

**University of Southern California
Rossier School of Education
EDUC 715: Current Issues in Learning (3 units)
Ed.D. Program in Educational Leadership
Spring 2020**

Instructor:	Kenneth Yates, Ed.D.	Sections:	26502D
E-mail:	kennetay@usc.edu		Thursday, 4:00 – 6:40 pm
Office:	WPH 600J		WPH 207
Office Hours:	By appointment (online or in person): https://yates1.youcanbook.me		

Course Connections to the Rossier Mission

The mission of the USC Rossier School of Education is to prepare leaders to achieve educational equity through practice, research and policy. We work to improve learning opportunities and outcomes in urban settings and to address disparities that affect historically marginalized groups. We teach our students to value and respect the cultural context of the communities in which they work and to interrogate the systems of power that shape policies and practices. Through innovative thinking and research, we strive to solve the most intractable educational problems.

To further the Rossier mission, in this course you will:

- Apply evidence-based theories and principles of learning, motivation, and cultural competence to optimize equitable practice in educational settings locally, nationally, and globally.
- Demonstrate the belief that effective instruction is learner-centered, theoretically grounded, and contextually responsive to the individual differences of all learners.
- Integrate technology into a range of instructional tools to enhance learning and develop new media literacy.
- Demonstrate competency in academic writing.

Course Description

The main purpose of this course is to provide an overview of advanced topics in the area of learning. This course builds on the basic content and theories of learning (concepts, principles, processes, and procedures) introduced in the introductory learning course (EDUC 525) and knowledge of this material is assumed. This course is designed to correspond to the main goal of our Ed.D. program, which is to prepare you to become expert practitioners equipped to address a range of learning opportunities and challenges for people in urban settings. We expect you to learn to apply current research and best practices to educational initiatives and create equitable educational opportunities for individuals in urban settings.

The course will primarily focus on the following issues in learning:

1. Cognitive development and learning
2. The development of expertise, automaticity, and cognitive task analysis
3. Problem-solving and transfer
4. Domain-specific learning
5. Self-regulation and metacognition
6. Social and emotional influences on learning
7. Technology and learning
8. Language, culture, and learning
9. Neuroscientific views of learning

As an Ed.D. student concentrating in Educational Psychology, you will continue to develop your skills in the application of learning research to address practical learning and instructional goals in urban settings. This course offers strategies to enable you to systematically evaluate the selected research and to apply research findings to the types of learning issues that educational leaders face. The course assignments are designed to focus on the application of research on learning to a real-world task.

Learning Objectives

Upon completion of this course students will be able to:

1. Identify and accurately characterize major and current theoretical approaches to describe, predict, and explain human learning.
2. Analyze the central questions, controversies, and issues addressed in recent learning research.
3. Apply research on learning and instruction to relevant professional practice.
4. Identify research-based strategies to promote learning for diverse learners in a variety of contexts and settings.
5. Analyze and synthesize empirical research on learning and effectively articulate, orally and in writing, relevant information from the research and implications for practice.
6. Create or evaluate a curriculum to address a problem of practice.

Course Requirements

Students enrolled in this course are required to read *all* current assignments and complete all other exercises and projects required for each lesson *before* each class meeting where the lesson will be discussed. ***Late assignments are not accepted*** unless for serious personal emergency or illness, and ***with my prior consent***.

All absences must be due to serious illness or an extreme emergency. If you find it absolutely necessary to be absent from class because of illness or an emergency, you must send me an e-mail as soon as possible to discuss your absence and documentation that you may be required to provide. You are responsible for mastering *all* information presented during your absence. Do not ask the instructor to repeat important information—identify a classmate who will help you. If you are absent for more than 25% of the scheduled class meetings, you must repeat the entire course.

By participating in this graduate-level seminar class, you are agreeing to abide by ground rules for discussion

1. Promote an environment conducive to learning. If something did not make sense, ask about it because it is likely that others feel the same.
2. Respect differences of culture, nationality, values, opinion and style
3. Welcome disagreement and explanations because they provide opportunities to learn.
4. Seek to understand first before trying to be understood.
5. Encourage participation. Everyone has something to contribute.
6. Promote clear communication:
7. Be specific
8. Give examples
9. Ask questions
10. Speak for yourself. Let others speak for themselves.
11. Help achieve today's class goals in the time available:
12. Add to what has already been said
13. Be conscious of time and do not monopolize discussions

Assignments

(Detailed instructions for each assignment will be posted to Blackboard, Google Docs, and distributed in class)

Weekly Participation and Class Activities (20%)

There are a number of class activities that you will be asked to complete. The purpose of these activities is to help you engage in more thoughtful reflection about topics and also serve as interim tasks in the larger group project. The class activities primarily consist of synthesis paragraphs related to the readings for the week. In addition, there are interim tasks that will help ensure that your curriculum project progresses in a timely fashion.

Oral Presentation and Written Summary of an Empirical Article (Oral, 10%; Written 5%)

As part of your academic and professional development, and to develop your skills at presenting empirical research, you will provide a 5-minute oral presentation on an empirical article of your choice that does *not* appear on the syllabus. During the first week of class you will select a unit in the course for which you will find one empirical article that relates to the unit content. You will prepare a PowerPoint presentation that includes relevant information in the study. You will be limited to 5 minutes for this presentation. The presentation will be followed by a short question-and-answer session from your classmates. The sign-up sheet for this assignment will be provided during the first class. You will also summarize your empirical article as it might appear in a literature review or other section of your dissertation and submit it on BB the same day.

You are encouraged to seek out empirical articles that provide evidence on effective strategies to improve learning opportunities and outcomes in urban settings and to address disparities that affect historically marginalized groups.

Curriculum Design Project (25%)

As a summative assessment in this course you will complete a curriculum design project in which you develop a curriculum for an organization that addresses a problem of practice. You can work individually or in groups of 2 or 3 (recommended), to research, develop, and present your proposed course curriculum at the end of the semester. The

curriculum for the course will be presented in the form of a learning plan with multiple units/modules and a presentation video (see below). Enough detail needs to be provided to ensure that an instructor or facilitator would have a clear understanding of what the entire curriculum, and each unit/module is to accomplish, as well as how learning is to be evaluated.

