

Fall 2016 Cognition and Memory 15:295:502:01 (3 credits)

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Fax #: 732-932-6829	Prerequisites: None
Mode of Instruction: <input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Seminar <input type="checkbox"/> Hybrid <input type="checkbox"/> Online <input type="checkbox"/> Other	Permission required: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If you need a permission # for some reason, contact Dr. O'Donnell
Office Hours: by appointment	Websites: www.sakai.rutgers.edu
Class Meets in Person: GSE 347	
Required Texts: Kellogg, R. (2016). <i>Fundamentals of Cognitive psychology</i> . (3rd edition). Thousand Oaks, CA: Sage. Available from Rutgers Barnes and Noble Bookstore. Other Readings: Other course readings are listed at the end of the syllabus and are available to be downloaded from Sakai under "Resources."	

Overview

The course provides a basic introduction to cognition and memory. Cognitive psychology has evolved to become a dominant influence on a variety of other areas of psychology such as social and developmental psychology. Topics covered in this course include the basic processes of attention and perception and brain functioning, the types and structures of memory, judgment and decision making, and reasoning, among others. Applications to classroom practice are made when appropriate. I expect you to come to class having read the material and prepared to ask questions.

Goals

The learning goals for this course are shown as they align with the overall learning goals of the LCD master's degree program in the table below. In addition, the table shows how each goal will be assessed.

LCD master's program goals	Course Goals	Assessment of Course Goals
1. Attain mastery of psychological constructs and theories relevant to learning, cognition, and development.	You will be able to define basic concepts related to memory and cognition and give examples of these concepts.	In weekly comments you will be able to explain, comment and reflect critically on the readings On the midterm, you will communicate mastery of core concepts
2. Appropriately apply these psychological constructs and theories to educational setting and related applied contexts.	You will be able to recognize the operation of these constructs in practical examples drawn from real life	
3. Achieve skill in the critical evaluation of empirical evidence related to the psychology of education	You will be able to respond critically to the readings in the course or raise questions related to the readings.	In weekly comments you will be able to explain, comment and reflect critically on the readings

LCD master's program goals	Course Goals	Assessment of Course Goals
4. Attain competence in oral and written communication on topics with educational psychology.	<p>You will be able to provide a coherent presentation of selected content to their peers and be able to answer student questions about the content.</p> <p>You will develop skills of writing a literature review on a topic of interest</p>	<p>In a presentation to the class, you will provide an overview of a select area of work in cognition and memory.</p> <p>In a class paper, you will write a review of research on a topic of interest to you.</p>

How You Earn Your Grade

The evaluation of your performance in this course is based on a points system. It is possible for you to earn a total of one hundred points (100) for this course. This system allows you to monitor your progress as the semester progresses. Details of requirements are provided on succeeding pages. The following is a list of the number of points you will need in order to earn the associated grade.

<i>To Earn</i>	<i>You Need</i>	<i>To Earn</i>	<i>You Need</i>
A	90 points	C+	77 points
B+	87 points	C	70 points
B	80 points	F	less than 60 points

<i>Required Activities</i>	<i>Due Date</i>	<i>Points Available</i>
Weekly Comments	Each week	20
Midterm	November 16th	30
Presentation	as assigned	20
Paper	December 21st	30

*Schedule of Classes and Reading Assignments ***

	<i>Topic</i>	<i>Reading</i>
September		
7	Introduction/Science of Cognition/Methods of Research	Chapter 1
14	Perception	Chapter 2; Sacks (1998)
21	Attention	Chapter 3; Strayer & Drewes (2007)
28	Memory Systems	Chapters 4; Baddeley (2002)
October		
5	Memory for Events	Chapter 5
12	Memory Distortions	Chapter 6; Loftus (2010) Chapter 8 (Schwartz, 2011)
19	Memory Disorders	Schwartz Chapter 10 (2011); O'Connor & Verfaellie 2004)
26	Knowledge Representation	Chapter 7; O'Donnell et al. (2007)

November		
02	Memory Improvements	Chapter 13, 9 from Schwartz (2011)
09	Language	Chapter 8
16	Midterm	
23	Thanksgiving week	
30	Problem Solving	Chapter 9
December		
07	Expertise	Farrington-Darby & Wilson (2006) Erickson (1996) Glaser (1996)
14	Presentation	
21	Presentation	Papers due

