



Note-Taking & Critical Thinking

Academic Enhancement

The Study

3rd Floor Complex Commons

www.uky.edu/ugs/study



Recommendations for *Effective* Note Taking:

- Pre-Class
- In-Class
 - Formats
- After-Class
 - Within 24 Hours
 - Weekly
 - With Note Partner
- Reading Notes



Pre-Class:

- Have what you need for class
 - (binder, paper, pen)
- Complete your reading & assignments *before* class! (follow syllabus)
- Write questions from reading assignments or previous class lecture notes to ask the instructor.
- Decide on abbreviations and symbols,
- Have a seat up front & actively listen!



In-Class

- Actively listen
 - Concentrate
 - Listen for important terms, concepts, clues (Who? What? Where? When? Why? How?).
- **Take your own notes!**
(Even if *instructor* notes are available)
- Write on one side of paper only.
- Date and Title each page.

Dual-Column Note Format

Topic: Example

Date: Today

○ Term

○ Concept/Main Point

○ Important Person

○ Procedure/Process

○ Quote

○ Definition, synonym, antonym

○ Detailed explanation, example

○ Important contributions, why you need to remember this person, events or activities involved in, relevance to topic of lecture

○ Illustration, details, steps, sequence, example

○ Interpretation, relevance, response

Note Summary

Three-Column Version

Concept/
Term

Ex.
Punnett
Square

Definition/Description

A tool used in genetics to determine the probability of an offspring expressing a particular genotype

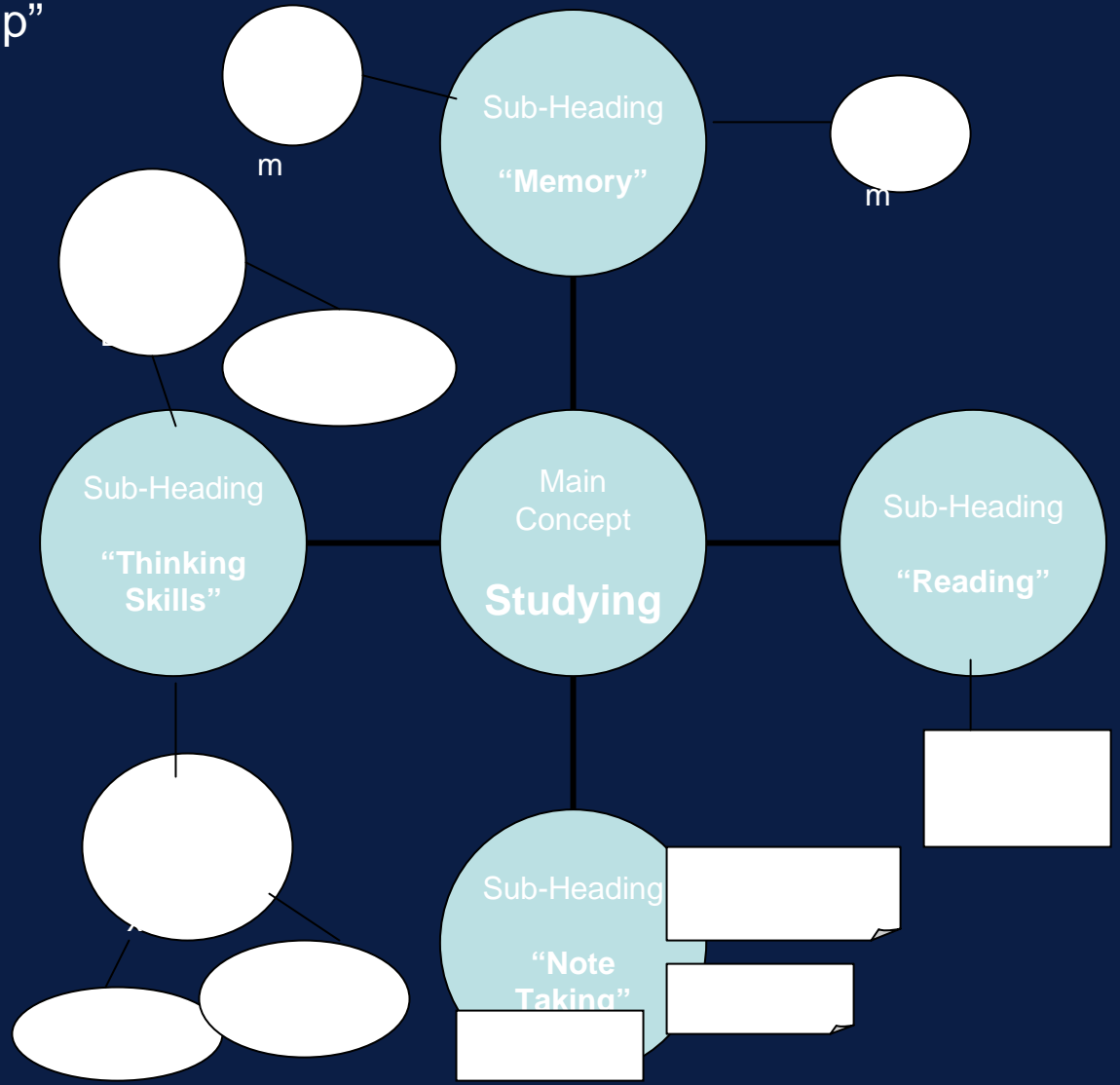
Example/Illustration

Male Gametes

Female Gametes

	T	t
T	TT	Tt
t	tT	tt

“Brain Dump”