As such, the following should be included in the curriculum design:

- A brief overview of the problem being addressed.
- A curriculum plan (template to be provided) that includes:
 - Overview and purpose of the curriculum
 - Cognitive Task Analysis (high level)
 - Learning goals
 - Unit/module descriptions and objectives, and lesson plans
 - Assessments
 - A worked example to support learning in the course
- Use of learning theories and research to explain your curricular choices.
- A video presentation of your curriculum

Curriculum Presentation (15%)

In a 5 to 10 minute recorded video presentation, you will provide an overview of your curriculum or evaluation to be viewed by the rest of the class and invited guests at the end of the semester. The presentation is meant to provide a general view of your curriculum plan and an explanation and justification of the curricular choices you made. More information will be provided during the semester.

Individual Summative Reflection and Peer Curriculum Evaluation (25%)

The purpose of this assignment is to assess your understanding of the learning issues we have discussed in class, by presenting and reflecting on your learning this semester. There are essentially three parts to this assignment: an explanation of your curricular choices, an evaluation of one other curriculum project presentations from class, and a reflection of your learning as a result of the project and course.

As part of this assignment, you will review one other curriculum presentation in class and write a brief review of the presentation and curricula. Your responses to the presentations will be evaluated on how well your feedback connects with what you have learned in the course, as well as the helpfulness of your feedback to the presenter(s). Your feedback should focus on both the content of the presentation (i.e., the curriculum content), as well as the method of presentation.

The assignment should be completed individually and should be no more than 8 pages. You should incorporate literature from the course to support your main points and show your understanding of the relationship between research and practice. Your paper should include the following:

- A brief overview of the curriculum that was developed or evaluated. (1 paragraph)
- A brief description of the theoretical framework chosen for the curriculum design and justification of why the chosen framework was appropriate for the design. (1-2 paragraphs)

- Specific examples of how your curriculum exemplifies concepts aligned with the chosen theoretical framework and relevant research. (2-3 pages)
- A reflection of your own learning process through this course and project. (1 page)
- An assessment of one curriculum presentations. (1 pages)

Class Participation and Attendance

Regular and consistent in-class participation and attendance account is required for this course. Students with serious personal emergencies or illness should contact me to make alternative accommodations to make up the class content. **Students will be required to submit a written response to the week's discussion classes, in lieu of in-class discussion. However, this written response does not earn the same credit as in class participation.**

Small group discussions will occur at every class meeting and students are expected to participate fully in them. Students are also encouraged to ask questions and actively participate in both planned and impromptu class discussions so long as the discussion forwards the purpose of the class. Effort invested during class time will reduce the effort necessary outside class.

Technology

This course makes extensive use of technology for the creation, distribution, and presentation of instructional materials and products both collaboratively and individually. As such, we will be “practicing what we preach.” Each media decision has been thought out and available for discussion, however, you will also be making appropriate media choices throughout the course.

As such, I use both Blackboard and Google Docs to distribute documents and to receive and provide feedback on your assignments. To be successful, you need to follow directions carefully. You may already be familiar with Blackboard, but not necessarily with Google Docs and folders. Now might be a good time to learn and practice the most frequently used tools, such as sending me email through File>Email collaborators or using Suggesting mode to revise your work. Both are requirements for the course. If you are not confident using these tools, then the simplest way to find out is to “Google” what you want to know.

Grading

The final course grade will be based on your cumulative scores on the following course assignments:

Weekly Activities and Participation	20%
Oral Presentation of Empirical Article	10%
Written Summary of Empirical Article	5%
Curriculum Project	25%
Curriculum Presentation	15%
Individual Summative Reflection and Peer Curriculum Evaluation	25%

Your cumulative grade will be weighted in your favor (if you are one point below a higher grade you will receive the higher grade) and figured according to this scale:

A = 95 - 100%	B- = 80 - 82%
A- = 90 - 94%	C+ = 77-79%
B+ = 87 - 89%	C = 73-76%
B = 83 - 86%	C- = 70-72%

Course Readings

The primary readings for this course will be articles that are available through Blackboard. We will also be using the following sources:

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

Anderson, L.W., & Krathwohl (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.

Mayer, R. E. (2011). *Applying the science of learning*. Pearson: Boston, MA.

Mayer, R. E., & Alexander, P. A. (2016). *Handbook of research on learning and instruction* (2nd ed.). New York: Routledge.

You may purchase the books from the USC University Bookstore or from any of the internet booksellers. The other documents used in class discussions will be provided to you in class.

Incompletes

IN – Incomplete (work not completed because of documented illness or some other emergency occurring after the twelfth week of the semester; arrangements for the IN and its removal should be initiated by the student and agreed to by the instructor prior to the final exam); IX – lapsed incomplete.

Conditions for Removing a Grade of Incomplete. If an IN is assigned as the student's grade, the instructor will fill out the Incomplete (IN) Completion form which will specify to the student and to the department the work remaining to be done, the procedures for its completion, the grade in the course to date and the weight to be assigned to the work remaining to be done when computing the final grade. A student may remove the IN by completing only the portion of required work not finished as a result of documented illness or emergency occurring after the twelfth week of the semester. Previously graded work may not be repeated for credit. It is not possible to remove an IN by re-registering for the course, even within the designated time.

Time Limit for Removal of an Incomplete. One calendar year is allowed to remove an IN. Individual academic units may have more stringent policies regarding these time limits. If the IN is not removed within the designated time, the course is considered "lapsed," the grade is changed to an "IX" and it will be calculated into the grade point average as 0 points. Courses offered on a Credit/No Credit basis or taken on a Pass/No Pass basis for which a mark of Incomplete is assigned will be lapsed with a mark of NC or NP and will not be calculated into the grade point average.

Statement for Students with Disabilities

Any candidate requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

Statement on Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All candidates are expected to understand and abide by these principles. *Scampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A:

<http://www.usc.edu/dept/publications/SCAMPUS/gov/>. Candidates will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at:

<http://www.usc.edu/student-affairs/SJACS/>

Emergency Preparedness/Course Continuity

In case of emergency, and travel to campus is difficult, USC executive leadership will announce an electronic way for instructors to teach candidates in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies. Instructors should be prepared to assign candidates a "Plan B" project that can be completed at a distance. For additional information about maintaining your classes in an emergency please access:

<http://cst.usc.edu/services/emergencyprep.html>

Please activate your course in Blackboard with access to the course syllabus. Whether or not you use Blackboard regularly these preparations will be crucial in an emergency. USC's Blackboard learning management system and support information is available at blackboard.usc.edu.

