

GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
ADVANCED STUDIES IN TEACHING AND LEARNING PROGRAM

EDUC 613.001
HOW STUDENTS LEARN
3 credits, Fall 2014 (F2F)
CRN: 73596

Meeting Days/Times
Aug. 28-Dec. 17, Thursdays 4:30-7:10 pm
Location: Thompson Hall L004

PROFESSOR

Shannon King, Ph.D., NBCT

Office Hours: By appointment; F2F or online via Skype

Office Location: N/A

Office Phone: 703-409-5522

E-mail: spascha1@gmu.edu



COURSE DESCRIPTION

Advanced course in the study of learning based on research and theory from different disciplines. Focuses on increasing students' learning through the study of different learning systems and understanding each learner in the context of the learning process itself.

Prerequisites: Admission to Graduate School and ASTL Course EDUC 612

LEARNER OUTCOMES/OBJECTIVES

As a result of EDUC 613, ASTL participants will be able to:

- A. define learning and learner-centered teaching (*ASTL Outcomes 1 & 4*) (*IB Adv Cert Domains 1.2 & 2.1*),
- B. develop the ability to link observational data of learners to individualizing learning in the classroom (*ASTL Outcome 3*) (*IB Adv Cert Domains 2.2, 2.3 & 2.4*),
- C. examine a teacher's role as a facilitator and scaffolder of learning (*ASTL Outcomes 2 & 4*) (*IB Adv Cert Domains 1.2 & 2.1*),
- D. identify and apply learning theories (*ASTL Outcomes 1 & 5*) (*IB Adv Cert Domains 3.1, 3.2, 3.3 & 3.4*),
- E. read, analyze, and reflect on course readings to examine influences on the processes of learning (*ASTL Outcomes 2, 4 & 6*) (*IB Adv Cert Domains 3.2 & 3.3*),
- F. develop an in-depth case study of one student (*ASTL Outcomes 1, 3, 4 & 7*) (*IB Adv Cert Domains 4.1, 4.2, 4.3 & 4.4*).

RELATIONSHIP TO PROGRAM GOALS & PROFESSIONAL ORGANIZATION

EDUC 613 is the second of five courses in the ASTL CORE. It is aligned with the following GSE Priorities: Diversity and Equity, Children, Families, and Communities, and High Standards and Research-Based Practices. EDUC 613 is also aligned with the National Board for Professional Teaching Standards' (NBPTS) five core propositions, which provide the guiding principles for *what teachers should know and be able to do.*

National Board for Professional Teaching Standards I – Teachers are committed to students and their learning.

National Board for Professional Teaching Standards III – Teachers are responsible for managing and monitoring student learning

National Board for Professional Teaching Standards IV – Teachers think systematically about their practice and learn from experience.

EDUC 613 is aligned with the additional three learning outcomes that guide the ASTL core:

- Teachers account for the needs of culturally, linguistically, and cognitively diverse learners
- Teachers are change agents, teacher leaders, and partners with colleagues

The content of EDUC 613 also aligns with aspects of the International Baccalaureate Certificate in Teaching and Learning Research, with a particular focus on the following Domains of Knowledge, specifically:

- Domains 2.2, 2.3 & 2.4: Research practice – Collection, analysis, interpreting and reporting of evidence, and Evaluation of research activity, and Reflection on and dissemination of findings and implications for practice
- Domains 3.2 & 3.4: Linking theory to practice in an IB context -- Critical reading and reflection and Synthesizing research and experiential evidence
- Domains 4.2, 4.3 and 4.4: Building capacity for practitioner inquiry – Modes of research and methods of data collection, and Research design, and Analysing, interpreting and reporting research findings

REQUIRED TEXT

Jensen, E. (2005). *Teaching with the brain in mind* (2nd ed.). Alexandria, VA: ASCD.

We will also use a textbook required for EDUC 612 and the Core:

Falk, B., & Blumenreich, M. (2005). *The power of questions: A guide to teacher and student research*. Portsmouth, NH: Heinemann.

