

Fall 2016
 Psychology of Learning
 15:295:580:90
 3 Credits
 Asynchronous online class

Instructor: Anna Lee, Ph.D.	Email: swanna96@rci.rutgers.edu
Phone Number: n/a	10 Seminar Pl
Virtual Office Hours: by email only	Prerequisites or other limitations: n/a
Mode of Instruction: <input type="checkbox"/> Lecture <input type="checkbox"/> Seminar <input type="checkbox"/> Hybrid <input checked="" type="checkbox"/> Online <input type="checkbox"/> Other	Permission required: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Directions about where to get permission numbers:

Learning goals: The specific objectives of this course include:

1. To develop your knowledge of teaching and learning; how humans learn, how human memory is thought to work, how motivation play a role in classrooms
2. To consider the impact of individual differences on learning

To develop skills of diagnosing learning and instructional problem, analyzing instructional situations, predicting instructional outcomes, and designing instruction based on theory and research

Course catalog description:

Introduction to psychological theories of human learning, including behavioral, social, and cognitive theories of learning. Principles of learning, mediation, and transfer as deduced from these theories. Applications to a variety of settings considered, including classrooms and information setting.

Class materials/ Textbooks:

Reading materials will be available on eCollege. (No textbook) You should read all readings before coming to class.

Week1	<p><u>Introductory activities.</u> Because you have not yet had time to complete any readings, we will spend the first week on a variety of introductory activities. Please note that discussion threads will be active this week!</p>
Week2	<p><u>Theories of Learning</u> Chinn (2011). Chapter2. Theories of Learning: Information processing theory (pages 28-53). Pool, M.M., Koolstra, C.M. & van der Voort, T. H. A. (2003). The impact of background radio and television on high school students' homework performance. Journal of Communication, 53, 74-87. Rourke, A., & Sweller, J. (2009). The worked-example effect using ill-defined problems:</p>

	<p>Learning to recognise designers' styles. <i>Learning and Instruction</i>, 19, 185-199.</p> <p>Sweller, J. & Chandler, P. (1994). Why some material is difficult to learn. <i>Cognition and Instruction</i>, 12, 185-223.</p>
Week3	<p><u>Prior Conceptions and Learning</u></p> <p>Chinn (2011). Effects of prior conceptions on learning. Prior conceptions (pp. 66-77)</p> <p>Chinn, C. A., & Samarapungavan, A. (2001). Distinguishing between understanding and belief. <i>Theory Into Practice</i>, 40, 235-241.</p> <p>Watson, B., & Konicek, R. (1990). Teaching for conceptual change: Confronting children's experience. <i>Phi Delta Kappan</i>, 71, 680-685.</p> <p>Swann Jr., W. B., Hixon, J. G., De La Ronde, C. (1992). Embracing the bitter "truth": Negative self-concepts and marital commitment. <i>Psychological Science</i>, 3(2), 118-121.</p> <p>Swann, W. B., Jr. (1997). The trouble with change: Self-verification and allegiance to the self. <i>Psychological Science</i>, 8, 177-180.</p>
Week5	<p><u>Self-regulated learning</u></p> <p>Chinn (2011). Chapter 7. Complex cognitive strategies and Self-regulated learning. Self-regulated learning (pp. 127-128, pp. 134-145)</p> <p>Zimmerman, B. J. (1998). Academic studying and the development of personal skill: A self-regulatory perspective. <i>Educational Psychologist</i>, 33, 73-86.</p> <p>Wineburg, S. (1991). Historical problem solving: A study of the cognitive processes used in the evaluation of documentary and pictorial evidence. <i>Journal of Educational Psychology</i>, 83, 73-87.</p> <p>Iiskaka, T., Volet, S., Lehtinen, E. & Vauras, M. (2015). Socially shared metacognitive regulation in asynchronous CSCL in science: functions, evolution and participation. <i>Frontline Learning Research</i>, 3(1), 77-110.</p>
Week6	<p><u>Goals and Assessment</u></p> <p>Chinn (2011). Chapter 8. Assessment: The instructional cycle (174-176).</p> <p>Wilson, M., & Sloane, K. (2000). From principles to practice: An embedded assessment system. <i>Applied Measurement in Education</i>, 13, 181-208.</p> <p>Furtak, E. M., & Ruiz-Primo, M. A. (2008). Making students' thinking explicit in writing and discussion: An analysis of formative assessment prompts. <i>Science Education</i>, 92, 799-824.</p> <p>Pellegrino, J. W. (2002). Knowing what students know. <i>Issues in Science and Technology</i>, XIX(2), 48-52</p>
Week7	<p><u>Classroom Management; Motivation</u></p> <p>Chinn (2011) Chapter 11. Creating Well-Managed Learning Environment (Garrett & Chinn, 2011), Classroom management (pp. 221-236)</p> <p>Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. <i>Journal of Personality and Social Psychology</i>, 75, 33-52.</p> <p>Yeager, D. S. & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. <i>Educational Psychologist</i>, 47(4), 302-314</p> <p>Dweck, C. S., Mangels, J. A., & Good, C. (2004). Motivational effects on attention, cognition, and performance. In D. Y. Dai, & R. J. Sternberg, <i>Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development</i> (pp. 41-55). Mahwah, NJ: Lawrence Erlbaum Associates.</p>