Relative Average Speeds:

Writing – 50 WPM

Talking – 150 WPM

Reading – 250 WPM

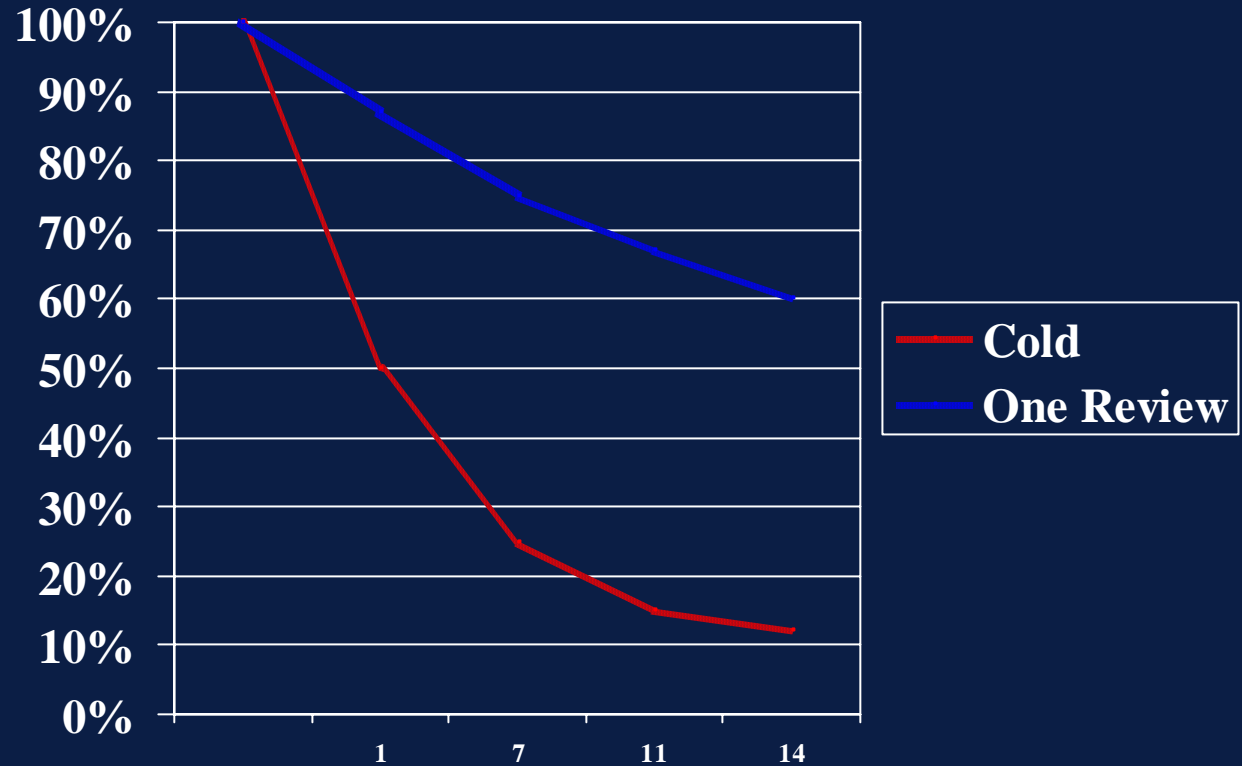
**Thinking – 800+
WPM!**



After-Class:

- **Review within 24 hours!!!!!!!**
 - You will forget 70% after a day
 - You will forget 90% after 2 weeks
- Fill in details
- Compare to reading notes
- Draw symbols for emphasis
- Look for themes, main points
- Anything you don't understand, circle and ask a question next class!

Value of Daily Reviews





After-Class Continued:

- Review the week's notes on a weekend afternoon. Circle what you don't understand or remember.
- Use notes for making study cards, predicting test questions, comparing class and reading, and planning your study time.
- Compare yours to a partner's and the instructor's to fill in gaps.