Related resources

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

REFERENCES FOR ASSIGNED ARTICLES & BOOK EXCERPTS

- Bailey, D. B. Jr., (2002). Are critical periods critical for early childhood education? The role of timing in early childhood pedagogy. *Early Childhood Research Quarterly, 17*, 281-294.
- Brown, P.C., Roediger, H.L., McDaniel, M.A. (2014). *Make it stick: The science of successful learning*. Cambridge, Massachusetts: Belknap Press.
- D'Arcangelo, M. (2000). The scientist in the crib. *Educational Leadership 58*(3), 8-13.
- Diemand-Yauman, C., Oppenheimer, D.M., & Vaughan, E.B. (2011). Fortune favors the bold (and the italicized): Effects of disfluency on educational outcomes. *Cognition, 118*, 111-115.
- Dweck, C.S. (2006). *Mindset: The new psychology of success*. New York: Ballantine Books.
- Hattie, J. & Yates, G. (2014). *Visible learning and the science of how we learn*. New York: Routledge.
- Jensen, E. (2008). A fresh look at brain-based education. *Phi Delta Kappan, 89*, 408-417.
- Joseph, N. (2010). Metacognition needed: Teaching middle and high school students to develop strategic learning skills. *Preventing School Failure, 54*, 99-103.
- Pappano, L. (2013). 'Grit' and the new character education. *Harvard Education Letter, 29*, 1-3.
- Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2009). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest, 9*(3), 105-119.
- Rosiek, J. (2003). Emotional scaffolding: An exploration of the teacher knowledge at the intersection of student emotion and the subject matter. *Journal of Teacher Education, 54*, 399-412.
- Sharan, Y. (2010). Cooperative learning for academic and social gains: Valued pedagogy, problematic practice. *European Journal of Education, 45*, 300-313.
- Sternberg, R. J., Grigorenko, E. L., & Kidd, K. K. (2005). Intelligence, race, and genetics. *American Psychologist, 60*(1), 46-59.

COURSE REQUIREMENTS AND ASSIGNMENTS

Course Delivery

Course delivery will be through mini-lectures, experiential learning activities, cooperative learning groups based on learning theorists, and case study groups linking student learning to national standards and program/student outcomes. Additional learning activities include:

- *Presentations* (i.e., mini-lectures, often assisted by Power Point and other visuals);

- *Discussions* (i.e., active involvement of students in learning by asking questions that provoke critical thinking and verbal interaction);
- *Cooperative learning* (i.e., small group structure emphasizing learning from and with others);
- *Collaborative learning* (i.e., heterogeneous groups in an interdisciplinary context);
- *Student sharing and mini-presentations;*
- *Videos;*
- *Blackboard Learning System* web-based course management and portal system.

To participate fully in this course, students will need the following resources:

- Internet access (Check the list of Blackboard compatible, supported Web browsers at https://help.blackboard.com/en-us/Learn/9.1_SP_10_and_SP_11/Student/002_Browser_Support_SP_11).
 - It is highly recommended that you have access to *high speed Internet* to facilitate the downloading of necessary files and other information for the course.
- GMU email account (to be checked **daily**)
- Word processing software: MS Office 2007 or later, or OpenOffice 2007 or later
- Adobe Flash Player, available for free downloading at <http://get.adobe.com/flashplayer>

To access the course, go to the MyMason portal login page at <https://mymasonportal.gmu.edu>. Your GMU email user name is also your MyMason Portal ID and your GMU email password is also your MyMason Portal password. After logging in, click on the COURSES tab at the top of the page to see your list of courses, then select EDUC 613.

General Requirements

- A. Class attendance is both important and **required**. If, due to an emergency, you will not be in class, you must contact your instructor prior to class time. Learners with more than two absences may drop a letter grade or lose course credit.
- B. All assignments are due no later than **11:59 PM EDT** of the date indicated in each week's assignments published in the **COURSE SCHEDULE AND TOPICS** section of this Syllabus. Due dates are also posted on our Bb course site.
 - a. **Grades for assignments date-stamped in Blackboard after the due date will be reduced by 10%, unless prior approval from instructor has been granted.**
No late submissions will be accepted after the course end date.
 - b. Assignments earning less than a passing grade may be rewritten and resubmitted so that the assignment is satisfactorily completed. In fact, because learning is the goal, I may *require* you to redo an assignment that is far below expectations.
- C. Please adhere to the assignment submission instructions listed in this Syllabus. Only assignments submitted as indicated will be graded; incorrect submissions will result in a grade of zero for those assignments.
 - a. All assignments submitted should have the filename format LASTNAME-ASSIGNMENT TITLE. Please do not upload written assignments in PDF format.

