


Reading for Learning

In her 1960 Pulitzer Prize-winning novel *To Kill a Mockingbird*, Harper Lee introduces us to a six-year-old girl nicknamed Scout, who loves to read. The novel is set in a 1930s Southern town, hard hit by the Depression. Scout's father, a lawyer named Atticus Finch, had taught her to read before she went to school. Instead of being pleased, her teacher is dismayed because Scout is so far ahead of the other children. The teacher forbids Scout to read in school, and Scout is heartbroken. Her father promises Scout that she can read all she wants at home.

Can you relate to this story? Some of you may have spent long summer days reading books in a series, such as Harry Potter or the Twilight books, eager for the next one to come out. On the other hand, some of you may not read unless required to do so for classes, or feel that you simply do not like to or are not good at reading. You likely read more, and more often than you realize. Do you really read less than your parents or grandparents, or do you just read differently? Think of all the things you have read in the past week: E-mail from friends or someone's personal blog? An online news site or an article in a local newspaper? A magazine that focuses on a favorite hobby? A textbook, an assignment handout, or a classmate's paper as a peer reviewer? The latest installment of a graphic novel?

However, like so many other things we do these days, we all tend to read too quickly to do it effectively. We skim written communication and half-listen to conversations. However, to become a strong and successful learner, you need to both read and listen well. This experience will build on the reading skills you already have and strengthen them so that you can be a confident and more successful lifelong learner.

The goal of the reading for this experience is to help you learn how to improve your reading and comprehension skills. We will also look at the connection between reading and writing, two activities that form the foundation of your college education.



Molly is a first-semester student who grew up on a dairy farm an hour outside of the city where she now attends college. She was very active in high school sports, including softball and soccer. Molly even tried wrestling for a season. She tends to get bored easily and is happiest when she's physically active. Molly wants to be a nurse and work with rural families. She knows from her own experience that many farm families are so busy taking care of their farms and livestock that they don't take very good care of their own health. Molly would like to change that, and introduce new ideas like nutrition and maybe even yoga!

Molly

Improving your effectiveness as a reader requires that you read *actively*. This means your eyes are not simply passing over words on a page, but that you are *thinking* while processing the information you read. In order to get the most benefit from your study and reading time, you must be *critically engaged* without distractions. This applies to any reading where comprehension is important such as reading a textbook, your own notes, research sources, or laboratory data.

Language development skills are the foundation from which a person's reading process can be improved. Table 1 lists the skills from the *Classification of Learning Skills* that are associated with language development. The table includes general skills such as *building vocabulary* as well as specific skills like *defining*.

As proficiency with language development skills increases, so will a person's reading skills. Specifically, reading skills improve by:

- *building vocabulary* — being able to define and apply words
- *decoding communication* — putting meaning to words and symbols (so that you understand them, not just recognize them)
- *understanding syntax* — properly using and grouping words in sentences
- *identifying semantics* — recognizing the meaning of speech forms and grouping of words
- *identifying context* — understanding that words have different meanings in different contexts

Table 1 Language Development Skills

Building vocabulary	Decoding communication	Understanding syntax	Identifying semantics	Identifying context
Defining	Pattern recognition	Word recognition	Recognizing meaning	Identifying cultural background
Practice and usage	Assigning meaning	Proper use of grammar	Recognizing connotations	Identifying historical background
Using contextual cues	Recognizing symbols	Proper use of sentence structure	Using rhetoric	

Reading Methodology

This reading will focus on the Reading Methodology. Reading is one step in the process of joining ongoing conversations with authors. You become part of that conversation when you read and discuss published sources, and again when you write your own analysis and reflection of those sources. Good conversations can continue for years and produce solutions to many thorny issues.

While being able to read faster may improve your reading performance, building speed is not the main concern of this reading. More important is that you are able to comprehend, communicate, and apply what you read. For many students, the bottom line is that they would benefit greatly from simply processing and structuring the critical information, so they can integrate what they read into their learning.

Examining the Reading Methodology

The Reading Methodology is a valuable tool that you can use to improve reading comprehension. In addition, there are some general guidelines that you can adapt to various reading situations. If you want to see improvement in your reading, you should be prepared to practice using the Reading Methodology often enough to get proficient with it. Realize, however, that not every step is required for all reading contexts. Trying to use all the steps in the methodology in all contexts can lead to frustration and discourage you from using the methodology. Initially focus on using the Reading Methodology in academic reading situations where it is an especially useful and appropriate guide to follow.