** Additional readings to be assigned.

Policies

Academic Integrity: I expect that you will comply with standards of academic integrity (that is, you will not even think about cheating) in this course. If you need assistance in understanding an assignment or course content, please seek assistance from other appropriate resources or me. Assignments, however, should be your own work, except in cases where I have required a group product. The consequence for violating policies of academic integrity and other elements of the student code of conduct are serious and can have a tremendous negative impact on your academic progress and future career. You should not turn in the same work in two separate classes without the specific written approval of the faculty members involved. Leaving work until the last minute can increase the temptation to plagiarize work from journals or “borrow” friends’ work. You can avoid problems by getting your work done early. Exams are also your own work. The Office of Student Conduct supervises issues related to violations of academic integrity (see (<http://academicintegrity.rutgers.edu/>)). Please familiarize yourself with the university policy on academic integrity (<http://academicintegrity.rutgers.edu/integrity.shtml>). Also see the PowerPoint slides on plagiarism on the course sakai website.

COURSE REQUIREMENTS

Midterm (30%)

Purpose: There are two purposes for the midterm examination. One purpose of the midterm is to provide feedback to you about your understanding of the material up to that point in the semester. The second purpose is to provide me with information about what you are learning from the material.

Format: The examination is an in-class, closed-book exam, lasting one class period. The general format of the exam will be short answer questions including definitional questions, comparison questions, and questions about implications.

Grading: Grading will reflect the accuracy and completeness of your answers.

Presentation (20%)

As a Presenter: You will be asked to select a topic related to the course and develop a 20 minute presentation on the topic for the class. In your presentation, you should include an introduction of the topic, report its current status, and identify areas of needed research. You should be creative and interactive in your presentation. A question-and-answer session will be held after your presentation to engage students in meaningful discussions.

At least one week before your presentation, you should let me know by email what your topic will be, provide a brief description of your presentation topic, the outline of your presentation and how you are going to run your presentation. Your actual presentation will constitute 15% of the grade.

As an Audience Member I will ask you to comment on the strengths and weaknesses of each presentation. Your evaluations will constitute 5% of your grade.

Weekly Notes (20%)

You will be asked to submit notes about the readings on a weekly basis. These notes should be between 1 and 2 pages. The content can include any of the following: a) describe how the reading relates to your personal experience; b) identify difficult parts of the reading; c) raise questions about the reading.

Paper (30%)

What? This will consist of a thorough literature review on a topic chosen by you. The paper is worth 25% of your grade. The topic of your paper should be relevant to the content of the course. The paper should be written using APA style, which is the style of the American Psychological Association. If you do not already have a copy of the APA Style Manual (6th edition), you can get access to one at the reference section of the library. The final paper should be between 20 and 25 pages long, excluding references. For the purpose of the literature review, a convergence approach is probably the best approach to adopt, that is, you should start with general ideas and converge on specific issues which you feel have been ignored in the current literature, or are interesting and worth pursuing. You should provide me with a title and abstract of the paper (general idea of what you might include) of the paper on March 12th. The purpose of this is so I can help you either narrow your focus to something manageable or expand the focus. The final paper is due on April 30th. A detailed description of how to do a literature review can be found at the end of the syllabus.

When? The paper is due on December 16th, 2015.

GUIDELINES ON WRITING A LITERATURE REVIEW FOR 295:502

Some preliminary comments: You will be required to complete a literature review as part of the assignments in this class. You will be required to use APA style to write this review. Many people may not have had previous experience in writing a literature review. The information on the following pages is designed to help you understand what is being required. If the information contained in the following pages is too basic for you, please do not feel insulted. The information is intended as a guide to someone who might be nervous about what I expect and unsure of how to proceed. Hopefully, the information contained in the following pages will provide you with some idea of my expectations and some strategies for proceeding with your paper. Irrespective of the degree of expertise you already have in writing such papers, I encourage you to select a topic early and begin to do the background reading for that topic.

The following information can be found in the succeeding pages:

1. A definition of a literature review or review article
2. How do I choose a topic?
3. Selecting information for inclusion in a literature review
4. The nature of the information to be included
5. Finding the information in the library
6. Organizing a literature review
7. Concluding the literature review
8. What the reader should know by reading your review
9. A very abbreviated example of a literature review
10. A commentary on the example

Some of this information has been adapted from the *Publication Manual of the American Psychological Association*.(3rd). Its use in this context is for instructional purposes only.