Other editable formats are acceptable (i.e., .doc, .docx, .rtf, .ppt, .pptx, .xlsx, .xlxs). Supporting documents for assignments can be in PDF format.

- D. *All written work* should be carefully edited for standard grammar and punctuation, as well as clarity of thought. All submitted work should be prepared through word processing and reflect APA style (6th edition), as well as double-spaced, with 1" margins, and 12-point font (Times New Roman, Calibri, or Arial).

Assignments

	Points
Class Participation & Professionalism	30
Critical Article Review	10
Cooperative Learning Theory Group Project	15
Integrative Case Study of a Learner	40
Portfolio Reflection Point 2	5
Total Points	100

1. Class Participation and Professionalism (30%)

Class participation and professionalism include multiple aspects of engagement in our course content, including: the in-class experiences, article discussions, participation in the cooperative group project, in & out of class work to advance the developing case study, reflective journaling and peer evaluation and support in critical friends groups. In addition to being present in each class, this part of your grade also includes quality participation in class discussions and professionalism in all communication with your professor and your peers.

Course Outcomes A, C, D, E

2. Critical Article Review (10%)

Each student will prepare **one critical article review (CAR)**. Articles are available through the library website & additional guidelines will be provided with the assignment. See the appropriate section of the syllabus for additional instructions and the rubric containing criteria for evaluation.

Course Outcome E

3. Cooperative Learning Theory Group Project (15%)

Each student will be part of a cooperative learning theory group that applies a theoretical perspective to learning and discusses its implications for teaching.

Each discussant should:

- 1) **Describe & evaluate the learning theory:** address the salient principles and assumptions about learning,
- 2) **Connect the theory to relevant, current literature:** reference current articles that address learning from that theoretical perspective, and
- 3) **Connect the theory to practice:** relate that theory to the teacher's role in facilitating learning.

The discussant should provide the other class members a one-page, reflective summary of the salient ideas and make clear where he or she stands on that theory and why. Each group will prepare a digital presentation that highlights the major points and concepts of the theorist. The discussant should consider a variety of ways to share the information and salient points to class members, including technology (e.g., a narrated Prezi, Powerpoint or Google docs slide show (using a Screencast tool), a photo story, an online poster (e.g. using Glogster), Youtube video, podcast, or an interactive website).

Course Outcomes D & E

- 4. Integrative Case Study of a Learner (40%) (*Performance-Based Assessment*)**
Each student will identify one learner and follow that learner over a 6-week period. Knowing a learner deeply enables the professional educator to make appropriate instructional decisions. The purpose of this case study is to help you create a full and varied picture of an individual learner. The data you collect, including descriptive narratives, anecdotal records, artifacts, and interview results will comprise the core of your case study essay. You will then make some recommendations for working with your case study student based on insights from your work. Finally you will evaluate what you yourself have learned from following one student over time.
(*Course outcomes B, C, D, E, F*)

This performance-based assessment (PBA) MUST be uploaded and submitted to Taskstream for evaluation when the assignment is due. ONLY PBAs posted to Taskstream will be graded. This means NO final grades will be posted until all materials are on Taskstream.

- 5. Portfolio Reflection Point 2 (5%)**
As a part of the ASTL Core, participants will continue to build their Professional Portfolio and will add Reflection Point #2 (see the box below) at the conclusion of EDUC 613. For additional detailed information about this Reflection Point, as well as the remainder of the Portfolio, please refer to the Portfolio Guidelines posted in the ASTL Core Cohorts 2014-15 Organization site. You will submit Reflection Point 2 to the ASTL Core Cohorts 2014-15 Org site and also upload it to your Professional Portfolio

Prompt for Reflection Point 2: EDUC 613

In this section, you will focus on how coursework, related readings, and products in EDUC 613 have led you to think more deeply about the learning process, the factors that influence an individual's learning, and your own students. As you reflect on your own learning and your growth and change at this point in the Core, please address any of the applicable eight program learning outcomes and the ways in which the performance assessments included in this section provide evidence of your knowledge.

