

---

# EQUIPPING INTERNATIONAL GRADUATE STUDENTS WITH COGNITIVE AND METACOGNITIVE STRATEGIES: LITERATURE REVIEW WRITING

---

**Eman Elturki, Washington State University**

## **TOOL BOX: EQUIPPING INTERNATIONAL GRADUATE STUDENTS WITH COGNITIVE AND METACOGNITIVE STRATEGIES**

---

---

With the increasing number of international students pursuing graduate degrees in English-speaking countries, teaching students how to write a literature review is crucial. Reviewing existing, relevant research is an integral component of an academic paper (Webster & Watson, 2002). Nonetheless, literature review writing is one of the most daunting writing tasks one can undertake; as it involves different layers and requires various writing skills to be able to research, analyze, and synthesize information (Pautasso, 2013). Students need to know how to identify and narrow down a research topic, read critically and efficiently, evaluate sources, analyze content, and summarize and paraphrase information accurately and effectively. Additionally, they need to organize and cite information properly using a citation style conforming to their field of study. Adopting the process approach to writing (Brown, 2001) and drawing upon diverse scaffolding techniques can help students develop the language and metacognitive skills (Lam, 2015) needed to produce a quality literature review.

Accordingly, in order to help students compose a literature review, I utilize the process writing approach in a research writing course. The course is designed for international students during their first year of graduate school in a pathway program at a U.S. university. In pathway programs, international students, who do not meet admission criteria for direct entry at the undergraduate or graduate levels, take credit-bearing courses in their intended majors as well as English language classes to enhance their English linguistic skills (Redden, 2018). Students obtain a degree-seeking status after a successful completion of their pathways. In this course, I designed varied and authentic writing tasks during the literature review composition process to allow students to self-monitor and revise their writing (Fernsten & Reda, 2011). I broke the lesson down into different parts and used a number of strategies to scaffold and equip students with a wide variety of techniques and tools during each stage of the writing process (i.e. pre-writing/researching, writing/drafting, and post writing/revising/editing). This process has demonstrated to be effective and powerful not only in stimulating the integration of skills and digital literacy but also in promoting student-centeredness in which students become active participants in the learning process. In a student-centered classroom environment, the teacher's role shifts from being the "sage on the stage" to the "guide on the side" who views the students not as empty vessels to be filled with knowledge, but as seekers to be guided along their intellectual developmental journey" (Wright, 2011, p. 93).

In this paper, I list the lesson objectives and student learning outcomes, detail the procedures and activities used to achieve the learning outcomes, and share materials and resources to facilitate the teaching of literature review writing. The proposed approach to teaching writing could be beneficial to all novice research writers, international or domestic, at the undergraduate and graduate levels.

### **PEDAGOGICAL PRACTICES**

---

<b>Level: Advanced English for Academic Purposes</b>	<b>Topic: Literature review</b>
<b>Skill: Writing</b>	<b>Lesson duration:</b> 3 class sessions, 1 hour and 40 minutes per session
<p><b>Lesson objective:</b></p> <p>Students will learn how to:</p> <ul style="list-style-type: none"> <li>– Write a literature review in their discipline based on scholarly articles using effective unity, support, coherence, and mechanics.</li> </ul>	
<p><b>Student Learning Outcomes (<i>relevant to the curriculum</i>):</b></p> <ol style="list-style-type: none"> <li>a. Locate, evaluate, summarize, paraphrase, and synthesize information into a coherent piece of writing using discipline's citation and rhetorical style.</li> <li>b. Compose and revise text at the graduate level using appropriate register/tone/voice, effective support and organization, Standard English grammar, mechanics, and sentence pattern variation.</li> <li>c. Use digital literacy skills in research and writing.</li> </ol>	
<p><b>Prior knowledge (<i>skills and topics covered in previous lessons and to be utilized in this lesson</i>):</b></p> <ul style="list-style-type: none"> <li>– Techniques and online tools to research a topic (e.g. Google, Google Scholar, an online library database)</li> <li>– Identifying and evaluating sources</li> <li>– Understanding the purpose of a literature review and the steps to writing a literature review</li> <li>– Deconstructing, reading, and annotating an academic text</li> <li>– Identifying and examining the literature review section in research articles</li> <li>– Summarizing, paraphrasing, and citing (APA vs. IEEE)</li> <li>– Identifying a research topic</li> <li>– Writing an annotated bibliography on a particular topic</li> <li>– Using online corpus resources when editing</li> </ul>	