Additional comments: This compilation of material will only be useful to you if you actually make the effort to benefit from it which means taking some time to read the other reviews and commentaries. I firmly believe that what you learn from doing this will benefit you in your other courses and your subsequent professional writing.

1. Definition of a Review Article or Literature Review

A tremendous amount of research is conducted on various topics and it is necessary from time to time to

review the literature critically and summarize what has been discovered up to this point in time. A literature review is very different in style from an opinion paper, a concept paper, or a reaction paper. In opinion papers, your task may be one of persuasion or simply one of denouement of one's ideas. A reaction paper requires you simply to respond to ideas that are already presented. In many forms of writing, the explicit stance of the writer is one of subjectivity. Although one can never truly rule out one's own subjectivity and its influence on the selection and favoring of certain topics and ideas over others, writing a literature review in psychology requires that you make every effort to maintain an objectivity related to the literature being reviewed. While your personal opinions inform the selection of information to include, the organization of the information in the paper, and the conclusion you draw, these opinions must be substantiated by citations of appropriate and current research. This does not mean, however, that you search the literature for information that says what you want to say, assuming that a citation provides more legitimacy than your own opinion. The literature, in this case, is not actually reviewed, it is simply used.

The approach to be taken to doing a literature review on a topic is to frame a problem, approach the literature with an open mind to discover what have people learned about this topic, what are the general themes of the work they have done, what has been neglected, and what can be concluded from the available research. The synthesis of the available evidence should be objective, unemotive, and reasoned. It isn't simply a matter of deciding that 4 studies support a particular position and 8 do not. Many of the studies may be critically flawed, their findings restricted to a very narrow range of behaviors or situations, and may only address a small fragment of a larger problem. Your task is to assemble, critique, and synthesize the work. According to APA (1994), "review articles are critical evaluations of material that has already been published. By organizing, integrating, and evaluating previously published material, the author of a review article considers the progress of current research towards clarifying a problem. In a sense, a review article is tutorial in that the author.

- ** Defines and clarifies the problem
- ** Summarizes previous investigations in order to inform the reader of the state of the current research
- ** Identifies relations, contradictions, gaps, and inconsistencies in the literature, and
- ** Suggests the next step or steps in solving the problem." (p. 5)

2. How do I Choose a Topic?

You probably already have some general topics in mind as you selected this course. Specifying a particular topic can be the hardest part of writing a literature review. An important first step is in narrowing the domain of possibilities. There are basically three approaches to homing in on a topic, a top-down approach and a bottom-up approach, and a mixed-model approach. Depending on your cognitive style (tolerance for ambiguity, lack of structure, rigidity), one or other strategy may work best for you. A top-down processing involves approaching the task by ask yourself questions about what you want to know and why. It may be possible for you to generate a tentative outline based on questions you may be able to pose about the content. This strategy would require some prior knowledge of the content. The risk involved in this strategy is that you may not be as open to seeing the breadth and scope of the actual literature because you have narrowed your options a priori. An alternative strategy is a bottom-up processing approach in which you examine what the literature includes. In pursuing this strategy, you may first conduct a computerized search of a relevant database (e.g., ERIC) and try to identify the themes in the research you located. For example, I recently conducted a literature search on the research on peer tutoring conducted since 1982. I limited my searches to ERIC and Psychological Abstracts. I retrieved over 1,000 references. The risk to this approach to identifying a topic is that you can feel easily overwhelmed and ironically, you may miss some important material because the efficacy of a computer search is highly contingent on the keywords used. The third strategy for identifying a topic is to do a little of both of the previous two strategies, come up with an initial idea, check the literature to see what has been done in this area. For example, if you were interested in writing a term paper on assessment of multi-handicapped deaf children (not a good topic for this course), you would need to check the available literature before committing too much to this topic. What you would find with this topic is that there is very little information available. A very important aspect of finding a good topic is finding one that is doable. You might call this the "Goldilocks" strategy, not too big, not too small, but something "just right."

3. Selecting Information for Inclusion in a Literature Review

The information in a literature review should be as unbiased as possible. If, for example, you are reviewing the literature on the effects of cooperative learning on high achievers, you should include information related to many aspects of the issue, not just those which you personally support. If you believed that cooperative learning was only useful for low achievers, you might be tempted to include in your review only those studies that conform to your personal beliefs. Resist such a temptation. This would be very poor practice. You need to objectively evaluate the evidence available, which means considering ideas and *research that do not necessarily conform to your* opinions or beliefs.