Suggested course products which may be provided as evidence of knowledge:

1. Case Study of a Learner (EDUC 613)
2. Learning Theory Group product (EDUC 613)
3. Other, as selected by individual (be specific)

Guidelines and Suggested Format for each of the Reflection Points

Length: Aim to limit your response to two well written pages

Focus: Each Reflection Point should include a short description, but will focus on *interpretation* and *analysis* of learning by synthesizing knowledge attained from that learning component of the Core coursework.

Format: Each reflection point *describes, interprets, and examines* why and how the course product(s) provide evidence of the ASTL principles addressed in that learning module. Here you should also discuss the impact of this course/learning module on your teaching practice and its impact on P-12 student learning.

Grading Scale:

A = 94-100

A- = 90-93

B+ = 85-89

B = 80-84

C = 70-79

F = Did not meet course requirements

TASKSTREAM REQUIREMENTS

Every student registered for EDUC 613, How Students Learn, is required to submit the following assessment, the *Integrative Case Study*, to TaskStream. Evaluation of the performance-based assessment by the course instructor will also be completed in TaskStream. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

GMU POLICIES AND RESOURCES FOR STUDENTS

- a. Students must adhere to the guidelines of the George Mason University Honor Code (See <http://oai.gmu.edu/the-mason-honor-code/>).
- b. Students must follow the university policy for Responsible Use of Computing (See <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- c. Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance (See <http://caps.gmu.edu/>).
- e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester (See <http://ods.gmu.edu/>).
- f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (See <http://writingcenter.gmu.edu/>).

PROFESSIONAL DISPOSITIONS

Students are expected to exhibit professional behaviors and dispositions at all times.

CORE VALUES COMMITMENT

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

**For additional information on the College of Education and Human Development,
Graduate School of Education, please visit our website <http://gse.gmu.edu/>.**

Projected CLASS SCHEDULE EDUC 613: Fall 2014

This schedule may be changed at the discretion of the professor
or as the needs of the students or the ASTL Program warrant.

Date	Class Topic	Readings & Assignments due for class date
Aug. 28 Week 1	<u>Introduction to EDUC 613</u> <ul style="list-style-type: none"> • What is Learning? Learning, learner-centered experiences, cycle of learning, APA Learning Factors • Discuss D'Arcangelo article • Brain-based teaching self-assessment • Teacher as researcher • Brainstorm learning theories, examine MI • Form learning theory groups 	Readings for class on 8/28 <ul style="list-style-type: none"> • D'Arcangelo, The scientist in the crib <i>After-class tasks to be completed by next F2F class period, 9/11:</i> <ul style="list-style-type: none"> • Take Syllabus Quiz • Read Case Study Example
Sep. 4 Week 2	No F2F Class	
Sep. 11 Week 3	<u>Case Study & Learning Theory Group Work</u> <ul style="list-style-type: none"> • Review APA Learner Centered Principles • Case Study Overview • Learning Styles & MI: What does the research tell us? • APA Learning Factors: connecting to theorists • Learning Theory Group Work 	Readings for class on 9/11 <ul style="list-style-type: none"> • Falk & Blumenreich (textbook): chapters 1, 2 & 3 • Pashler, McDaniel, Rohrer & Bjork: Learning styles: Concepts & evidence
Sep. 18 Week 4	<u>Research Planning & Learning Theory Group Work</u> <p>Example Model of CAR (Scientist in the Crib)</p> <ul style="list-style-type: none"> • Discuss Critical Article Review format <p>For Case Study Research:</p> <ul style="list-style-type: none"> • Selecting your student <p>Learning Theory Group Work</p>	Readings for class on 9/18 <ul style="list-style-type: none"> • Falk & Blumenreich (textbook): chapter 4 • Jensen (textbook): chapter 3 <p>Due to Blackboard by Sun 9/21, 11:59 pm</p> <p>• Selection of student for case study</p>
Sep. 25 Week 5	<u>Motivational & Affective Learning Factors & Learning Theory Group Work</u> <ul style="list-style-type: none"> • Emotions & Learning • Getting the brain's attention • Threats, stress, and learning • Motivation & Rewards • Learning climate <p>For Case Study Research:</p> <ul style="list-style-type: none"> • Planning your research <p>Learning Theory Group Work</p>	Readings <ul style="list-style-type: none"> • Falk & Blumenreich (textbook): chapter 5 • Rosiek: Emotional scaffolding