Week8	<p><u>Motivation II</u></p> <p>Chinn (2011). Chapter 10. Motivation (pp. 197-204).</p> <p>Blumenfeld, P. C., Kempner, T. M., & Krajcik, J. C. (2006). Motivation and cognitive engagement in learning environments. In R. K. Sawyer (Ed.), <i>The Cambridge handbook of the learning sciences</i> (pp. 475-488). Cambridge: Cambridge University Press.</p> <p>Raphael, L. M., Pressley, M., & Mohan, L. (2008). Engaging instruction in middle school classrooms: An observational study of nine teachers. <i>Elementary School Journal, 109</i>, 61-81.</p>
Week9	<p><u>Motivation III; Transfer I</u></p> <p>Patrick, H., Anderman, L. H., Ryan, A. M., Edelin, K. C., & Midgley, C. (2001). Teachers' communication of goal orientations in four fifth-grade classrooms. <i>Elementary School Journal, 102</i>(1), 35-58.</p> <p>Schunk, D. H. (1991). Self-efficacy and academic motivation. <i>Educational Psychologist, 26</i>, 207-231.</p> <p>Nokes-Malach, T. J., Meade, M. L., & Morrow, D. G. (2012). The effect of expertise on collaborative problem solving. <i>Thinking & Reasoning, 18</i>(1), 32-58.</p>
Week10	<p><u>Transfer II</u></p> <p>Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). Learning and transfer. In J.D. Bransford, A.L. Brown, R.R. Cocking (Eds.). <i>How People Learn</i> (pp.51-78). Washington, DC: National Academy Press.</p> <p>Schwartz, D. L., Chase, C. C., & Bransford, J. D. (2012). Resisting overzealous transfer: Coordinating previously successful routines with needs for new learning. <i>Educational Psychologist, 47</i>, 204-214.</p> <p>Chinn (2011). Chapter 1. Transfer (pp. 13-14). Chapter 14. (pp. 311-338).</p>
Week11	<p><u>Theories of Learning: Constructivism, Sociocultural theory</u></p> <p>Rogoff, B., Paradise, R., Arauz, R. M., Correa-Chávez, & Angelillo, C. (2003). Firsthand learning through intent participation. <i>Annual Review of Psychology, 54</i>, 175-203.</p> <p>Chinn (2011). Chapter 2. Theories of Learning: Constructivism (pp. 53-60).</p> <p>Palincsar, A. S., & Herrenkohl, L. R. (1999). Designing collaborative contexts: Lessons from three research programs. In A. M. O'Donnell & A. King (Eds.), <i>Cognitive perspectives on peer learning</i> (pp. 151-177). Mahwah, NJ: Erlbaum.</p>
Week13	<p><u>Teaching strategies</u></p> <p>Chinn (2011). Chapter 14. Learning Environments that promote self-regulated learning. Goals when promoting self-regulated learning (pp. 303-304)</p> <p>Langer, J. A. (2001). Beating the odds: Teaching middle and high school students to read and write well. <i>American Educational Research Journal, 38</i>, 837-880.</p> <p>Stahl, S. A. (1999). Different strokes for different folks? A critique of learning styles. <i>American Educator</i>23(3), 1-5.</p> <p>Feldon, D. F., Maher, M. A., Hurst, M. & Timmerman, B. (2015). Faculty mentors', graduate students', and performance-based assessments of students' research skill development. <i>American Educational Research Journal, 52</i>(2), 334-370.</p>
Week14	<p><u>Collaborative learning</u></p> <p>Chinn (2011). Chapter 15. Collaborative learning. (pp. 345-349)</p> <p>Nussbaum & Edwards (2011). Critical questions and argument stratagems: A framework for enhancing and analyzing students' reasoning practices. <i>Journal of the Learning</i></p>