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards”

<https://policy.usc.edu/scampus-part-b/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Support Systems:

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://engemannshc.usc.edu/rsvp/>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime. Provides overall safety to USC community. <http://dps.usc.edu>

Course Calendar

Week/ Date	Topic(s)	Readings and Videos (To be completed by the date listed; read in the order listed)	Assignments Due
Unit 1 Jan 16	Course Introduction and Review of Learning Theories	<p>Alexander, P. A, Schallert, D. L., & Reynolds, R. E. (2009). What is learning anyway? A topographical perspective considered. <i>Educational Psychologist</i>, 44(3), 176-192.</p> <p>Reynolds, R. E., Sinatra, G. M., & Jetton, T. L. (1996). Views of knowledge acquisition and representation: A continuum from experience centered to mind centered. <i>Educational Psychologist</i>, 31(2), 93-104.</p> <p>Winne, P. H. & Nesbit, J. C. (2010). The psychology of academic achievement. <i>Annual Review of Psychology</i>, 61, 653-678.</p> <p>Kirschner, P. A., & van Merriënboer, J. G. (2013). Do learners really know what's best? Urban legends in education. <i>Educational Psychologist</i>, 48(3), 169-183.</p> <p>Deans for Impact (2015). <i>The Science of Learning</i>. Austin, TX: Deans for Impact.</p> <p>American Psychological Association, Coalition for Psychology in Schools and Education. (2015). <i>Top 20 principles from psychology for preK–12 teaching and learning</i>. Retrieved from http://www.apa.org/ed/schools/cpse/top-twenty-principles.pdf</p> <p>Watch: Interview with Paul Kirschner (Urban Legends) https://vimeo.com/user7858084/review/102940558/7ea37dde41</p>	<p><u>Weekly Activity</u> Online learning theories assessment due (available on BB in Assignments folder; due 24 hours before class on BB)</p>

<p>Unit 2 Jan 23</p>	<p>Approaches to Instruction</p>	<p>Mayer (2011) – Section 2 (How Instruction Works)</p> <p>Mayer and Alexander (2016) – Chapter 19</p> <p>Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based experiential and inquiry-based teaching. <i>Educational Psychologist</i>, 41(2), 75-86.</p> <p>Schmidt, H. G., Loyens, S. M., van Gog, T., Pass, F. (2007). Problem-based learning is compatible with human cognitive architecture: Commentary on Kirschner, Sweller, and Clark (2006). <i>Educational Psychologist</i>, 42(2), 91-97.</p> <p>Alferi, L., Brooks, P. J., Aldrich, N. J., & Tenenbaum, H. R. (2011). Does discovery-based instruction enhance learning? <i>Journal of Educational Psychology</i>, 103(1), 1-18.</p> <p>Vogel-Walcutt, J. J., Gebirim, J. B., Bowers, C., Carper, T. M., & Nicholson, D. (2011). Cognitive load theory vs. constructivist approaches: Which best leads to efficient, deep learning? <i>Journal of Computer Assisted Learning</i>, 27, 133-145.</p> <p>Mayer (2011) – Section 1 (How Learning Works)</p> <p>Watch: Interview with Paul Kirschner (Minimally Guided Instruction) https://vimeo.com/user7858084/review/102940559/086fe5b4ad</p> <p>For Curriculum Design Project or Curriculum Evaluation Project:</p> <ul style="list-style-type: none"> • Read program materials posted in Final Projects content folder on BB 	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p>
<p>Unit 3 Jan 30</p>	<p>Developing Expertise and Cognitive Task Analysis</p>	<p>Feldon, D. (2006). Expertise. Retrieved from http://www.education.com/reference/article/expertise/</p> <p>Schunn, C., & Nelson, M. (2006). Expert-novice studies. Retrieved from http://www.education.com/reference/article/expert-novice-studies/</p> <p>Clark, R.E., Feldon, D., Van Merriënboer, J.J.G., Yates, K., and Early, S. (2008) Cognitive task analysis. In J.M. Spector, M.D. Merrill, J.J.G. van Merriënboer, & M.P. Driscoll (Eds.). <i>Handbook of research on educational communications and technology (3rd ed.)</i>. Mahwah, NJ: Lawrence Erlbaum Associates.</p> <p>Watch: Automated Knowledge with Richard E. Clark http://youtu.be/SSK63nqEblQ</p> <p>Watch: CTA Videos with Ken Yates (See folder in Unit 3 readings)</p>	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p>

<p>Unit 4 Feb 6</p>	<p>Cognitive Load Theory</p>	<p>Kirschner, P., Kirschner, F., & Paas, F. (2006). Cognitive load theory. Retrieved from http://www.education.com/reference/article/cognitive-load-theory/</p> <p>Choi, H., van Merriënboer, J. J., & Paas, F. (2014). Effects of the physical environment on cognitive load and learning: Towards a new model of cognitive load. <i>Educational Psychology Review</i>, 26(2), 22-244.</p> <p>Martin, S. (2014). Measuring cognitive load and cognition: Metrics for technology-enhanced learning. <i>Educational Research and Evaluation</i>, 20(7-8), 592-621.</p> <p>And choose <u>one</u> from below:</p> <p>Kaminski, J. A. & Sloutsky, V. M. (2013). Extraneous perceptual information interferes with children's acquisition of mathematical knowledge. <i>Journal of Educational Psychology</i>, 105(2), 351-363.</p> <p>Park, B., Moreno, R., Seufert, T., & Brunken, R. (2011). Does cognitive load moderate the seductive details effect? A multimedia study. <i>Computers in Human Behavior</i>, 27, 5-10.</p> <p>Young, J. Q., ten Cate, O., O'Sullivan, P. S., & Irby, D. M. (2016). Unpacking the complexity of patient handoffs through the lens of cognitive load theory. <i>Teaching and Learning in Medicine</i>, 28(1), 88-96.</p>	<p><u>Weekly Activities</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p>Article for empirical article review due to BB</p>
-------------------------	------------------------------	--	---

<p>Unit 5 Feb 13</p>	<p>Learning Objectives and Assessment</p>	<p>Mayer and Alexander (2016) – Chapter 13 and 14</p> <p>Anderson and Krathwohl (2001) – Chapters 1-5</p> <p>Eberly Center – Educational Value of Course-Level Learning Objectives</p> <p>Mayer (2011) – Section 3 (How Assessment Works)</p> <p>Lipnevich, A. A., McCallen, L. N., Miles, K. P., & Smith, J. K. (2014). Mind the gap! Students' use of exemplars and detailed rubrics as formative assessment. <i>Instructional Science</i>, 42(4), 539-559.</p> <p>Carpenter, S. K. (2012). Testing enhances the transfer of learning. <i>Current Directions in Psychological Science</i>, 21(5), 279-283.</p> <p>Review: Interactive Anderson & Krathwohl Taxonomy http://www.celt.iastate.edu/teaching-resources/effective-practice/revised-blooms-taxonomy/</p>	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
--------------------------	---	--	--

