The PDP study method takes into consideration that reading is a process rather than isolated singular events for college students. There are specific practices that students engage in before they read, while they read, and after they read. Reading also is integrally tied to the process of writing. Beginning college students sometimes treat these activities as separate distinguishable events, so it is important for tutors to highlight the interrelatedness of these activities.

Teaching Strategies
The individual components of the PDP study method are described below.

- **Review strategies.** Review the process and the rationale. Since the strategy may appear to take more time than the student is accustomed to, it is important to discuss its advantages in terms of learning efficiently. While it may be time-consuming at first, to annotate, for example, it will be less so when the student becomes more skilled. Additionally, the student should recognize the timed saved from a well annotated book, when preparing for an exam, or writing a paper.

- **Effective use of strategy.** Make sure the student can use the strategy effectively. Ask students to demonstrate it with a think aloud.

- **Focus on generalizations.** When reviewing the students use of a strategy try to help them make a generalization of how to use the strategy appropriately. For example, when the student is annotating the main idea, ask how they know that a statement is a main idea. What are the features of main idea statements? Where are they found? etc.

- **Individualized student study system.** Have the student make up their own study system using the strategies taught but tailoring it to his/her own needs and the task demands. Have the student make up a one-page, step-by-step outline of his/her system to use as a reminder when studying. Do it on the computer and make copies.

- **Aim for mastery.** Students need to get enough practice in the skill during the tutoring sessions and in studying so that they become skilled at using these study strategies. The more the strategies become automatic the more likely the student will continue to use them.

- **Use strategies in tutoring sessions.** Make sure that the student uses the study strategies in the tutoring sessions. For example, when going over a reading make sure the student previews it first.

- **Tutor model strategy.** Use a think aloud to model strategy for the student.

- **Student think aloud.** Ask the student to do a think aloud while engaging in the study activity. Ask the student for the bases for his/her decisions.

**Prereading**

Prereading activities are a very important and often overlooked study strategy. They involve thinking about and reading small selective portions of a text in a systematic way for specific purposes. The major purpose of prereading is to make the text easier to read and study. It helps the reader develop a schema or structure to guide the reading. This schema
makes the text easier and more comprehensible, especially for difficult material. It also helps the student decide how to read the text (e.g., for details, main points, memorization, etc.) Prereading activities, particularly previewing, should be used on all study activities.

Prereading should not be a time-consuming activity. Five minutes is adequate for a textbook chapter and 10 minutes for a book or longer assignment. A variety of prereading strategies are presented below. It would take too long to use all of them. Students should experiment and choose the strategies that would best for them. The basic strategies that all students should use are indicated by an asterisk.

- **Determine purpose/ reason/goal of the reading.** Before any study activity it is important for the student to think about its specific purpose. For a reading assignment the students need to think about what they want to get out of the reading and/or what they want to use the reading for. Purposes can include studying for an exam, getting the general idea of reading, detailed reading with the purpose of memorizing etc. The purpose should determine how a text is read and the strategies employed. Reviewing the course syllabus or lecture notes also will give the student a sense of the purpose of the readings. When reviewing notes and the syllabus the students should be looking for important themes and questions that may give insight as to the purpose of the reading.

- **Preview.** The following parts of the text can be read as part of a preview:
  - Preface
  - Introduction
  - Table of contents
  - Summary
  - First paragraph
  - Last Paragraph
  - Headings major and minor
  - 1st /last sentence of each paragraph (except with long texts)
  - Graphic aids
  - Study Questions
  - Glossary
  - Boldface or italicized words
  - Unknown vocabulary -box or underline

- **Determine text structure and difficulty level.** As the text is previewed the student should try to determine the structure (its organization) and estimate the difficulty level. This assists the student in deciding how much time the reading will take.

- **Make outline or graphic organizer.** Make an outline or graphic organizer based on the preview of the text. An outline or graphic organizer reinforces the schema or structure the student has developed from the preview which makes the text easier to study because is provides focus for the reading.

- **Activate prior knowledge.** On the basis of the preview the students should think about what they know about the topic and how it may relate to their own experiences and interest. This prior knowledge may come from the student's own personal experience, and , more importantly, what already has been discussed, covered, or read in class. This makes the text easier to understand.