	<p><i>Sciences, 20(3), 443-488</i> King, A. (2002). Structuring peer interaction to promote high-level cognitive processing. <i>Theory Into Practice, 41, 33-39.</i></p>
Week15	There are no readings in Week 15 to give you time to complete your class paper.

Important notes:

1. **Substitutions may be made for readings on this list.** If substitutions are made, they will be announced before that week’s readings begin. On the day when readings for a week begin, please double check course announcements to be sure that there have been no substitutions. Please check with me if you decide to read substantially ahead.
2. Shorter readings may be added to some weeks to address issues that arise in our discussions.
3. In some weeks, there are additional online sources posted on eCollege. Each week, be sure to check what is listed under the main activities for that week.

Other description of course purposes, context, methods, etc:

1. Features of an Online Course

An online course differs from a traditional face-to-face course in a number of ways. In particular, for this class:

- A. There is a strong emphasis on **student-driven learning**. The instructor role is of overall facilitator and coordinator.
- B. You will be able to work at your convenience. But it is important to be seriously engaged at least five days during each and every week (from May 26 to July 2). This is quite different from a traditional course, in which it is perfectly fine to prepare the day before, go to class the day of class, and then not think about the course the other five days a week. It is *especially* important during a six-week online course that you work consistently each day.
- C. We focus on asynchronous rather than synchronous activities. This course will--officially--be all asynchronous.
- D. Students do more of the integrative work than in a face-to-face class. This is likely to support long-term memory development.

2. Important Notes

1. Some requirements and procedures may be adjusted as we find out how things are working.
2. Be sure to email me or talk to me about problems.

3. Weekly Schedule

Schematically, the weekly schedule looks like this:

	Sun	M	T	W	Th	F	S
Discussions	Discussion (6 th day)	Discussion (last day)	Discussion for this week begins on Tuesday. (Sept 6)	Discussion (2 nd day)	Discussion (3 rd day)	Discussion (4 th day)	Discussion (5 th day)
Reflection Paper		Due: 8pm (Sept 12)					
Question		Due: 9pm (Sept 12)					
Reading	Next week's reading	Complete the next week's reading	Begin reading the next week's readings.	Next week's reading	Next week's reading	Next week's reading	Next week's reading

To reiterate, it is important that you get onto the discussion threads and contribute on at least 5 different days spread out throughout the weekly cycle.

Grading policy:

Grade	A	B+	B	C+	C	D	F
Points Needed	90+	87	80	77	70	60	<60

Assignments:

<i>Required Activities</i>	<i>Due Date</i>	<i>Points Available/% Grade</i>
Discussion of readings	ongoing	20%
Discussions of instructional problems	ongoing	20%
Case analysis paper	10/3	10%
Questions about articles	ongoing	10%
Reflection Paper	ongoing	20%
Final paper	10/17, 12/19	20%

Web site: eCollege

1. Discussions of Readings (20%)

Each week, you will discuss the readings within eCollege discussion threads. We will focus on:

- Clarifying understanding of the readings. For research articles, this includes the research question, what the method was, what the results were, and whether the authors' conclusions are appropriate.
- Discussing applications and implications of the ideas you have read about.