4. The Nature of Information to be Included

Information about a topic is gleaned from a variety of sources. Some sources are more reliable than others. Information may be gleaned from the personal opinions of others, presented in newspaper articles, a research report based on the analysis of large numbers of people, a personal narrative of an experienced event, etc. The sources differ in the degree to which we can feel confident in the results and in the degree to which we anticipate that the information can be used to analyze other behavior of a similar nature. Many good ideas begin with a personal experience or intuition. You should not ignore these and they will no doubt shape the organization of your review. For the purposes of this course, I expect you to rely on empirical research findings or reviews of such findings that can be found in the major journals of the field. Other sources will be judged to be unacceptable.

5. Finding the Information in the Library

Rutgers has one of the largest library systems in the country, despite the enduring belief that the book you want is always at another campus. If you are not already familiar with the library system, you should take the earliest available opportunity to acquaint yourself with the system.

Library Resources Available.

1. Reference librarians. They are usually located at the reference desk and provide all kinds of good information. They are generally helpful and will show you how to use the computerized data base facilities if you request help.
2. IRIS Catalogue. This catalogs books held by the library. It can be accessed from any computer on campus through www.libraries.rutgers.edu
3. Bound Journals. These contain the most up-to-date research/reports on almost any topic. Rutgers has a huge collection. A listing of all the journals help by Rutgers is available at the *reference* desks and is also available online by checking IRIS.
4. Abstracts: Abstracts of various fields of study are published separately and are especially useful in tracking down information related to specific topics. Abstracts are searched by looking for key words and finding abstracts of articles that have used these key words. For example, if you were to look in the Psychological Abstracts for articles that dealt with "ability grouping" you would look up the term and locate the abstracts. This can be quite tedious as the abstracts are published yearly. The computerized version of these abstracts has some considerable advantages because of its speed.
5. Computerized Abstracts: Abstracts are also available online or on computer disk for certain subject areas. The Psychology abstracts and ERIC (the main resource on education) are available online and can be accessed as part of the INDEXES available from the RU Library homepage. The beauty of the computerized versions of these indices is that the search process is very rapid.
6. Current Contents. One of the most useful indices available online are Current Contents of Journals. You can search these by keyword, author, subject, or journal title.
7. Intercampus Materials. If the material you are looking for is located at a different campus, you can get books or

journal articles using the copy express or book express. Information about these is available at the circulation desk.

8. Interlibrary Loan. If material that you need is not available at any of the Rutgers campuses, you can get the material through interlibrary loan.
9. Google.com/scholar. This is a useful resource for finding articles by specific researchers.

6. **Organizing a Literature Review**

In synthesizing information related to a topic, you will have to define the problem being addressed, summarize previous investigations, and identify connections, contradictions, and gaps in the literature. In order to summarize the previous investigations, you will have to decide what are the general issues addressed in the literature related to the particular topic chosen. You may want to group the literature you examine according to a set of subthemes being addressed. The organization of the subthemes should have a logical ordering.

7. **Concluding the Literature Review**

You should conclude the review by *identifying* the issues related to the chosen *topic* that *remains* unresolved or unstudied. You should point the way to those subtopics that require further study. It is not enough to conclude, "Further research is needed *in* this area." You will need to say why and in what specific area. Your conclusion is not limited to a single paragraph. You might consider checking that you have done the following:

- You have sufficiently focused the topic so that you addressed issues in some depth.
- You provided sufficient detail of reported experiments so that your reader could understand why you were providing criticism.
- You kept the audience in mind and considered what might need to be explained.
- You made your assumptions clear and made a case for them, rather than simply making assertions.
- You provided evidence that was sound.
- Your conclusions could be reasonably drawn from the work you presented.
- Your organization was clear and there were no major "cognitive leaps" needed by your reader.

8. **What the Reader Should Know by Reading Your Review.**

A reader of *your* review should have a very good idea of the current knowledge related to a particular topic based on the available research. The writer of the review will have assisted the reader by organizing the information *according* to the important themes of research on the topic. The reader should also know what are the major unresolved issues related to the topic and what are important areas of future research.

9. **A Very Abbreviated Example of a Literature Review**

The following example is included as a rough outline of what you might expect to do when writing a literature review. **NORMALLY, THE TEXT OF A PAPER IS DOUBLE-SPACED. HOWEVER, I HAVE USED SINGLE-SPACING HERE BECAUSE OF SPACE CONSTRAINTS.** This material is based on the example used in the APA manual (3rd edition) to illustrate preparation of a manuscript. I have added material to that example.