<b>Resources and materials:</b> <ul style="list-style-type: none"> <li>- Blackboard</li> <li>- Projector</li> <li>- Students' personal laptops or a computer lab</li> <li>- <u>Literature Review Assignment and Rubric</u></li> <li>- <u>Literature Review Research Topic Brainstorming</u></li> <li>- <u>Literature Review Rough Draft</u></li> </ul>	<ul style="list-style-type: none"> <li>- <u>Annotated Bibliography Assignment and Rubric</u></li> <li>- <u>KWL Chart</u></li> <li>- <u>Literature Review Self-Evaluation</u></li> <li>- <u>Literature Review Peer Evaluation</u></li> <li>- <u>Purdue OWL: APA Style Guidelines</u></li> <li>- <u>IEEE Organization: IEEE Style Guidelines</u></li> </ul>
--	---

## SESSION I [1 hour and 40 minutes, 15 min break]

Lesson Structure		
Time	Content and procedures	Student activity
<b>12 min</b>	PRE-WRITING <i>*Focus: <u>Structure and language</u></i> – To review, students partner up to discuss what a literature review is; its definition, purpose, components, and the steps to writing a literature review [ <i>"Literature Review Template"</i> by Pamela Fry offers a concise explanation of the purpose and components of a literature review.]	– Think/Pair/Share
<b>13 min</b>	– Teacher distributes and goes over a handout with recurrent formulas that students can use in literature review writing to, for example, introduce a study, highlight a gap, etc. [Plenty of resources are available online- e.g. " <i>Research Writing Starters by RMIT University</i> "]	– Receive a copy of the sheet and follow the information (which is projected on the whiteboard as well)- a whole class discussion
<b>35 min</b>	– Teacher distributes two former students' literature review papers- one follows APA style and the other follows IEEE style- cut into strips (introduction, body paragraph one, body paragraph two..., and conclusion). In groups, students work on (1) arranging the literature review paragraphs into the right order, and (2) highlighting or underlining phrases that the writer used to discuss a study, highlight limitation, indicate a gap...	– Group activity; 3-4 students per group based on field of study- engineering/computer science vs. humanities