<p>Unit 6</p> <p>Feb 20</p>	<p>Problem-solving and Transfer</p>	<p>Mayer and Alexander (2016) – Chapter 15 and 16</p> <p>Berg, C. A., & Strough, J. (2011). Problem solving across the life span. In K. Fingerman, C. A. Berg, T. Antonucci, & J. Smith. (Eds.), <i>Handbook of life-span development</i> (pp. 239-260). New York: Springer.</p> <p>van Merriënboer, J. J. (2013). Perspectives on problem solving and instruction. <i>Computers and Education</i>, 64, 153-160.</p> <p>Dinsmore, D. L., Baggetta, P., Doyle, S., & Loughlin, S. M. (2014). The role of initial learning, problem feature, prior knowledge, and pattern recognition on transfer success. <i>The Journal of Experimental Education</i>, 82(1), 121-141.</p> <p>And choose <i>two</i> from below:</p> <p>Abercrombie, S. (2013). Transfer effects of adding seductive details to case-based instruction. <i>Contemporary Educational Psychology</i>, 38, 149-157.</p> <p>Blayney, P., Kalyuga, S., & Sweller, J. (2015). Using cognitive load theory to tailor instruction to levels of accounting students' expertise. <i>Educational Technology and Society</i>, 18(4), 199-210.</p> <p>Culpin, V. Eichenberg, T., Hayward, I., & Abraham, P. (2014). Learning, intention to transfer and transfer in executive education. <i>International Journal of Training and Development</i>, 18(2), 132-147.</p> <p>Engle, R. A., Lam, D. P., Meyer, X. S., & Nix, S. E. (2012). How does expansive framing promote transfer? Several proposed explanations and a research agenda for investigating them. <i>Educational Psychologist</i>, 47(3), 215-231.</p> <p>Helsdingen, A., van Gog, T., & van Merriënboer, J. (2011). The effects of practice schedule and critical thinking prompts on learning and transfer of a complex judgment task. <i>Journal of Educational Psychology</i>, 103(2), 383-398.</p> <p>Homklin, T., Takahashi, Y., & Techakanont, K. (2014). The influence of social and organizational support on transfer of training: Evidence from Thailand. <i>International Journal of Training and Development</i>, 18(2), 116-131.</p> <p>(Continues on next page, 14)</p>	<p><u>Weekly Activity</u></p> <p>Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
-----------------------------	-------------------------------------	---	--

		<p>Hsu, Y., Gao., Y., Liu, T., & Sweller, J. (2015). Interactions between levels of instructional detail and expertise when learning with computer simulations. <i>Educational Technology and Society</i>, 18(4), 113-127.</p> <p>Kellogg, R. T., & Whiteford, A. P. (2009). Training advanced writing skills: The case for deliberate practice. <i>Educational Psychologist</i>, 44(4), 250-266.</p> <p>Nievelstein, F., van Gog, T., van Dijck, G., & Boshuizen, H. P. (2013). The worked example and expertise reversal effect in less structured tasks: Learning to reason about legal cases. <i>Contemporary Educational Psychology</i>, 38, 118-125</p> <p>Van Gog, T., & Rummel, N. (2010). Example-based learning: Integrating cognitive and social-cognitive research perspectives. <i>Educational Psychology Review</i>, 22, 155-174.</p>	
--	--	---	--

<p>Unit 7</p> <p>Feb 27</p>	<p>Self-Regulation and Metacognition</p>	<p>Mayer and Alexander (2016) – Chapters 9-11</p> <p>Dinsmore, D. L., Alexander, P. A., & Loughlin, S. M., (2008). Focusing the conceptual lens on metacognition, self-regulation, and self-regulated learning. <i>Educational Psychology Review</i>, 20, 391-409.</p> <p>Stankov, L., & Kleitman, S. (2014). Whither metacognition. <i>Learning and Individual Differences</i>, 29, 120-122.</p> <p>Winne, P. H. (2010). Improving measurements of self-regulated learning. <i>Educational Psychologist</i>, 45(4), 267-276.</p> <p>Mueller, P. A. & Oppenheimer, D. M., (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. <i>Psychological Science</i>, 25(6), 1159-1168.</p> <p>And choose <u>two</u> from below:</p> <p>Delen, E., Liew, J., Willson, V. (2014). Effects of interactivity and instructional scaffolding on learning: Self-regulation in online video-based environments. <i>Computers and Education</i>, 78, 312-320.</p> <p>English, M C., & Kitsantas, A. (2013). Supporting student self-regulated learning in problem- and project-based learning. <i>Interdisciplinary Journal of Problem-Based Learning</i>, 7(2), 128-150.</p> <p>Fiorella, L. & Mayer, R. E. (2012). Paper-based aids for learning with a computer-based game. <i>Journal of Educational Psychology</i>, 104(4), 1074-1082.</p> <p>Kunsting, J., Kempf, J., Wirth, J. (2013). Enhancing scientific discovery learning through metacognitive support. <i>Contemporary Educational Psychology</i>, 38, 349-360.</p> <p>Robertson, J. (2011). The educational affordance of blogs for self-directed learning. <i>Computers and Education</i> 57, 1628-1644.</p> <p>Roodenrys, K., Agostinho, S., Roodenrys, S., & Chandler, P. (2012). Managing one’s own cognitive load when evidence of split attention is present. <i>Applied Cognitive Psychology</i>, 26, 878-886.</p> <p>Veenman, M. V., Bavelaar, L., De Wolf, L., Van Haaren, M. G. (2014). The on-line assessment of metacognitive skills in a computerized learning environment. <i>Learning and Individual Differences</i>, 29, 123-130.</p> <p>White, C. B. & Fantone, J.C. (2010). Pass-fail grading: Laying the foundation for self-regulated learning. <i>Advances in Health Science Education</i>, 15, 469-477.</p>	<p><u>Weekly Activity</u></p> <p>Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
-----------------------------	--	--	--