- **Make predictions.** On the basis of the preview the student can make predictions about the content of the text. This helps focus the reading as the student confirms or dis-confirms the predictions.
- **Ask questions.** Formulate questions the student has about the reading related to his/her interests or experience. One mechanical strategy is to turn the headings into questions. Questions should be written down.

**During Reading**

- **Read text according to the purpose.** As text is read students should try to answer questions, make predictions, and relate to background knowledge.

- **Monitor Comprehension.** Students need to pay attention to their degree of comprehension of the text. Annotation after each paragraph or section will provide a test of comprehension.

- **Adjust reading techniques when working with difficult texts.** When the text or sections of a text is difficult there are several strategies to be used.
  - **Reduce reading speed.** Slowing down makes it less likely that important points will be missed.
  - **Read aloud.** Reading aloud makes the reading more focused and improves comprehension.
  - **Reread.** Reading a text a second time improves comprehension by providing a schema for the second reading.
  - **Focus on important words.** Try to ignore adjectives, adverbs, function words and read only nouns and verbs.
  - **Continue reading.** Authors often restate concepts in different words or provide a definition or examples. Rather than stopping until the difficult section is understood, the student should continue reading because subsequent material may clarify the difficult part.
  - **Annotate and underline.** This helps concentration and makes for active reading.
  - **Ask for help.** Ask a tutor, TA or friend in the same class for help. Go to the professor's office hours to ask for help. Pick out a specific part of the text or a concept that is not understood before asking for help.

- **Annotate.** Annotating, i.e. putting comments in the margins, is an important skill. It requires active reading and more in-depth processing than simply reading, which can be a passive activity. It also provides the student with notes for making an outline or summary and for use when studying for a test. It can substitute for rereading the whole text when studying for exams. Rereading is often prohibitively time-consuming for any student.

**Annotation strategies include the following:**

- **Read and annotate one paragraph or section at a time.** Texts should be read in chunks and each section annotated rather than reading the whole text before annotating.

- **Read a section first.** Students should read each paragraph of a larger section of text and then go back and annotate. They can put check marks at places they want to go back to annotate. As they become more skilled at identifying important points to be annotated they may learn to annotate as they go along. However, they need be very skilled before they can do this.
- **Paraphrase.** The annotations should be paraphrases of the points in the students own words rather than copied directly out of the text. This forces the student to do more processing.

- **Telegraph.** Because of space limitations in the margins and to help focus on essential points, the annotations should be telegraphed. Function words (a, the, is, on, in etc.) should be omitted and abbreviations and symbols should replace full words.

(note: Paraphrasing and telegraphing should also be used for lecture note taking.)

- **Reference.** Annotations can be used to reference or point to places in text where there is certain types of information. Abbreviations indicate the type of information in the text.

Referencing notation:

```
intro     introduction
comp      comparison
def       definition
ex        example
pro       arguments for
con       arguments against
*          important point
?          confusing point
sum       summary statement
```

Students often have difficulty identifying what to annotate. The following guidelines may be helpful:

- **Major points.** The major point of paragraphs or sections should be annotated. They tend to have the following characteristics:
  - They tend to be at the beginning and ends of paragraphs or sections.
  - They tend to be general statements that are explained or expanded in the text.
  - They can be signaled by key words:
    - "In summary", "in general", "finally", "in conclusion"
    - "First", "second" etc.
    - "An important point..."

- **Examples of main points.** Examples can be annotated or referenced by the "ex" abbreviation.

- **Subpoints**

- **Lists.** Lists can be numbered or bulleted.

- **Definitions.** Definitions can be annotated or references by the "def" abbreviation.

- **Personal reactions.** Agreement or disagreements with content, contradictions and similarities to other texts should be noted.

- **Underlining.** Underlining is them most common study strategy used by students. However it is not used very effectively. It is often a passive activity in which students don't put much effort into deciding what to underline. The results most often is too much underlining which fails to distinguish important form unimportant points. Underlining needs to be limited and act as a complement of reinforcer of annotating. Some strategies to promote more effective use of underlining include:

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- **Set a limit: one sentence per paragraph.** One way to decrease the amount of underlining is to arbitrarily limit it to one sentence per paragraph. The one sentence should be the main point. This forces the student to be a more active reader as h/she decides upon the main point.