The minimum requirement for contributing to the discussion is 9 or more substantive entries (including at least 4 responses) to the discussion threads. Your contributions to the discussions plus the collaborative problems (explained below) should collectively indicate that you have read all the readings. I also expect that you will not simply stop at 9 contributions each week. I hope that your goal will be to participate in meaningful, interesting discussions.

Evaluation will be based on the number of contributions as well as the quality of your contributions.

Discussions are places to explore and entertain ideas. There should be no presumption that discussants are firmly committed to positions that they are presenting arguments for.

Discussion contributions should adhere to normal rules of English usage, etc.

2. Discussions of Instructional Problems (20%)

Each week's discussions will also include discussions focused on practical instructional problems that require application of the ideas in the readings. In the second week, you will discuss three cases and will submit the paper (see "Case Analysis Paper"). You will work on Instructional Problems within eCollege discussion threads. You should make at least 4 contributions to the discussions of instructional problems each week (some weeks will require more), and these contributions should begin right away on Monday. As with the discussions of readings, I expect that you will not just be counting contributions but rather be participating meaningfully in the discussion.

Evaluation will be based on the number of contributions as well as the quality of your contributions.

3. Case Analysis Paper (10%)

In an effort to apply the psychological concepts and principles we encounter in the readings to practical real-world situations, we will analyze 3 case studies in small groups. I will provide a framework for you to discuss the case studies in small groups and then you need to submit your conclusions to me by October 3.

Case 1: The first case will be a special need student's case to be applied a social cognitive theory.

Case 2: The second case study will be four academic strategies that your group needs to rank from the best to the worst that applies cognitive theories to learning strategies.

Case 3: The third case will be a student' artifacts to be analyzed with a social constructivist theory.

Case Analysis Paper : Your paper will include your reflection and conclusion about three cases.

Length: Your paper should be 3 single spaced/ or 6 double spaced pages.

Deadline: 9 PM on October 3 th (Tue).

Submission: You will submit your paper on a DROPBOX in eCollege.

Name the file as follows: 580_CASE_ANALYSIS_Yourlastname_Yourfirstname.

For example: 580_CASE_ANALYSIS_Anna_Lee

4. Questions about articles (Weekly, 10%)

Each week, by Monday at 9 p.m., post discussion questions about the readings. The description of activities for each week will give you more specific instructions about how many questions to write and about which readings. These should be questions raised by the readings that you would like to discuss. Submit one possible discussion question on each of the next week's readings.

5. Reflection Paper (Weekly, 20%)

Each week, you will submit a written assignment based on the week's readings. You will submit the reflection paper by Monday of each week (except for Week 1; see the calendar). Each week's assignment will be posted on **eCollege**. You will turn the assignment in on a JOURNAL in eCollege. These need not be polished in terms of refined prose, but they should show that you have reflected substantively on the readings and that you have understood them.

Length: Your reflection paper should not be longer than 2 single spaced/ or 4 double spaced pages (but they should be about that length).

Contents: Both (1) Article Critique and (2) Opinion/Reaction

(1) Article Critique: You need to choose and critique one article.

1. What kind of study is this?
 - (1) Is this an empirical article (an experimental research design? or a correlational research design?)
 - (2) Are the authors reporting new findings or describing a new event?
2. What is the research question? Is it stated clearly?
3. What constructs or variables are included in this question? What is independent variable? What is dependent variable?
4. Is there a hypothesis (or hypotheses)? What are they?
5. Comment on the appropriateness of the measures: What sort of measures were used? Do they seem adequate?
6. Comments on the statistical validity of the study: internal and external validity of the study
7. What were the authors' conclusions? Do these seem adequate? Does the discussion make sense to you? Was the original question answered? Were they hypotheses supported? Can we generalize these findings? To whom? When?