The Reading Methodology

Step	Explanation
1. Establish purpose	<i>Determine why you're reading the material.</i>
2. Set learning objectives	<i>Determine what you want to learn from the reading.</i>
3. Set performance criteria	<i>Determine how you'll know you read successfully.</i>
4. Estimate time involved	<i>Browse the reading to determine the level of difficulty, and how long it should take you to complete the reading.</i>
5. Vocabulary terms	<i>Browse the reading for vocabulary terms that are unfamiliar (keep a dictionary handy to look up unfamiliar words and write down definitions so you can refer back to them).</i>
6. Outline	<i>Survey the structure of the reading, so you understand the organization of content.</i>
7. Quick Read	<i>Complete a quick reading, largely skimming the content for the author's purpose, intended audience, type of writing and key emphasis areas (diagrams and pictures) to prepare for developing initial questions. Note any questions you have as you begin to read.</i>
8. Comprehensive Read	<i>Read carefully using your initial questions, taking notes and highlighting important passages, annotating in the margins and marking difficult passages to answer your questions, formulate new questions, and support your ideas.</i>
9. Inquiry Questions	<i>Elevate the inquiry to higher levels of learning, so more significant issues can be addressed by applying this knowledge.</i>
10. Synthesis	<i>Think about what you've read, combine the parts, sections, or ideas into a whole and produce learning around your learning objectives.</i>
11. Integration	<i>Integrate new information you've learned with your existing knowledge base to find new ways to apply this knowledge in your life.</i>
12. Assessment	<i>Assess your progress. Did you meet your learning objectives? How long did the reading take? How could you improve your reading performance in future?</i>

Discussion of the Steps in the Reading Methodology

Step 1—Establish Purpose

Before you begin reading, identify why you are reading, what you want to get out of the material, and how thoroughly you need to understand it. Determine if you are reading for a general idea or for details. The purpose will vary depending on the context, whether you are reading for a test, to complete an assignment, or for pleasure. By carefully defining your purpose, you can set your reading strategy to accomplish this purpose. For example, if you are reading for details, your reading speed will be slower than if reading for just a general idea or for pleasure. However, if you are reading only to get some idea of the main points, then skimming alone may be sufficient.

Step 2—Set Learning Objectives

How the Reading Methodology is used will depend a great deal on the specific purpose and objectives. For example, if you are reading for leisure, your only objective may be to enjoy the reading. In this case, many of the steps of the methodology are not applicable. On the other hand, if you are studying for an exam, the purpose and use of the methodology are very different. All the steps of the methodology become important in this situation. Based on the purpose (why you're reading), set learning objectives which specify what you expect to learn from the reading. If you're reading in order to learn something specific (for instance, to understand the process through which Alexander Graham Bell invented the telephone), your learning objective might be to comprehend the major steps of his process and provide examples for each.

Step 3—Set Performance Criteria

As with the activities in this book, performance criteria describe what you'll be able to accomplish or do, if you have met the learning objectives. In other words, the kind of performance you will be able to complete. Back to the example of Mr. Bell and the telephone: a possible performance criteria for completing that reading with the learning objective of, "understand the process through which Alexander Graham Bell invented the telephone," might be, "Describe the key scientific processes that Alexander Graham Bell used in inventing the telephone" or "Compare the process AGB used to invent the telephone with another inventor and the process he or she used." The bottom line is that performance criteria describe what we can **do** if we meet the learning objectives.

Step 4—Estimate Time

Consider the total amount of time you have available for the reading and compare it to the estimated time needed to complete the reading. Be sure to consider the level of difficulty as you budget your time. Remember, when reading for academic (rather than leisure) purposes, you will usually need to read through the text more than once. Make sure you schedule adequate time to allow you to do this.

Step 5—Vocabulary Terms

Identify terminology in the reading that is unfamiliar to you. Write down these words and look up the definitions. In effect, build your own glossary. You may also want to write notes and definitions to "key" words in the margins of your outline, your notes, and if allowed, in the reading itself.

Step 6—Outline

Survey the structure of the reading, so you understand the flow of content and connections. Different kinds of writing (e.g., a novel, play, poem, personal essay, lab report, newspaper article, or scholarly article) have different requirements that determine the form in which the material is presented as well as its supporting structure.

Step 7—Quick Read

Complete a quick reading by largely skimming the content. As best you can, try to determine the author's purpose, the intended audience, and type of writing. These factors influence what is being said and how it is being said. The intended audience will determine the level of difficulty of the reading and how formal or informal the writing is. Mark the parts of the reading that seem difficult, complex, or confusing. Pay special attention to key areas of emphasis (mark or take note of), such as diagrams, pictures, abstracts, summaries, and conclusions to help you prepare for developing initial questions.