Oct. 2 Week 6	<p>Motivational & Affective Learning Factors, cont'd</p> <p>Socio-Emotional Learning Theories Group Presentation</p> <p><i>Motivational & Affective Learning Factors</i></p> <ul style="list-style-type: none"> • Motivation & Emotion • Intrinsic Motivation • Motivation & Effort • What types of data illuminate this factor? 	<p>Due in class on 10/2:</p> <p><i>Socio-Emotional Learning Theories Group Presentation</i></p> <p>Readings</p> <ul style="list-style-type: none"> • Jensen (textbook): chapters 5 & 8 • Pappano: 'Grit' and the new character education • Dweck: excerpt from <i>Mindset</i> <p>Due to Blackboard by Saturday, 10/4, 11:59 pm:</p> <ul style="list-style-type: none"> • Critical Article Review
Oct. 9 Week 7	<p>Developmental & Social Learning Factors</p> <p>Social Learning Theories Group Presentation</p> <p><i>Developmental & Social Learning Factors</i></p> <ul style="list-style-type: none"> • Social Influences on Learning <ul style="list-style-type: none"> ◦ Cooperative/Collaborative Learning • Developmental Influences on Learning <ul style="list-style-type: none"> ◦ Critical Periods of Development ◦ Movement & Learning 	<p>Due in class on 10/9:</p> <p><i>Social Learning Theories Group Presentation</i></p> <p>Readings</p> <ul style="list-style-type: none"> • Jensen (textbook): chapters 4 & 7 • Sharan: Cooperative learning for academic and social gains • Bailey: Are critical periods critical for early childhood
Oct. 16 Week 8	<p>Developmental & Social Learning Factors, cont'd</p> <p>Constructivist Learning Theories Group Presentation</p> <p><i>Developmental & Social Learning Factors, cont</i></p> <p><i>For Case Study Research:</i></p> <ul style="list-style-type: none"> • Data Collection Methods 	<p>Due in class on 10/16:</p> <p><i>Constructivist Learning Theories Group Presentation</i></p> <p>Readings</p> <ul style="list-style-type: none"> • Jensen (textbook): chapter 6 • Falk & Blumenreich (textbook): chapter 6
Oct. 23 Week 9	<p>Cognitive & Metacognitive Learning Factors</p> <p>Cognitive Learning Theories Group Presentation</p> <p><i>Cognitive & Metacognitive Learning Factors</i></p> <ul style="list-style-type: none"> • Memory & Recall • Thinking about Thinking • Context & Learning <p><i>For Case Study Research:</i></p> <ul style="list-style-type: none"> • Data Collection Methods 	<p>Due in class on 10/23:</p> <p><i>Cognitive Learning Theories Group Presentation</i></p> <p>Readings</p> <ul style="list-style-type: none"> • Jensen (textbook): chapter 9 & 10 • Joseph article: Metacognition needed

Oct. 30 Week 10	<p><u>Cognitive & Metacognitive Learning Factors, cont'd</u></p> <p>Behaviorist Learning Theories Group Presentation</p> <p><i>Cognitive & Metacognitive Learning Factors, Cont'd</i></p> <p><i>For Case Study Research:</i></p> <ul style="list-style-type: none"> • Data Analysis 	<p>Due in class on 10/30:</p> <p><u>Behaviorist Learning Theories Group Presentation</u></p> <p>Readings</p> <ul style="list-style-type: none"> • Hattie & Yates, <i>Visible learning and the science of how we learn</i>, ch. 16 • Brown, Roediger & McDaniel: excerpt from <i>Make it stick: The science of successful learning</i> • Diemand-Yauman, Oppenheimer & Vaughan: Effects of disfluency on educational outcomes
Nov. 6 Week 11	<p><u>Individual Differences Learning Factors</u></p> <p><i>Individual Learning Factors</i></p> <ul style="list-style-type: none"> • Diversity-culture, language • Differences in learning <p>Sternberg discussion</p> <p>Implications for Classroom</p> <p>Types of Data for Individual Learning Factors</p>	<p>Due to CFG this week:</p> <ul style="list-style-type: none"> • Draft of Descriptive Discussion; Learning Factors and Data Sources Due for Peer Review (CS, Part I) • Feedback to your CFG on their draft <p>Readings</p> <ul style="list-style-type: none"> • Falk & Blumenreich, (textbook): chapter 7 • Sternberg, Grigorenko & Kidd: Intelligence, race and genetics
Nov. 13 Week 12	<p><u>Individual Differences Learning Factors, cont'd</u></p> <p><i>Individual Learning Factors, Cont'd and Review of all Learning Factors and APA Learner Centered Principles</i></p> <p>Implications for Classroom – Brain Based Instruction</p> <p>Jensen Video</p> <p>In-class Work time</p>	<p>Due to CFG this week:</p> <ul style="list-style-type: none"> • Draft of Analytical Discussion for Peer Review (CS, Part II) • Feedback to your CFG on their draft <p>Readings</p> <ul style="list-style-type: none"> • Jensen (textbook): chapter 11 & 12 • Jensen, A Fresh Look at Brain-Based Education (PDK article)
Nov. 20 Week 13	<p><u>Individual Conferences</u></p> <p>No F2F Class- Individual conferences with instructor via Skype or Blackboard's Collaborate</p>	<p>Due to Instructor via Blackboard by Thursday, 11/20:</p> <ul style="list-style-type: none"> • Draft of Case Study Part I & II (Learning Factors & Data Sources and Analytical Discussion) for Instructor Review
Nov. 27 Week 14		Thanksgiving Break- No Class