Tips for studying your notes:

- Plan!
- Treat your work as a full time student as your full time employment.
- Schedule study time in blocks each day with specific goals/actions for each session.
- Review your notes regularly
- Prioritize and commit



Improve Your Reading

Critical Reading Skills



S

Q

3R



Three Phases of Reading ~ 3 phases of Note-Taking

- Phase I: Pre-Reading Strategies
- Phase II: Strategies While Reading
- Phase III: Strategies for After Reading



1) Pre-Reading Strategies

- Set Goals for Your Reading
 - Conduct a timed reading
 - Read digestible “chunks”
- Examine the Structure of the Text
 - Table of Contents, chapter summaries
 - Headers, bold type, inset tables
 - Preface, overviews, chapter questions
- Activate Your Prior Knowledge
 - “Brain dump” last assignment/lecture



While You Are Reading

- Elaboration Strategies
 - Predict, connect, visualize
- **Take Notes**
 - Highlight, Questions, Notes in Margins
 - Summaries of what you are reading
 - Develop mental images of the text
 - Make questions and predictions

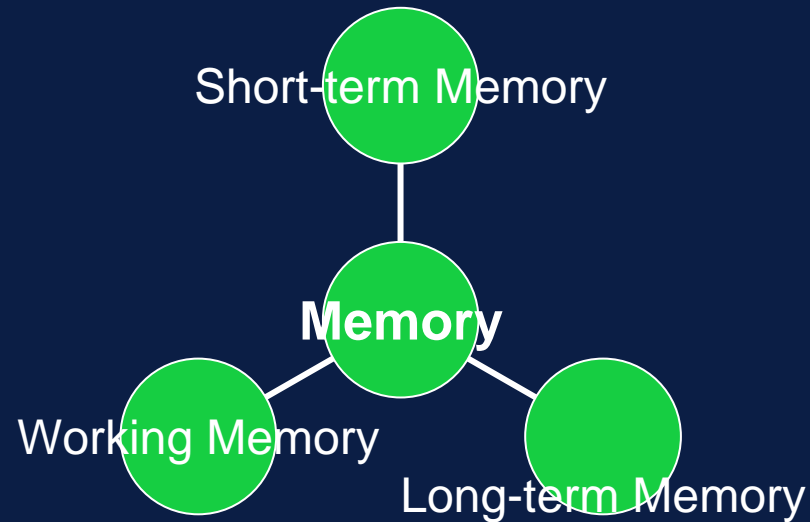


Possible Questions to Ask

- Describe _____ in your own words
- What does _____ mean?
- Why is _____ important?
- How are _____ and _____ similar?
Different?
- What causes _____ ?
- What would happen if _____ ?
- How does _____ tie in with what was
said in class?
- How does _____ relate to _____ ?

Organizational Strategies

- Concept Maps:
“Brain Dump”





Organizational Strategies

- o Develop and Use Charts

	Short-term Sensory Store	Working Memory	Long-term Memory
Function	Perception	Action on information	Storage of information
Duration	A few seconds	Less than a minute	Very long
Capacity	Limited	Very Limited	Unlimited
Cognitive Process	Attention	Rehearsal Elaboration Encoding	Retrieval



Organizational Strategies

- Develop and use outlines
 - Check the beginning of the text for a possible outline to follow
 - Paraphrase important ideas in your own words to see how they fit together
 - Integrative outline of text readings, course lecture notes, and discussion section notes



Phase III

Strategies to Use After Reading

- Ask yourself general questions
 - Predict test questions
- Answer chapter questions
- Enhance lecture and reading notes
- Review reading notes with class notes
- Write a final summary



Critical Thinking:

- *Thoughtful, systematic, careful examination of ideas (Meltzoff, 1998)*
- *Expected in college level coursework*
- *Essential for solving complex problems*
- *Expected for academic achievement*
- *Reflects higher-order thinking skills*

Why?

How?



Bloom's Taxonomy

Hierarchy of thinking skills

- Evaluate *High*
- Synthesize
- Analyze
- Apply
- Comprehend
- Memorize *Low*



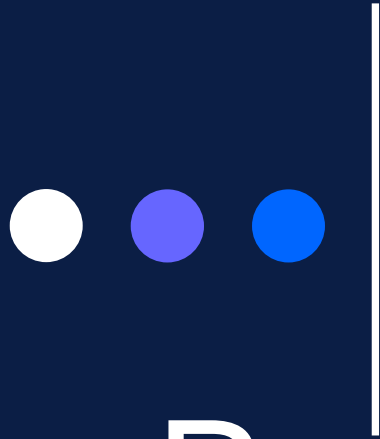
Critical Thinking:

- Make well-reasoned judgments
- Make informed decisions
- Criticize a position
- Use criteria to judge quality
- Cite advantages and disadvantages
- Assess variety of perspectives
- Synthesize information
- Evaluate



Critical Thinking is Active

- Predict
- Imagine
- Question, question, *question*
- Seek questions and verify answers
- Draw inferences
- Challenge assumptions
- Recognize biases, assumptions, positions (your own, the author, your instructor, classmates)



Practice
makes
progress

Practice critical thinking daily.