<p>Unit 8 Mar 5</p>	<p>Media, Technology, and Learning 1</p>	<p>Mayer and Alexander (2016) – Chapters 22, 23 and 24</p> <p>Clark, R. E., Yates, K., Early, S. & Moulton, K. (2010). An analysis of the failure of electronic media and discovery-based learning: Evidence for the performance benefits of guided training methods. In K. H. Silber, & R. Foshay, (Eds.), <i>Handbook of training and improving workplace performance, Volume I: Instructional design and training delivery</i> (pp. 263-297). New York: Wiley and Sons.</p> <p>Philip, T. M. & Garcia, A. D. (2013). The importance of still teaching the igeneration: New technologies and the centrality of pedagogy. <i>Harvard Educational Review</i>, 83(2), 300-319.</p> <p>Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. Washington, D.C.: US Department of Education.</p> <p>Mares, M. & Pan, Z. (2013). Effects of Sesame Street: A meta-analysis of children’s learning in 15 countries. <i>Journal of Applied Developmental Psychology</i>, 34(3), 140-151.</p>	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
-------------------------	--	---	---

<p>Unit 9 Mar 12</p>	<p>Media, Technology, and Learning 2</p>	<p>Abdul Jabbar, A. I., & Felicia, P. (2015). Gameplay engagement and learning in game-based learning: A systematic review. <i>Review of Educational Research</i>, 85(4), 740-779,</p> <p>Hirsh-Pasek, K., Zosh, J. M., Golinkoff, R. M., Gray, J. H., Robb, M. B., & Kaufman, J. (2015). Putting education in “educational” apps: Lessons from the science of learning. <i>Psychological Science</i>, 16(1), 3-34.</p> <p>Sana, F., Weston, T., & Cepeda, N. J. (2013). Laptop multitasking hinders classroom learning for both users and nearby peers. <i>Computers and Education</i>, 62, 24-31.</p> <p>Tangen, J. M., Constable, M. D., Carrant, E. Teeter, C., Beston, B. R., & Kim, J. A. (2011). The role of interest and images in slideware presentations. <i>Computers and Education</i>, 56, 865-872.</p> <p>And choose <u>one</u> from below:</p> <p>Chariker, J. H., Naaz, F. & Pani, J. R. (2011). Computer-based learning of neuroanatomy: A longitudinal study of learning, transfer, and retention. <i>Journal of Educational Psychology</i>, 103(1), 19-31.</p> <p>Rogers, L. (2011). Developing simulations in multi-user virtual environments to enhance healthcare education. <i>British Journal of Educational Technology</i>, 42(4), 608-615.</p> <p>Rom, E. & Kalderon, Y. (2013). The predictive role of simulations in assessing military performance. <i>Military Psychology</i>, 25(4), 402-411.</p> <p>Takacs, Z. K., Swart, E. K., & Bus, A. G. (2015). Benefits and pitfall of multimedia and interactive features in technology-enhanced storybooks: A meta-analysis. <i>Review of Educational Research</i>, 85(4), 698-739.</p>	<p><u>Weekly Activities</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p>Draft of curriculum and unit outcomes due to Google Docs</p> <p><u>Individual oral presentations of empirical article in class</u></p>
<p>Mar 19</p>		<p>NO CLASS – USC Spring Recell</p>	

<p>Unit 10 Mar 26</p>	<p>Culture, Language, and Learning</p>	<p>Wiggan, G. (2007). Race, school achievement, and educational inequality: Toward a student-based inquiry perspective. <i>Review of Educational Research</i>, 77(3), 310-333.</p> <p>Bang, M. (2014). Culture, learning, and development and the natural world: The influences of situative perspectives. <i>Educational Psychologist</i>, 50(3), 220-233.</p> <p>Kim, S., & McLean, G. N. (2014). The impact of national culture on informal learning in the workplace. <i>Adult Educational Quarterly</i>, 64(1), 39-59.</p> <p>And choose <i>one</i> from below:</p> <p>Bowman, N. A. (2010). College diversity experiences and cognitive development: A meta-analysis. <i>Review of Educational Research</i>, 80(1), 4-33.</p> <p>Goldenberg, C. (2008). Teaching English language learners: What the research does-and does not-say. <i>American Educator</i>, 32(2), 8-44.</p> <p>Janzen, J. (2008). Teaching English language learners in the content areas. <i>Review of Educational Research</i>, 78(4), 1010-1038.</p> <p>Rowe, M. L., Silverman, R. D., & Mullan, B. E. (2013). The role of pictures and gestures as nonverbal aids in preschoolers' word learning in a novel language. <i>Contemporary Educational Psychology</i>, 38, 109-117.</p> <p>Optional:</p> <p>Hayes, K., Rueda, R., & Chilton, S. (2009). Scaffolding language, literacy, and academic content in English and Spanish: The linguistic highway from Mesoamerica to Southern California. <i>English Teaching: Practice and Critique</i>, 8(2), 137-166.</p>	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
---------------------------	--	---	---

<p>Unit 11 Apr 2</p>	<p>Social Influences and Learning</p>	<p>Mayer and Alexander (2016) – Chapter 17, 18, 20, and 21</p> <p>Walton, G. M. & Dweck. C. (2009). Solving social problems like a psychologist. <i>Perspectives on Psychological Science</i>, 4(10), 101-102.</p> <p>Kirschner, F., Paas, F., & Kirschner, P. A. (2009). A cognitive load approach to collaborative learning: United brains for complex tasks. <i>Educational Psychology Review</i>, 21, 31-42.</p> <p>Yeager, D. S. & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. <i>Review of Educational Research</i>, 81(2), 267-301.</p> <p>And choose <u>one</u> from below:</p> <p>Kirschner, F., Paas, F., & Kirschner, P. A., & Janssen, J. (2011). Differential effects of problem-solving demands on individual and collaborative learning outcomes. <i>Learning and Instruction</i>, 21, 587-599.</p> <p>Lee, J., & Shute, V. J. (2010). Personal and social-contextual factors in K-12 academic performance: An integrative perspective on student learning. <i>Educational Psychologist</i>, 45(3), 185-202.</p> <p>Oliveira, I., Tinoca, L., & Pereira, A. (2011). Online group work patterns: How to promote a successful collaboration. <i>Computers and Education</i>, 57, 1348-1357.</p>	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
<p>Unit 12 Apr 9</p>	<p>Domain-specific Learning</p>	<p>Mayer and Alexander (2016) – Chapters 2-8</p>	<p><u>Weekly Activities</u> Completed PPT template for Mayer chapter (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>