25 min	<ul style="list-style-type: none"> <li>Teacher projects the complete literature review papers so that students review their construction of the different pieces and ask questions. Using think aloud, teacher models how the paper can be deconstructed and what can be noticed about the structure and language.</li> </ul>	<ul style="list-style-type: none"> <li>Whole-class activity guided by the teacher</li> </ul>
30 min	<ul style="list-style-type: none"> <li>Teacher goes over the <u>Assignment and Rubric Literature Review</u> and illustrates how the writing process is going to build on the annotated bibliography assignment. (1) Begin with body paragraphs using the annotated bibliography entries, (2) arrange the body paragraphs in logical order, (3) add a paragraph hook and a concluding statement to each body paragraph, (4) add a conclusion paragraph, and (5) write the introduction paragraph [process is adapted from "<u>Writing a Short Literature Review</u>" by William Ashton]. An example illustration on the whiteboard:</li> </ul> <div data-bbox="310 1037 946 1633" style="border: 1px dashed black; padding: 10px;"> <p>Step 1: <b>BODY PARAGRAPHS</b> (<i>multiple paragraphs</i>)</p> <p><i>Second</i> → <b>2) Paragraph hook</b> (<i>a transition + a general introductory statement highlighting the theme or paragraph focus</i>)</p> <p><i>First</i> → <b>1) Summary of paper 1</b> (<i>i.e. purpose, method, major findings, limitations</i>)</p> <p><i>Third</i> → <b>3) Concluding statement</b> (<i>a transition + a statement that concludes the main idea/findings in this paragraph</i>)</p> <p>Step 2: <b>CONCLUSION PARAGRAPH</b></p> <ol style="list-style-type: none"> <li>1) Summary of the overall findings</li> <li>2) Limitations and gap</li> <li>3) What needs to be done (research purpose and importance)</li> </ol> <p>Step 3: <b>INTRODUCTION PARAGRAPH</b></p> <ul style="list-style-type: none"> <li>➤ An introductory paragraph for the literature review:             <ol style="list-style-type: none"> <li>a. Broad information (<i>e.g. definitions, statistics...</i>) → specific information focuses on the research topic</li> <li>b. Ends with a thesis statement introducing the scope of the research</li> </ol> </li> </ul> </div>	<ul style="list-style-type: none"> <li>Whole-class discussion</li> </ul>
10 min	<ul style="list-style-type: none"> <li>In preparation for the writing task during the next class, teacher explains the <u>KWL Chart</u> homework requirements.</li> </ul>	<ul style="list-style-type: none"> <li>If time permits, students begin working on the <u>KWL Chart</u>.</li> </ul>

**Assignment:****PRE-WRITING**

\*Focus: Content/ideas

- Using the information from their Annotated Bibliography assignment, students complete the KWL Chart to record what they already know about their topic from their initial research, what they still want to know, and what they learn about their topic after they do further research.
- For the next class, students bring their laptops, topic-related journal articles, completed KWL Chart, Research Topic Brainstorming form, and Annotated Bibliography paper.

## SESSION II [1 hour and 40 minutes, 15 min break]

**Lesson Structure**

Time	Content and procedures	Student activity
1.25 min	<p>WRITING</p> <ul style="list-style-type: none"> <li>– Using their laptops, students use the <u>Literature Review Rough Draft</u> Word file posted on Blackboard to begin the writing process in class. Teacher explains the writing process again by going over the rough draft assignment:               <ul style="list-style-type: none"> <li>○ Students copy and paste their summaries of the articles from their annotated bibliography assignment (body of the literature review paper).</li> <li>○ Arrange their summaries/paragraphs into logical order.</li> <li>○ Add introductory and concluding statements to each paragraph.</li> <li>○ Work on the conclusion then the introduction.</li> <li>○ Using the information compiled in the KWL chart, students add more information to their body, conclusion, or introduction if needed.</li> </ul> </li> <li>– Teacher checks on each student while they are working to provide feedback and answer questions.</li> </ul>	<ul style="list-style-type: none"> <li>– Work individually on the rough draft of the literature review using their laptops</li> </ul>

**Assignment:****WRITING**

\*Focus: Content/ideas, language, formatting

- Students work on their first draft of the literature review. Students create a new Word file and copy and paste the information from their rough draft in the right order (i.e. title, introduction, body paragraphs, conclusion, and reference list). They format their paper according to their disciplines' style (following either APA or IEEE). Read through their papers to check the flow of ideas and make additions or changes if necessary.
- Students complete the guided Literature Review Self-Evaluation form and make any further additions or changes if needed.
- Students bring a hard copy of their first draft of the literature review to the following class meeting for peer review before submission.