Step 8—Comprehensive Read

Next, reread critically and carefully and try to answer your initial questions. Spend additional time working to build comprehension. Write to help process what you read.

Writing is a good way to process what you have read and to make it a lasting part of what you know (rather than something you forget right after a test or quiz). There are a variety of possibilities that are appropriate for different contexts. For example:

- take notes in a notebook that supports answers to your inquiry questions
- annotate the text by writing comments and notes in the margin of the text itself
- summarize by condensing and recording the subject matter without including your own questions and opinions
- summarize what you read but include your own thoughts, questions, and opinions

Summarize and read your responses. This works well when you are reading sources for a research project. It is also helpful for courses based on class discussions of reading assignments. In these cases, you will have to represent what your source said as well as offer your own commentary on the source.

Summarize, annotate, and take notes when reading textbook material that you will be tested on later. In these situations, your personal opinion is usually less relevant than showing that you know the material. Try using a combination of these options to find out what works best for you.

Step 9—Inquiry Questions

As you read, ask and document questions you would like answered about the material, as well as ideas that the comprehensive reading triggers. This increases your thinking and focus and keeps you actively engaged in the reading. Critically engaged reading may mean that at times you are willing to disagree with or challenge the author. Write down these opinions too. This step elevates your levels of learning by developing inquiry questions that address difficult issues about applying this knowledge in difficult situations.

Step 10—Synthesize Information

During the first part of the methodology, you intentionally broke the reading apart and focused on different aspects of the reading. Now is the time to bring it all back together and consider the reading as a whole. If the reading was an argumentative essay, for example, the author built a case and presented evidence for a position. Appreciating the case itself requires seeing the reading holistically. It is also critical that you synthesize the information into a whole in order to produce the learning you identified in your learning objectives.

Step 11—Integrate Information

Make connections between what you are reading, and other materials you have read. Also, make connections with other courses you have taken or are currently taking as well as connections with personal experience in other contexts in your life (e.g., at work or at home). Strive to find ways to apply your new knowledge and learning to your life.

Step 12—Assessment

Assess what you have read. Make modifications to your notes as needed. Summarize what you have gained from the reading. Determine if there are errors, inconsistencies, and pieces of information which are still unclear or missing. If needed, reread to enhance understanding, clarify and answer questions that remain unanswered, and make sure that objectives for the reading are met. Be sure to consider how you might improve your reading performance in future!

Reading and the Levels of Learner Knowledge

Jennifer's instructor was happy to follow up with her about the article and Jennifer's application of the Reading Methodology. Here's what Dr. Anders had to say:

The important performance in reading is to produce learning at the level of the performance criteria that you set. The critical step in the Reading Methodology is the production of inquiry questions. The ability to ask these inquiry questions is the ability to determine what is important in the reading. To help you to start understanding how to ask these inquiry questions, I've put together examples of reading quiz questions at each level of learning.

Reading Quiz for Problem-Based Learning

Level 1—Informational Knowledge

Question What role does the faculty member play in problem-based learning?

Answer *He or she is a facilitator of learning*

Question How do the students work together in PBL?

Answer *Cooperatively*

Level 2—Comprehension, Understanding, and Meaning

Question What was the driving motivation for creating problem-based learning and how does PBL "solve the problem?"

Answer *In medicine, a diagnosis (the diagnostic procedure) can lead to the recognition of unique characteristics (i.e., things that may not have been seen before). Thus, in order to develop the most effective solution to a diagnosed medical problem, new learning will probably need to be done. In traditional medical educational practice, doctors-in-training are taught to use only the knowledge they currently have. By constantly looking for new knowledge to solve a problem, this behavior becomes consistent in life-long learning.*

Question What are the dynamics that produce an effective problem-based learning environment and how do they support each other?

Answer *Learners and teachers create a learning community with shared commitment towards everyone's success, so risk-taking is encouraged and learners have the opportunity to fail without punishment. High expectations are set with clear performance criteria, appropriate*

levels of challenges, lots of self-assessment, and documentation of accomplishments leading to greater challenges. Through cooperative learning, mentoring, critical thinking, preparation, a high level of engagement, and self-assessment, each learner can grow through failures leading to improved future learning performance.

Level 3—Application of Knowledge to New Situations

Question How does a learner become successful in a problem-based learning environment, and what are three practices these students use effectively?

Answer *Successful learners would need to learn to use the Learning Process Methodology effectively and understand the relationship between levels of learning and the ability to solve problems. The key steps of using the LPM would be to become effective readers in order to identify what information in the reading is critical for their understanding. This would help them to ask the questions most likely to produce the meaning needed to for applying the knowledge to the current problem.*

A second practice is to use the Problem Solving Methodology to state the problem, identify issues, and determine what is known, and what is not known in order to help identify learning issues.