Analytical Cognitive Style as a Factor in Memory for Text

Cognitive or personality style differences have traditionally been ignored in the field of human learning and memory (Eysenck, 1977). This situation is surprising given the growing body of literature showing that individuals differ in how they encode and retrieve simple and complex verbal information (for summaries, see Eysenck, 1977, and Goodenough, 1976). The present review has two purposes: (a) to demonstrate that when the popular personality and

cognitive constructs - locus of control(Rotter, 1966) and field dependency (Witkin, Dyk, Faterson, Goodenough, & Karp, 1962) are used as factors in semantic recall studies, similar results are obtained; and (b) to suggest that this similarity occurs because both constructs overlap with the analytical/holistic cognitive style dimension.

Locus of control

Rotter (1966) suggested that people with an internal, as opposed to external, locus of control believe that events are contingent on their own actions and abilities rather than chance or other people(section continues).

Research on Learning Word Lists

A widely held belief in verbal learning is that participants use cognitive categories while learning word lists and use these categories as the basis for retrieval (Bousfield, 1977). ...(section continues).

Research on Text Recall

The argument that externals and internals use different strategies to encode and retrieve simple word lists can be made when complex material serves as the stimulus material....(section continues).

Field Dependency

A field-dependent person, in contrast to a field-independent person, cannot overcome an embedding context and cannot deal with a perceptual field analytically...(section continues).

Research on Learning Word Lists

Researchers obtain similar results to those found in the locus of control literature when they use field dependency as the individual-difference construct in studies employing simple verbal materials(section continues).

Research on Text Recall

Annis (1979) has found individual differences in field dependency and test recall that parallel those found in a study of locus of control by Wolk and DuCette (1974)...(section continues).

Relationship of Locus of Control and Field Dependency with Analytical Processing

The constructs of locus of control, field dependency, and analytical processing style are related to a certain extent because the definitions of the constructs overlap. However, the overlap in the constructs occurs because...(section continues).

Conclusions

Although the constructs of locus of control and field dependency generally measure different aspects of personality and cognitive functioning, they appear to measure the same processes in terms of text encoding. That process appears to be individual differences in analytic and holistic processing...(section continues).

10. Brief Comments on the Literature Review Above

**** Defines and clarifies the problem:** The author first notes the problem which is the fact that cognitive and personality factors have been ignored in the field of human learning, despite the fact that individuals have been shown to differ in how they encode verbal information. The purpose of the review is two-fold. First the author wishes to demonstrate that individual differences on a cognitive factor (field dependency) and a personality factor (locus of control) are recalled to text recall. Second, the author wishes to propose an explanation of why these two characteristics overlap in their relationship to text recall.

**** Summarizes previous investigations in order to inform the reader of the state of current research:** The author introduced the two important constructs he or she wishes to discuss in the opening paragraphs. The author takes each of the constructs separately, defines it, and reviews literature, which show that it relates to simple and complex verbal information processing (word lists and text recall). "Locus of control" is discussed first. The author briefly defines and then reviews the literature-relating locus of control to verbal information processing. The author follows the same procedure with the second construct (field dependency).

**** Identifies relations, contradictions, gaps, and inconsistencies in the literature:** Having addressed the same aspects of the two constructs, the author then moves on to the second purpose of the literature review which was to offer

an explanation for the overlap of the two constructs and their relationship to verbal information processing. In this part of the review, the author proposes that field dependency and locus of control both share the same component, that is, an analytical vs. holistic cognitive style dimension. In this example, there was no need to identify inconsistencies in the previous literature, as the relationship between these two constructs had not previously been addressed.

**** Suggests the next step or steps in solving the problem:**

This kind of information is usually found in the conclusion section of a review.

I suggest that you read a number of literature reviews critically in order to get a good sense of what constitutes a well written literature review.

