Writing Effectively



Effective Writing Basics

Tips that can improve your writing in any medium



Five keys to effective writing



- Put the reader first
- Use simple words and short sentences
- Use jargon only when necessary
- Write with verbs and nouns
- Format to improve readability



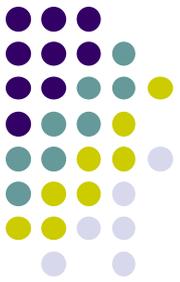
Five keys to effective writing

- Key #1: Put the reader first
 - Communication = understanding
 - Write to EXpress not Impress
 - Use words readers can picture
 - Tie in to the reader's experience
 - WIIFM – What's in it for me

Five keys to effective writing



- Key #2: Use simple words and short sentences



Example 1

- Per our conversation, I am enclosing herewith a remittance of \$25 for the balance due on my account. (18 words)
- As we discussed, here is the \$25 remaining on my account. (11 words)
- Here is the \$25 remaining on my account. (8 words)



Example 2

- As pertaining to the question of whether or not to construct a new storage facility, corporate management will ascertain the appropriateness of such an issue in the near future.
- Management will decide next week whether to build a new storage facility.



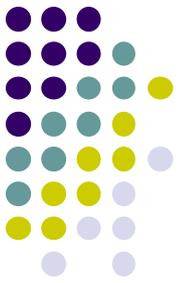
Tip

- **Avoid wordy prepositional phrases**
 - **In the amount of (for)**
 - **In order to (to)**
 - **Due to the fact that (because)**
 - **In the event that (if)**
 - **During the time that (when, while)**

Five keys to effective writing



- Key #3: Use jargon only when necessary
 - What is jargon?



Example 3

- The new FMIS system from Global provides VOR/DME nav redundancy, as well as enhanced GPS capability.
- Global's new flight management system provides several ways to navigate your airplane, including the latest in satellite navigation.



Example 4

- While the new ST7000 provides extensive memory and is extremely user compatible, it lacks the requisite capacity for calculating at a high rate of speed.
- Our computer system is easy to use and has enough memory, but it is too slow.



Example 5

- Demand-side capacity combined with transmission wheeling contracts and local generation resources will be able to meet local demand and spinning reserve requirements for the next five years.
- SMUD will be able to save and produce enough power to meet local needs for the next five years.

Five keys to effective writing

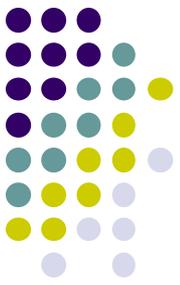


- Key #4: Write with verbs and nouns
 - Use the active voice
 - When it is okay to use passive voice



Example 6

- The company (S) sells (V) insurance (O).
- Not: Insurance is sold by the company.
- The construction crew repaired the road.
- Not: The road was repaired by the construction company.
- Tests showed the new material did not wear well.
- Not: When tests were run, it was discovered that good wear is not exhibited by the new material.



Example 7

- **Choose the right verb and the right noun**
 - Mr. Johnson ran quickly across the four-lane street, almost falling down when he stepped in a large hole in the concrete. (22 words)
 - Mr. Johnson sprinted across the boulevard, stumbling when he stepped in a pothole. (13 words)



Five keys to effective writing

- Key #5: Format document to improve readability
 - Use lists, bullets, charts, tables, indents, italics, bolds, headings and subheadings
 - The 100-word rule



Plan, organize, write

- Before you begin
 - Who is the audience (“My audience is _____.”)
 - Purpose of the message (“My purpose is _____.”)
 - How will the reader use the information (“So that the reader will _____.”)



Plan, organize, write

- As you begin
 - Assemble all useful information
 - Determine what's important
 - Choose what to leave *out*
 - Group information logically



Plan, organize, write

- Four ways to organize
 - Division
 - Compare/contrast
 - Cause/effect
 - Problem-analysis solution



Division

- Start with main idea, then discuss the parts
- Example:
 - ACME Corporation faces four problems that threaten its competitiveness:
 - Outdated marketing plan
 - Poor service record
 - High prices
 - Low Morale



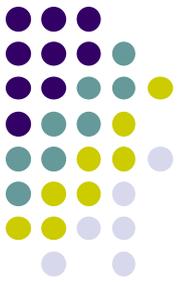
Compare/Contrast

- Use familiar to explain unfamiliar
- Put the conclusion up front
- Example:
 - If we expand in the West we will face the same challenges as we did in expanding to the South:
 - Lack of identity
 - Poor distribution
 - Short p-term cash flow problem
 - Untrained labor force



Problem-Analysis-Solution

- Find a straightforward way to offer recommendations
- Example:
 - The shipping dock's inability to ship product fast enough results from a inefficient tracking system. The solution is to:
 - Invest in a new computer system
 - Retrain staff
 - Inform customers of realistic shipping times
 - Budget for overtime to meet peak demand



Cause/Effect

- Presents a clear-way analysis
- A-B; A-B-C-D; ABCD-E
- Example:
 - Reorganizing the marketing department will cause two benefits and one problem:
 - Improved accountability
 - Better communication
 - Problem – poorer service to industrial customers



Plan, organize, write

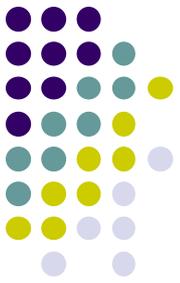
- Develop an outline
- Write
 - Write the easiest part first
 - Develop major sections one at a time
 - Introduction for main ideas
 - Main point in first paragraph
 - Turn off your internal editor



Plan, organize, write

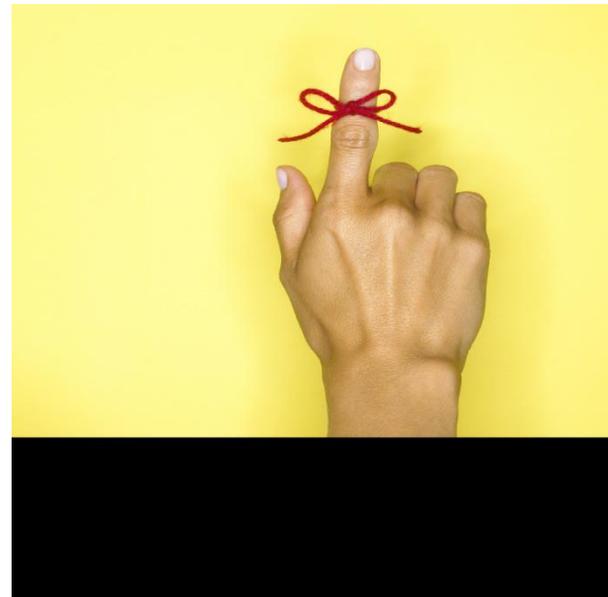
- 90% of writing is re-writing and editing
- Let the document cool
- Run a Fog test
- Aim to cut first draft by at least 10%

Make the most of your memory: the key to effective studying



Your ability to remember
is affected by—

- Distractions
- Time of day
- Comfort Level
- Stress
- Interest in material
- Level of motivation





General to Specific

Before learning new material, get a general overview

Make it Meaningful

Ask yourself, “How will I use this information?”

Create Associations

Relate what you’re learning to what you know

Learn Actively

Manipulate and change the information

Reduce Distractions

Turn off the TV!

Monitor Your Learning

Ask yourself questions at the end of section



Knowledge is a treasure,
but practice is the key to it.



Thomas Fuller