Dec. 4 Week 15	<p><u>Bringing it all together: Final class meeting</u></p> <p>Debrief Case Study Process Synthesizing Class Autobiographical Discussion: How does this new information about learning apply to me in my professional role? Where do I go from here?</p>	<p>Due in class on 12/4:</p> <ul style="list-style-type: none"> • Case Study presentations <p>Due to CFG this week:</p> <ul style="list-style-type: none"> • Draft of Reflective Discussion for Peer Review (CS, Part III) • Feedback to your CFG on their draft
Dec. 11 Week 16		<p>Case Study (FINAL) due to TaskStream by 11:59pm on Thursday, 12/11</p>
Dec. 12 Week 16		<p>Portfolio Reflection Point 2</p> <p>upload to Blackboard Organization site (ASTL Core Cohorts 2013-2014 Org)</p>

EDUC 613
CRITICAL ARTICLE REVIEW (CAR)

Objective: To engage learners thoughtfully and meaningfully with current learning research and theory, and to apply their emergent analyses and reflections to classroom practices and application. The purpose of the critical article review assignment is to engage students in a thoughtful process that will help them become critical consumers of the research literature on how students learn, and will bring current course readings and additional research in the field together with classroom practice. The critical article review will require that you formulate thoughts on paper and connect those thoughts to current research.

Each student needs to write a two to three page Critical Article Review (CAR) (from the list of articles that correspond to the different learning factors). The CAR should include the following parts: description; analysis, application and interpretation; and reflection on the content and its meaning to you in your current/future professional role. Your article summary needs to include the article reference in APA style (at the beginning of the CAR). Each CAR needs to include a clear description or summary of the article content, what the reading *means to you* as an educator, *how you relate to the ideas of the author*, and how and why you *can or cannot apply* these ideas into your current or future practice.

Details to guide you in your analysis:

Article Reference: Provide an APA style reference for the article at the beginning of your CAR. You should *also* include the article in the reference page.

Description: Describes and summarizes the main points of the article. This tells briefly **what** the article is about. One to two paragraphs in length only.

Analysis, Application, and Interpretation: This section is where you, the critic/analyzer, apply your knowledge to comment on the theory(ies), core ideas, or research described and discussed in the article. This section focuses on your interpretation of the material based on related course readings. This section tells **how or why**. In this section, you need to compare and contrast the author's (or authors') points to other readings by using **at least three supporting sources from related readings**. Cite references within the text and include a references page at the end of your journal critique (*using correct APA style*). These citations may be taken from your text, other supporting articles read for class, or articles you may have read on your own.

Reflection: In this section you need to connect the article you are analyzing/critiquing to yourself and your own classroom practice. You need to address the question: What does this article mean to you? Your reflection on the reading should include a synthesis of the material personally and an evaluation of your description and analysis (which includes what this means to you as an educator). Think about what you would/might do **similarly or differently**, and **why**, to help students learn. Or, you may want to talk about what you learned through the article that will help you in the future in your particular teaching context. This section should personalize the description, analysis, and interpretation to your individual situation.