Rubric for Grading Paper

Learning Goal	Subgoal	0	1	2	3	4
Attain mastery of psychological constructs and theories relevant to learning, cognition and development.	Inclusion of an appropriate scope of theories, principles, and concepts that are the central focus of the paper	Very few of the theories, principles, and/or concepts that are central to the topic of the paper are included.	A few of the theories, principles, and/or concepts that are central to the topic of the paper are included.	Some of the theories, principles, and/or concepts that are central to the topic of the paper are included.	Many of the theories, principles, and/or concepts that are central to the topic of the paper are included. For the most part, these are interrelated appropriately.	Most or all of the theories, principles, and/or concepts that are central to the topic of the paper are included, and they are integrated into an appropriate framework.
	Accurate use and explanation of theories, principles, and concepts	Most theories, principles, and/or concepts are inaccurately used or explained, and/or explained very briefly and inadequately.	There are a number of theories, principles, and/or concepts that are inaccurately used or explained, and/or explained very briefly and inadequately.	There is a mix of accurate and inaccurate/incomplete use and explanations of theories, principles, and/or concepts.	Most theories, principles, and/or concepts are accurately used and explained; there are a few inaccurately used or explained theories, principles, and/or concepts.	All or nearly all theories, principles, and/or concepts are accurately used and explained.
	Setting topic in broader context	There is no attempt to show the reader where the topic fits in a broader context of theory and practice.	There are limited efforts to show the reader where the topic fits in a broader context of theory and practice.	The paper shows some of the broader theoretical and practical context related to the topic.	The paper elaborates on the broader theoretical and practical contexts related to the topic.	The paper fully explains how the topic of the paper is connected to broader theoretical and practical contexts.
	Consideration of controversies	Relevant controversies are not mentioned.	Relevant controversies are mentioned but not much discussed.	Relevant controversies are discussed, but quite superficially and with little evidence.	Relevant controversies are discussed with some evidence, but not thoroughly or with some errors.	Relevant controversies are discussed appropriately and accurately with ample evidence.

Learning Goal	Subgoal	0	1	2	3	4
Use of evidence	Number of citations to evidence	No citations to evidence	Few citations to evidence.	Quite a number of citations to evidence, but some missing areas.	Many citations to evidence, but not in all critical places.	Through citing of evidence.
	Discussions of evidence	No discussions of evidence. There are either no citations, or no discussions of any studies cited.	A few slight references to evidence (the slightest details about a study—such as the population). SPECIAL CASE: Papers that are largely annotated bibliographies are also scored in this category.	Some discussions of evidence, but not in great detail.	Elaborated discussions of some key studies, but more elaboration of some more studies is still needed.	Evidence is cited throughout, with an appropriate number of studies described in elaborated detail, an appropriate number described in less detail, and an appropriate number in little or no detail (just cited).
Appropriately apply these psychological constructs and theories to educational settings and related applied contexts.	---	The student describes no applications of ideas to any practice setting.	There is some application of ideas to practice, but only a few, and/or not in ample detail.	The student applies some constructs to a practical setting in some but not ample detail.	The student applies either more than some constructs to a practical setting, or applies them in somewhat limited detail.	The student appropriately applies multiple constructs to a practical setting in enough detail to demonstrate full understanding.
Achieve skill in the critical evaluation of	Presence of critique	There is no critique of any study mentioned.	A few evaluative words (“good study,” “problematic study”) are used.	One to a few studies are critiqued very briefly.	Some studies are critiqued more extensively.	There is regular evaluative critique of studies discussed.

empirical evidence related to the psychology of education. (Include statistical issues?)	Critique quality	There is no critique of any study mentioned.	There are several inaccurate critiques and few or no accurate critiques.	Across the discussions of studies, one or two methodological features are discussed accurately (e.g., sampling, sample size, comparisons, measurement).	Across the discussions of studies, three or four methodological features are discussed accurately (e.g., sampling, sample size, comparisons, measurement).	Across the discussions of studies, five or more methodological features are discussed accurately (e.g., sampling, sample size, comparisons, measurement).
Attain competence in oral and written communication on topics within educational psychology	Clarity	Terms not defined, ideas not explained but explained only abstractly	Few core terms are defined, and few ideas are amply exemplified and explicated.	Some core terms are defined, and some ideas are amply exemplified and explicated.	Most core terms are defined, and most ideas are amply exemplified and explicated.	All core terms are defined, and ideas are amply exemplified and explicated.
	Organization	The overall organization and flow are very hard to follow.	There are a few signals to structure; parts of the structure are not coherent.	There are some signals to structure, and the structure. A few parts of the structure are not coherent.		The organization is well signaled, and the entire manuscript flows very well.
	Mechanics	Mechanical errors and hard-to-comprehend sentences are pervasive.	Many mechanical errors; many sentences hard to comprehend.	Some mechanical errors; some sentences are hard to comprehend.	Few mechanical errors; few sentences are hard to comprehend.	Very few or no mechanical errors; few sentences are hard to comprehend.