- **Use pen or pencil. Don't use highlighter.** A pen or pencil allows the student to annotate and underline without changing utensils. Highlighting requires awkward changes back and forth between highlighter and pen or pencil. A pencil is preferred because it makes it easier to change an annotation or underlining. As skills develops a pen or highlighter can be used.

- **Underline or box important vocabulary words.**

### Postreading

Students need to engage in some post reading activity. These include writing a summary, constructing an outline, or graphic organizer. Postreading activities have the following functions:

- Facilitate the reviewing of texts for an exam without the necessity of rereading the text.

- Encourage active reading

- Require the reader to pick out important points and distinguish them from unimportant details.

- Require the reader to synthesize and organize.

- Require the reader to monitor comprehension. Students can't engage in these postreading activities without having comprehended the text.

- Improves recall of text. The student will recall content of text better if he/she has engaged in a postreading activity.

- Writing a research paper. Provides notes on different sources for writing a paper.

### Summary

A summary is a condensed version of a text which includes the most important points in the text. There are two types of summaries, writer-based, and reader-based. Writer-based summaries are written for the writer's use in studying; and-reader based summaries, which are written for others to read. These latter include summaries written during an exam or a homework assignment. Reader-based summaries will be more explicit and complex because the reader has to be taken into account. Writer-based summaries, on the other hand, need not be as explicit because they are written for the writers use only.

A summary has the following characteristics:

- **Condensed.** A summary is considerably shorter than the original text. Often a paragraph of two.

- **Paraphrased.** A summary paraphrases sentences rather than quoting.
- Main point included with most details left out.

- Reorganized. Often the summary does not follow the linear organization of the text. The ideas are often reorganized.

- Hierarchical structure. The structure of a summary should begin with the major points or generalization followed by subordinate points organized in a hierarchical structure.

- Based on annotation and underlining. Summaries should be written after annotation and underlining is completed and should be based on them. In principle it should be possible to write a summary using only annotation and underlining without rereading the text.

- Constructing a summary involves:
  - Deletion of unimportant and redundant material.
  - Substituting superordinate or more general concepts for a series of related lower level details.
  - Selecting a main point sentence for each paragraph or creating one if it is not present.

- Outline. Outlining is another way of representing the content of a text. Outlining covers more of the content and covers more detail. Outlining requires that the student distinguish main points from supporting or subordinate points, and he/she represent relationships between points. There are several types of outlines.

  Formal outlines are those in which different levels of relationships are indicated by specific symbols, main points by roman numerals, subpoints to the main points by capital letters, sub points to the subpoints by numbers, the next level by lower case letters etc. The symbols for each level are fixed and each level is indented for the next higher level. Formal outlines are used in books, tables of contents and official documents. Students often become confused about which symbol to use and this detracts them from focusing on the relationships between ideas which is more important for studying.

  Informal outlines indicate different levels of relationships through indentation as in formal outlines but allows for any symbols such as numbering or no symbols to indicate points. They are often more helpful for study purposes.

  Outlines, whether formal or informal, can use full sentences or phrases instead of words with function words omitted as in annotating. They can be longer than annotations because there are no space limitations.

- Graphic Representations (Maps). Graphic representations are visual representations of main points and supporting points and the relationships between them. Concepts are enclosed by a circle or box and supporting details are also enclosed with arrows or lines connecting them to the main concepts. Graphic representations are more flexible as well a representing ideas visually. Graphic representation differ in the amount of structure and the representation of relationships. Grids are highly structured and are suitable for textbooks.

- Flash Cards. Flash cards are 3 x 5 index cards that students can carry with them. They can be reviewed on the fly any time students have five minutes of free or dead time during the day. Students do not need large blocks of time to use flash cards. The are particularly useful for student athletes who do not have a lot of free time. They are useful for helping to learn and memorize vocabulary, formulas, or concepts. The process of constructing a succinct definition for a new concept that can fit on an index card can be a learning experience in
itself. They are particularly useful in studying for exams. On one side put the label or word for the concept or formula and on the other side put the definition or formulas. The student reads the word and tries to recall the definition etc. The student can turn over the card to check his or her recall. They can also be used in reverse starting with the definition and recalling the label or word.