## SESSION III [1 hour and 40 minutes]

Lesson Structure		
Time	Content and procedures	Student activity
<b>35 min</b>	POST WRITING – Working in pairs, students exchange papers, read carefully through each, complete the guided <u>Literature Review Peer Evaluation</u> form, and provide oral feedback to one another.	– Work in pairs
<b>45 min</b>	– Students work individually to revise and edit their papers. Teacher reminds students to refer to the APA or IEEE resources posted on Blackboard if they are not sure about how to cite a specific source. Teacher also reminds students to seek <u>StringNet</u> (a corpus-based tool which they are familiar with) to confirm language use. Teacher answers questions and provides help when needed.	– Individual work
<b>15 min</b>	– Before they leave class, students submit their papers on Blackboard (literature review assignment), generate the academic integrity report, read through it, and revise and resubmit if needed (in case some sentences are not well paraphrased or cited).	– Individual work

<b>5 min</b>	<ul style="list-style-type: none"> <li>– Students sign up for <u>individual conferences</u> to meet with the teacher after their papers are graded. During the conference, the teacher goes over the written feedback she provided, highlights things that were done well, and discusses aspects of the paper that need improvement.</li> </ul>	<ul style="list-style-type: none"> <li>– All students sign up for conferences</li> </ul>
<p><b>Assignment:</b></p> <ul style="list-style-type: none"> <li>– Students submit the first complete draft of the literature review on Blackboard by the due date- <u>Assignment and Rubric Literature Review</u>.</li> <li>– Students need to arrive on time to their <u>individual conferences</u> with the teacher (there will not be a regular class meeting.)</li> </ul>		

### **Assessment (*how learning will be recognized*)**

- ❖ Produce a mini Literature Review on a discipline-related topic.
  - Students receive a grade on their first complete draft of the literature review using a rubric.
  - Students receive a grade on their final draft of the literature review using a rubric.
  - The literature review paper, with its multiple drafts, is included in the writing portfolio with other writing assignments and a student-reflection paper. At the end of the semester, the writing portfolio is evaluated by a panel of 2-3 instructors who have experience teaching upper-level writing. The panel evaluates the portfolio as a whole using a holistic rubric (a passing portfolio demonstrates achievement of learning outcomes and growth in writing skills over time).

## **CONCLUDING REMARKS**

---

Teachers may adopt or adapt the process, assignments, and rubrics referred to in this paper to help students develop the necessary skills needed to compose a literature review. This lesson assumes that the purpose of a literature review has been covered in previous lessons. Various valuable resources by academic institutions on literature review writing are available online. In addition, prior to this lesson, it is important that students have read and deconstructed research articles to explore and see authentic examples of a literature review section. Moreover, an annotated bibliography as a pre-literature review assignment is effective in helping students locate, read, summarize, and evaluate articles related to their topic. The lesson in this article is focused on IEEE and APA citation styles since my students belonged to academic majors that used these citation formats. Teachers may utilize other available resources to help their students develop knowledge of the style used in their majors. Moreover, the lesson suggests that students examine and analyze literature review papers written by former students. If there are no papers available from previous sessions, teachers may find published articles to use for this purpose. For peer feedback, it is often challenging to get students to provide honest, constructive feedback to classmates

on their writing. To ensure an active and productive engagement in this activity, I highly recommend conducting guided peer reviews in which students utilize a checklist or a rubric to identify and assess particular elements and then discuss with their partner.

### **BIBLIOGRAPHY**

---

- Brown, D. (2001) *Teaching by principles: An interactive approach to language pedagogy* (2<sup>nd</sup> Ed.). New York, NY: Pearson Education.
- Fernsten, L. A., & Reda, M. (2011). Helping students meet the challenges of academic writing. *Teaching in Higher Education*, 16(2), 171-182.
- Lam, R. (2015). Understanding EFL students' development of self-regulated learning in a process-oriented writing course. *TESOL Journal*, 6(3), 528-553.
- Pautasso, M. (2013). Ten simple rules for writing a literature review. *PLoS Comput Biol*, 9(7), 1-4. Retrieved from <https://doi.org/10.1371/journal.pcbi.1003149>
- Redden, E. (2018, June 19). As pathway market expands, enrollment outcomes diverge. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2018/06/19/more-colleges-hire-corporate-partners-international-student-pathway-programs-mixed>
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, 26(2), xiii-xxiii.
- Wright, G. B. (2011). Student-centered learning in higher education. *International Journal of Teaching and Learning in Higher Education*, 23(1), 92-97.