<p>Unit 13 Apr 16</p>	<p>Emotions and Learning</p>	<p>Linnenbrink-Garcia, L. & Pekrun, R. (2011). Students' emotions and academic engagement. <i>Contemporary Educational Psychology</i>, 36, 1-3.</p> <p>Pekrun, R. (2011). Emotions as drivers of learning and cognitive development. In R. A. Calvo & S. K. D'Mello (Eds.), <i>New perspectives on affect and learning technologies</i> (pp. 23-39). New York: Springer. doi 10.1007/978-1-4419-9625-1_3</p> <p>MacCann, C., Fogarty, G J., Zeidner, M., & Roberts, R. D. (2010). Coping mediates the relationship between emotional intelligence (EI) and academic achievement. <i>Contemporary Educational Psychology</i>, 36, 60-70.</p> <p>And choose <u>two</u> from below:</p> <p>Ahmed, W., van der Werf, G., Kuyper, H., & Minnaert, A. (2013). Emotions, self-regulated learning, and achievement in mathematics: A growth curve analysis. <i>Journal of Educational Psychology</i>, 105(1), 150-161.</p> <p>Bohn-Gettler, C. M. & Rapp, D. N. (2011). Depending on my mood: Mood-driven influences on text comprehension. <i>Journal of Educational Psychology</i>, 103(3), 562-577.</p> <p>Chung, S., Cheon, J., & Lee, K. (2015). Emotion and multimedia learning: an investigation of the effects of valence and arousal on different modalities in an instructional animation. <i>Instructional Science</i>, 43(5), 545-559.</p> <p>Linnenbrink-Garcia, L, Rogat, T. K., & Koskey, K. (2011). Affect and engagement during small group instruction. <i>Contemporary Educational Psychology</i>, 36, 13-24.</p> <p>Nett, U. E., Goetz, T., & Hall, N. C. (2011). Coping with boredom in school: An experience sampling perspective. <i>Contemporary Educational Psychology</i>, 36, 49-59.</p>	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
---------------------------	------------------------------	--	---

Unit 14 Apr 23	Neuropsychology and Learning	<p>Clark, R. E. and Clark, V. P. (2010). From Neobehaviorism to Neuroscience: Perspectives on the Origins and Future Contributions of Cognitive Load Research. In Plass, J., Moreno, R., and Brünken (Eds.) Perspectives, problems and future directions in cognitive load research. New York: Cambridge University Press. 203-228.</p> <p>Immordino-Yang. M. H. (2011). Implications of affective and social neuroscience for educational theory. <i>Educational Philosophy and Theory</i>, 43(1), 98-103.</p> <p>Chiao, J. Y, Cheon, B. K., Pornpattananangkul, N. Mrazek, A. J., Y Blizinsky, K. D. (2013). Cultural neuroscience: Progress and promise. <i>Psychological Inquiry</i>, 24, 1-19.</p> <p>Roepstorff, A. (2013). Why am I not just lovin' cultural neuroscience? Toward a slow science of cultural difference. <i>Psychological Inquiry</i>, 24, 61-63.</p> <p>Cheon, B. K., Mrazek, A. J., Pornpattananangkul, N., Blizinsky, K. D., & Chiao, J. Y. (2013). Constraints, catalysts and coevolution in cultural neuroscience: Reply to commentaries. <i>Psychological Inquiry</i>, 24, 71-79.</p> <p>Review: Neuroscience and the Classroom: Making Connections http://www.learner.org/courses/neuroscience/</p>	<p><u>Weekly Activity</u> Synthesis paragraph (due by the beginning of class to BB)</p> <p><u>Individual oral presentations of empirical article in class</u></p>
Wrap up Apr 30	Final Projects and Presentations Due	<p>Curriculum Projects due</p> <p>Recorded presentations due.</p>	Final Projects and Presentations Due by 11:59 PM class day on Google Docs.
May 1		USC Classes End	
May 7		Individual Summative Reflection and Peer Curriculum Evaluation due	Due on Blackboard by 11:59 pm
May 14		USC Grades Submission	

Article Reading List

- Abdul Jabbar, A. I., & Felicia, P. (2015). Gameplay engagement and learning in game-based learning: A systematic review. *Review of Educational Research, 85*(4), 740-779,
- Abercrombie, S. (2013). Transfer effects of adding seductive details to case-based instruction. *Contemporary Educational Psychology, 38*, 149-157.
- Ahmed, W., van der Werf, G., Kuyper, H., & Minnaert, A. (2013). Emotions, self-regulated learning, and achievement in mathematics: A growth curve analysis. *Journal of Educational Psychology, 105*(1), 150-161.
- Alexander, P. A, Schallert, D. L., & Reynolds, R. E. (2009). What is learning anyway? A topographical perspective considered. *Educational Psychologist, 44*(3), 176-192.
- Alferi, L., Brooks, P. J., Aldrich, N. J., & Tenenbaum, H. R. (2011). Does discovery-based instruction enhance learning? *Journal of Educational Psychology, 103*(1), 1-18.
- American Psychological Association, Coalition for Psychology in Schools and Education. (2015). *Top 20 principles from psychology for preK–12 teaching and learning*. Retrieved from <http://www.apa.org/ed/schools/cpse/top-twenty-principles.pdf>
- Bang, M. (2014). Culture, learning, and development and the natural world: The influences of situative perspectives. *Educational Psychologist, 50*(3), 220-233.
- Berg, C. A., & Strough, J. (2011). Problem solving across the life span. In K. Fingerman, C. A. Berg, T. Antonucci, & J. Smith. (Eds.), *Handbook of life-span development* (pp. 239-260). New York: Springer.
- Bohn-Gettler, C. M. & Rapp, D. N. (2011). Depending on my mood: Mood-driven influences on text comprehension. *Journal of Educational Psychology, 103*(3), 562-577.
- Bowman, N. A. (2010). College diversity experiences and cognitive development: A meta-analysis. *Review of Educational Research, 80*(1), 4-33.
- Carpenter, S. K. (2012). Testing enhances the transfer of learning. *Current Directions in Psychological Science, 21*(5), 279-283.
- Chariker, J. H., Naaz, F. & Pani, J. R. (2011). Computer-based learning of neuroanatomy: A longitudinal study of learning, transfer, and retention. *Journal of Educational Psychology, 103*(1), 19-31.
- Cheon, B. K., Mrazek, A. J., Pornpattananangkul, N., Blizinsky, K. D., & Chiao, J. Y. (2013). Constraints, catalysts and coevolution in cultural neuroscience: Reply to commentaries. *Psychological Inquiry, 24*, 71-79.
- Chiao, J. Y, Cheon, B. K., Pornpattananangkul, N. Mrazek, A. J., Y Blizinsky, K. D. (2013). Cultural neuroscience: Progress and promise. *Psychological Inquiry, 24*, 1-19.

