## A Working Template for the Critique of Research Developed by Lawrence Zhang

In reading research articles or book chapters and taking notes or writing your paragraphs as part of your research, consider what is stated in the table below as guidelines. Be reminded that not all research reports include all of the following sections.

Overall Criteria	Guiding Questions	Key Features
Credibility	Is the research - Understandable? - Trustworthy? - Reliable? - Valid? - Useful? - Logical? - Practical?	All these aspects pertain to how consumers of research studies (i.e. readers) evaluate research.
Section-by- Section Criteria	Guiding Questions	Key Features
Introduction	<ul> <li>Is the research objective/purpose clearly stated?</li> <li>Is the introduction well organised?</li> <li>Is the research significant?</li> <li>What is its theoretical and/or practical contribution to knowledge in the field?</li> </ul>	This section usually serves the purpose of informing the readership of the context in which the study is conducted. Authors normally briefly make the research problem explicit in this section.
Review of the Relevant Literature	<ul> <li>Is the literature review current?</li> <li>Are the studies reviewed relevant to this study?</li> <li>Does the author rely on primary sources or does he take a short cut by resorting to secondary sources?</li> <li>Does the author simply summarise the studies or critically review them?</li> <li>Does the author make any attempt to link the previous studies reviewed to his/her current study?</li> <li>Can you see clearly that the author's review of the literature helps establish the significance of his/her research?</li> </ul>	The nature and extent of the literature review may vary from study to study, but one important thing to keep in mind is its currency and adequacy, particularly with reference to how that body of knowledge is critically assessed.  Quantitative: In quantitative studies, the literature review is usually clearly presented in a single section.  Qualitative: In qualitative studies, the review may be dispersed in all sections of the study although some authors do present the review in one section and then further elaborate on it in ensuing sections.  Mixed-methods: In mixed-methods studies the format of literature review can vary from study to study.
Research Questions	<ul> <li>Is the hypothesis/research question clear?</li> <li>Is there any consistency between the hypothesis and the reviewed literature?</li> <li>If quantitative, does the author state the variables, sampling and population clearly in relation to his/her research questions?</li> <li>If qualitative, is the initial research question well formulated?</li> </ul>	Generally speaking, most authors present their over-arching research question in the introduction section. Nonetheless, different kinds of studies tend to have different patterns of presenting the research questions.  In <i>quantitative</i> studies, some authors present their research questions by setting up a hypothesis or several hypotheses to be tested through the use of statistical analysis. In <i>qualitative</i> studies, researchers are more interested in exploring how the collected data can illustrate a particular tendency or phenomenon.

Methodology	- Does the author give complete	Participants and subjects are used
Subjects	information about the	interchangeably, but some researchers
Participants	subjects/participants?	advocate the use of participants in lieu of
<b></b>	- Does the author provide clear	subjects.
	procedures on how the sample is	
	selected from the total population?	
	- Do you see any potential thread	
	imposed on the validity of the study	
	by the author's method of selection	
	of samples?	
Methodology	- Does the study show any weakness	Key features to consider include: measures
Instruments	in the design of the study?	used by the researcher for gathering
Procedures	- Does the author present any	relevant information (e.g. students' English
	evidence about the reliability and	proficiency), validity and reliability.
	validity of the study?	
	- Is the instrument clearly described?	
	- Are the procedures for data	
	collection presented clearly?	
	<ul> <li>Does the researcher say anything</li> </ul>	
	about the interviewers/observers'	
	training?	
	<ul> <li>If two interviewers/observers are</li> </ul>	
	involved, does the author report	
	inter-rater reliability?	
	<ul> <li>Is there any likelihood that the</li> </ul>	
	research is biased?	
Results/Findings	- Does the author present the	The words <i>findings</i> and <i>results</i> are used
	findings clearly?	interchangeably by many authors.
	<ul> <li>Are the findings presented to</li> </ul>	
	address the research questions?	
	- Is the use tables, figures, charts,	
	quotes appropriate?	
	- Does the author report statistical	
	significance if quantitative?	
	- Does the author say anything about	
	the effect size when claiming	
	significance?	
Discussion and	- Does the author discuss the	Authors usually present a discussion of the
Conclusion	findings in relation to the research	meaning of their findings. The discussion
	questions and the results?	naturally serves to conclude the study.
	- Does the author present the	Often, they need to say something about the
	findings by interpreting them	generalizability, translatability and
	adequately?	comparability of their findings.
	- How does the author integrate or	
	separate the findings from his/her	
	own interpretations?	
	- Is the conclusion clearly stated?	
	- Is the statement justifiable based on	
	the results and discussion?	
	- Does the author mention any	
	factors that would affect	
	generalizability (external validity)?	