

19-item motivation in reading PSL questionnaire

subscale	item
expectancy value in reading PSL	Reading primary scientific literature is valuable to me as a student
	It would be useful for my future career to read primary scientific literature
	The amount of effort it takes to read primary scientific literature is worthwhile to me
	I feel that being good at reading primary scientific literature is important to me
	Reading primary scientific literature is useful in my daily life.
self-efficacy in reading PSL	I think that I can understand the experimental design from a primary scientific literature article
	I think that I can understand the data presented in a primary scientific literature article
	I think that I can understand the results section from a primary scientific literature article
	I think that I can understand the discussion section from a primary scientific literature article
	I think that I can understand the overall ideas presented in a primary scientific literature article
performance/competence in reading PSL	I am confident that I can understand primary scientific literature articles I read in class
	I can do well on exams based on primary scientific literature I have read as a class assignment
	I understand concepts I have studied through reading primary scientific literature;
	I can overcome setbacks in reading primary scientific literature
	Others ask me for help with reading primary scientific literature
	I am confident that I can understand primary scientific literature I read outside of class
interest in reading PSL	I am interested in reading more primary scientific literature
	Topics I read about in primary scientific literature excite my curiosity
	I enjoy learning about primary scientific literature

Expert-novice PSL research:

'I'm probably just gonna skim': an assessment of undergraduate students' primary scientific literature reading approaches:

<https://www.tandfonline-com.ezproxy.fiu.edu/doi/abs/10.1080/09500693.2020.1765044>

Perceptions of scientific research literature and strategies for reading papers depend on academic career stage:

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0189753>

Expert–Novice Comparison Reveals Pedagogical Implications for Students' Analysis of Primary Literature: <https://www.lifescied.org/doi/full/10.1187/cbe.18-05-0077>

11 “Thinking Tools” that experts use to read PSL

When reading PSL, how often do you:

1. Reread portions of the text one or more times?
2. Summarize part of the text by restating it in your own words?
3. Create verbal summaries that included explanations of the text or conclusions based on the text?
4. Write down your thoughts about the analysis of a set of data/results?
5. Write down questions or thoughts about the validity of a set of data/results?
6. Write down important facts that you read in the text?
7. Use knowledge you gained in past classes to help you understand the text?
8. Underline the text?
9. Use the definition of a term provided to better understand the text?
10. Look up a word in the text that you don't know?
11. Look up a method in the text that you don't know?