- Choi, H., van Merriënboer, J. J., & Paas, F. (2014). Effects of the physical environment on cognitive load and learning: Towards a new model of cognitive load. *Educational Psychology Review*, 26(2), 22-244.
- Chung, S., Cheon, J., & Lee, K. (2015). Emotion and multimedia learning: an investigation of the effects of valence and arousal on different modalities in an instructional animation. *Instructional Science*, 43(5), 545-559.
- Clark, R. E. & Clark, V. P. (2010). From Neobehaviorism to Neuroscience: Perspectives on the Origins and Future Contributions of Cognitive Load Research. In Plass, J., Moreno, R., and Brünken (Eds.) Perspectives, problems and future directions in cognitive load research. New York: Cambridge University Press. 203-228.
- Clark, R. E., Yates, K., Early, S. & Moulton, K. (2010). An analysis of the failure of electronic media and discovery-based learning: Evidence for the performance benefits of guided training methods. In K. H. Silber, & R. Foshay, (Eds.), *Handbook of training and improving workplace performance, Volume I: Instructional design and training delivery* (pp. 263-297). New York: Wiley and Sons.
- Clark, R.E., Feldon, D., Van Merriënboer, J.J.G., Yates, K., and Early, S. (2008) Cognitive task analysis. In J.M. Spector, M.D. Merrill, J.J.G. van Merriënboer, & M.P. Driscoll (Eds.). *Handbook of research on educational communications and technology (3rd ed.)*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Culpin, V. Eichenberg, T., Hayward, I., & Abraham, P. (2014). Learning, intention to transfer and transfer in executive education. *International Journal of Training and Development*, 18(2), 132-147.
- Deans for Impact (2015). *The Science of Learning*. Austin, TX: Deans for Impact.
- Delen, E., Liew, J., Willson, V. (2014). Effects of interactivity and instructional scaffolding on learning: Self-regulation in online video-based environments. *Computers and Education*, 78, 312-320.
- Dinsmore, D. L, Alexander, P. A., & Loughlin, S. M., (2008). Focusing the conceptual lens on metacognition, self-regulation, and self-regulated learning. *Educational Psychology Review*, 20, 391-409.
- Dinsmore, D. L., Baggetta, P., Doyle, S., & Loughlin, S. M. (2014). The role of initial learning, problem feature, prior knowledge, and pattern recognition on transfer success. *The Journal of Experimental Education*, 82(1), 121-141.
- Engle, R. A., Lam, D. P., Meyer, X. S., & Nix, S. E. (2012). How does expansive framing promote transfer? Several proposed explanations and a research agenda for investigating them. *Educational Psychologist*, 47(3), 215-231.
- Feldon, D. (2006). Expertise. Retrieved from <http://www.education.com/reference/article/expertise/>

- Fiorella, L. & Mayer, R. E. (2012). Paper-based aids for learning with a computer-based game. *Journal of Educational Psychology, 104*(4), 1074-1082.
- Goldenberg, C. (2008). Teaching English language learners: What the research does-and does not-say. *American Educator, 32*(2), 8-44.
- Hayes, K., Rueda, R., & Chilton, S. (2009). Scaffolding language, literacy, and academic content in English and Spanish: The linguistic highway from Mesoamerica to Southern California. *English Teaching: Practice and Critique, 8*(2), 137-166.
- Helsdingen, A., van Gog, T., & van Merriënboer, J. (2011). The effects of practice schedule and critical thinking prompts on learning and transfer of a complex judgment task. *Journal of Educational Psychology, 103*(2), 383-398.
- Homklin, T., Takahashi, Y., & Techakanont, K. (2014). The influence of social and organizational support on transfer of training: Evidence from Thailand. *International Journal of Training and Development, 18*(2), 116-131.
- Immordino-Yang, M. H. (2011). Implications of affective and social neuroscience for educational theory. *Educational Philosophy and Theory, 43*(1), 98-103.
- Janzen, J. (2008). Teaching English language learners in the content areas. *Review of Educational Research, 78*(4), 1010-1038.
- Kaminski, J. A. & Sloutsky, V. M. (2013). Extraneous perceptual information interferes with children's acquisition of mathematical knowledge. *Journal of Educational Psychology, 105*(2), 351-363.
- Kellogg, R. T., & Whiteford, A. P. (2009). Training advanced writing skills: The case for deliberate practice. *Educational Psychologist, 44*(4), 250-266.
- Kim, S., & McLean, G. N. (2014). The impact of national culture on informal learning in the workplace. *Adult Educational Quarterly, 64*(1), 39-59.
- Kirschner, P.A., Ayres, P., & Chandler, P. (2011). Contemporary cognitive load theory research: The good, the bad, and the ugly. *Computer in Human Behavior, 27*, 99-105.
- Kirschner, P., Kirschner, F., & Paas, F. (2006). Cognitive load theory. Retrieved from <http://www.education.com/reference/article/cognitive-load-theory/>
- Kirschner, F., Paas, F., & Kirschner, P. A.,(2009). A cognitive load approach to collaborative learning: United brains for complex tasks. *Educational Psychology Review, 21*, 31-42.
- Kirschner, F., Paas, F., & Kirschner, P. A., & Janssen, J. (2011). Differential effects of problem-solving demands on individual and collaborative learning outcomes. *Learning and Instruction, 21*, 587-599.
- Kirschner, P. A., & van Merriënboer, J. G. (2013). Do learners really know what's best? Urban legends in education. *Educational Psychologist, 48*(3), 169-183.

- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based experiential and inquiry-based teaching. *Educational Psychologist, 41*(2), 75-86.
- Koh, G. C., Khoo, H. E., Wong, M. L., Koh, D. (2008). The effects of problem-based learning during medical school on physician competency: A systematic review. *Canadian Medical Association Journal, 178*(1), 34-41.
- Kunstring, J., Kempf, J., Wirth, J. (2013). Enhancing scientific discovery learning through metacognitive support. *Contemporary Educational Psychology, 38*, 349-360.
- Lee, J., & Shute, V. J. (2010). Personal and social-contextual factors in K-12 academic performance: An integrative perspective on student learning. *Educational Psychologist, 45*(3), 185-202.
- Linnenbrink-Garcia, L. & Pekrun, R. (2011). Students' emotions and academic engagement. *Contemporary Educational Psychology, 36*, 1-3.
- Linnenbrink-Garcia, L, Rogat, T. K., & Koskey, K. (2011). Affect and engagement during small group instruction. *Contemporary Educational Psychology, 36*, 13-24.
- Lipnevich, A. A., McCallen, L. N., Miles, K. P., & Smith, J. K. (2014). Mind the gap! Students' use of exemplars and detailed rubrics as formative assessment. *Instructional Science, 42*(4), 539-559.
- MacCann, C., Fogarty, G J., Zeidner, M., & Roberts, R. D. (2010). Coping mediates the relationship between emotional intelligence (EI) and academic achievement. *Contemporary Educational Psychology, 36*, 60-70.
- Mares, M. & Pan, Z. (2013). Effects of Sesame Street: A meta-analysis of children's learning in 15 countries. *Journal of Applied Developmental Psychology, 34*(3), 140-151.
- Martin, S. (2014). Measuring cognitive load and cognition: Metrics for technology-enhanced learning. *Educational Research and Evaluation, 20*(7-8), 592-621.
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. Washington, D.C.: US Department of Education.
- Mueller, P. A. & Oppenheimer, D. M., (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychological Science, 25*(6), 1159-1168.
- Nett, U. E., Goetz, T., & Hall, N. C. (2011). Coping with boredom in school: An experience sampling perspective. *Contemporary Educational Psychology, 36*, 49-59.
- Nivelstein, F., van Gog, T., van Dijck, G., & Boshuizen, H. P. (2013). The worked example and expertise reversal effect in less structured tasks: Learning to reason about legal cases. *Contemporary Educational Psychology, 38*, 118-125

- Oliveira, I., Tinoca, L., & Pereira, A. (2011). Online group work patterns: How to promote a successful collaboration. *Computers and Education*, *57*, 1348-1357.
- Owens, P. & Sweller, J. (2008). Cognitive load theory and music instruction. *Educational Psychology*, *28*(1), 29-45.
- Park, B., Moreno, R., Seufert, T., & Brunken, R. (2011). Does cognitive load moderate the seductive details effect? A multimedia study. *Computers in Human Behavior*, *27*, 5-10.
- Pekrun, R. (2011). Emotions as drivers of learning and cognitive development. In R. A. Calvo & S. K. D'Mello (Eds.), *New perspectives on affect and learning technologies* (pp. 23-39). New York: Springer. doi 10.1007/978-1-4419-9625-1_3
- Philip, T. M. & Garcia, A. D. (2013). The importance of still teaching the igeneration: New technologies and the centrality of pedagogy. *Harvard Educational Review*, *83*(2), 300-319.
- Reynolds, R. E., Sinatra, G. M., & Jetton, T. L. (1996). Views of knowledge acquisition and representation: A continuum from experience centered to mind centered. *Educational Psychologist*, *31*(2), 93-104.
- Robertson, J. (2011). The educational affordance of blogs for self-directed learning. *Computers and Education* *57*, 1628-1644.
- Roepstorff, A. (2013). Why am I not just lovin' cultural neuroscience? Toward a slow science of cultural difference. *Psychological Inquiry*, *24*, 61-63.
- Rogers, L. (2011). Developing simulations in multi-user virtual environments to enhance healthcare education. *British Journal of Educational Technology*, *42*(4), 608-615.
- Rom, E. & Kalderon, Y. (2013). The predictive role of simulations in assessing military performance. *Military Psychology*, *25*(4), 402-411.
- Roodenrys, K., Agostinho, S., Roodenrys, S., & Chandler, P. (2012). Managing one's own cognitive load when evidence of split attention is present. *Applied Cognitive Psychology*, *26*, 878-886.
- Rowe, M. L., Silverman, R. D., & Mullan, B. E. (2013). The role of pictures and gestures as nonverbal aids in preschoolers' word learning in a novel language. *Contemporary Educational Psychology*, *38*, 109-117.
- Sana, F., Weston, T., & Cepeda, N. J. (2013). Laptop multitasking hinders classroom learning for both users and nearby peers. *Computers and Education*, *62*, 24-31.
- Schmidt, H. G., Loyens, S. M., van Gog., T., Pass, F. (2007). Problem-based learning is compatible with human cognitive architecture: Commentary on Kirschner, Sweller, and Clark (2006). *Educational Psychologist*, *42*(2), 91-97.

- Schunn, C., & Nelson, M. (2006). Expert-novice studies. Retrieved from <http://www.education.com/reference/article/expert-novice-studies/>
- Stankov, L., & Kleitman, S. (2014). Whither metacognition. *Learning and Individual Differences, 29*, 120-122.
- Takacs, Z. K., Swart, E. K., & Bus, A. G. (2015). Benefits and pitfall of multimedia and interactive features in technology-enhanced storybooks: A meta-analysis. *Review of Educational Research, 85*(4), 698-739.
- Tangen, J. M., Constable, M. D., Carrant, E. Teeter, C., Beston, B. R., & Kim, J. A. (2011). The role of interest and images in slideware presentations. *Computers and Education, 56*, 865-872.
- Van Gog, T., & Rummel, N. (2010). Example-based learning: Integrating cognitive and social-cognitive research perspectives. *Educational Psychology Review, 22*, 155-174
- Van Merriënboer, J. J. (2013). Perspectives on problem solving and instruction. *Computers and Education, 64*, 153-160.
- Veenman, M. V., Bavelaar, L., De Wolf, L., Van Haaren, M. G. (2014). The on-line assessment of metacognitive skills in a computerized learning environment. *Learning and Individual Differences, 29*, 123-130.
- Vogel-Walcutt, J. J., Gebrim, J. B., Bowers, C., Carper, T. M., & Nicholson, D. (2011). Cognitive load theory vs. constructivist approaches: Which best leads to efficient, deep learning? *Journal of Computer Assisted Learning, 27*, 133-145.
- Walton, G. M. & Dweck, C. (2009). Solving social problems like a psychologist. *Perspectives on Psychological Science, 4*(10), 101-102.
- White, C. B. & Fantone, J.C. (2010). Pass-fail grading: Laying the foundation for self-regulated learning. *Advances in Health Science Education, 15*, 469-477.
- Wiggin, G. (2007). Race, school achievement, and educational inequality: Toward a student-based inquiry perspective. *Review of Educational Research, 77*(3), 310-333.
- Winne, P. H. (2010). Improving measurements of self-regulated learning. *Educational Psychologist, 45*(4), 267-276.
- Winne, P. H. & Nesbit, J. C. (2010). The psychology of academic achievement. *Annual Review of Psychology, 61*, 653-678.
- Yeager, D. S. & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research, 81*(2), 267-301.