Finally, learning how to contextualize and transfer knowledge becomes critical so that any new knowledge can be applied to other new problems with equal effectiveness.

Question How does a teacher become effective with PBL, and what are three key practices they must embrace?

Answer *The faculty member needs to see their role as not the expert (which they are) but as the facilitator of learning and mentor of future doctors. The most important behavioral change is developing the patience to let the process unfold. The facilitator already knows the questions, direction, and solutions but must let the learners own the process. The faculty member must focus on the assessment of the performance of the learners to strengthen the learners' learning and problem solving skills. Also, the design of the learning experiences must be as authentic as possible (true to real-life) and be structured with the right level of challenge for the learners.*

Level 4—Problem Solving and Working Expertise

Question In what disciplinary areas does PBL really work, and in what situations doesn't it? Why is there a difference?

Answer *The context of the medical field (and scientific fields in general) tend to be where individuals accumulate a lifetime of professional practice (and habits) even as new knowledge and advancements are rapidly changing. The best practices that were state-of-the-art 10 years ago are rarely now considered "good enough." Learning must thus become part of daily practice as new situations present themselves or new practices become available. How many disciplines are producing research? Are problems becoming more complex? In each of the disciplines where the answer is "yes," the practices of PBL makes for a very strong learning environment.*

Hopefully you now see the challenges in reading for learning. You have experienced learning similar to PBL in this class and have studied how learning works through the Learning Process Methodology and problem solving through the Problem Solving Methodology. You have studied how the learner learns,

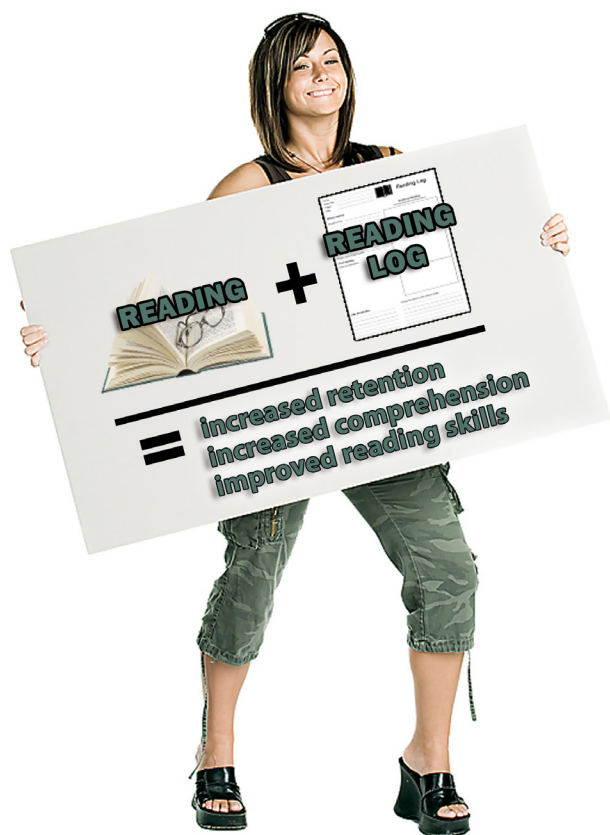
and the teacher facilitates. The level of thinking in producing levels of learning through the Reading Methodology would allow you to answer these questions at these higher levels.

Using a Reading Log

A reading log is a tool to help you not only document what you have read, but also to help you focus on applying the steps of the Reading Methodology in order to become a more effective reader.

Ron Miller, of Western Michigan University, explains that “all effective reading logs address two areas: what the student has learned and how the student has learned it. Reading logs challenge students to analyze their reading strategies, to demonstrate what they have learned from a reading assignment, to assess the quality of what they have read, and to develop an action plan for improving reading skills” (Miller, 2007).

Another benefit of using a reading log is that you are essentially preparing your own study guide for exams. When you create a reading log based upon assigned reading, you are engaging in every step of the Reading Methodology and are therefore increasing your skills as a reader. Beyond this, however, you are outlining the readings and being prompted to make connections and ask critical thinking questions. It should come as no surprise that these are precisely the types of skills that will serve you well on exams and reports.



Molly says, "I didn't see the point of a reading log when I first heard about it, but then I realized that it's really just the Reading Methodology (which helps A LOT!) with easy and quick prompts. I like that I can keep a bunch of blank logs in my notebooks to use for different reading assignments. I used a reading log for a chapter in my world history survey course, and believe it or not, one of the questions I asked on my reading log was one of the questions on our first quiz! I never would have focused on those specific ideas if I hadn't been using a reading log."