(2) Opinion/Reaction: If you try to write about everything in the readings, this will be a challenging task. It works a lot better if you select 2-3 topics that you connect with and/or you have a strong opinion or reaction to and then elaborate on your reflection on those topics. However, in addition to stating your opinion or reaction, substantiate it with examples, evidence, arguments, and or theories that lend support to your main idea. You can think deeper through an idea via these reflections. These are a useful medium to have a

one-on-one conversation with me on topics that interest, perplex, and or intrigue you. While these are not formal papers, they are also not meant to be bulleted outlines of the readings. Please do NOT summarize the book chapters or the online discussion.

Deadline: Your weekly reflection papers by 8PM Monday night before starting discussion on the next topic. Due dates are 9/26, 10/10, 10/17, 10/24, 10/31, 11/7, 11/14, 11/21, 12/5 & 12/12

For example, discussion for Topic 1: Theories of Learning I begins on 9/13 (Tue), comments must be posted by 8 PM on 9/18 (Sun), and reflection papers must be uploaded by 8 PM on 9/19 (Mon). The topic switches after 8 PM on 9/19 Monday to Topic 2. Please plan time for reading and completing reflection papers as per your work/school schedule. It is better to try and complete the reflection papers over the weekend so you're not struggling to write it last minute on Monday which might be a working day for you.

6. Final Paper (20%)

Topic Deadline: Monday, October 17. Submit a one-paragraph summary of proposal for final paper. It will include your topic and outline (e.g., table of contents)

Final Paper Deadline: Monday, December 19. Submit a final paper exceeding 12 pages (double spaced, Times New Roman 12 point font or Arial 11 point font) in length

Topic: There are a variety of formats from which to choose, so that you can find a topic that is relevant to your interests and of value to your future work. The paper will give you the opportunity to explore an aspect of the course in greater detail or extend a topic to another area. You may also pursue other areas not specifically addressed in-depth in the course (e.g. gender and ethnic differences, portfolio-based assessments, etc.).

Submission: Please send the paper to me via email attachment.

Name the file as follows: 580_FINAL_PAPER_Yourfirstname_Yourlastname.

For example: 580_FINAL_PAPER_Annan _Lee

Here are the options for your paper:

a) **Research/Theory Review Paper.** This is a paper that reviews research on a specific topic related to the course. The paper explores a particular issue in greater depth. The paper also references additional articles and resources on the topic that you have selected. The paper summarizes and introduces the concept under study, highlights the main issues in the field, presents contrasting points of view and debates in the field. In the paper's conclusion, you could apply relevant issues to a real world context, extend the topic to a new setting, or recommend future directions or avenues for research.

b) **Design of an instructional unit.** This is a paper that applies what you have learned to develop a unit plan for teaching a topic. The paper applies what you have learned to design a unit (a series of lessons) that teaches a set of topics. Part of the paper describes the lessons. You might include an example of a page of materials that you will use and that is grounded in principles of learning and teaching covered in the course. The other part of the paper describes in detail the principles of learning and instruction that have guided the development of the unit. You should explain specifically how the principles of learning and instruction apply to your particular unit. Your coverage of principles of teaching and learning should be broad ranging, describing how you have taken ideas from throughout the course to develop a unit that you believe will be effective.

Note that your unit doesn't have to be on a traditional educational topic. If you are preparing for a career in counseling, you might prepare a series of workshops on coping strategies for clients, for example. If you expect to be involved with teacher development work, you might design a series of workshops for teachers on a given topic such as effective inclusion strategies. You might develop a series of workshops to help first-year students how to be successful in the university.

c) **Design of a single lesson (or perhaps two lessons)**. This is similar to the design of a unit, except that you will focus in more detail on the design on one or two lessons (or, alternatively, a one or two hour workshop). Part of the paper describes the lesson or lesson in detail, presenting examples of handouts or any other material. The lesson should be designed so that it is based on principles of learning and instruction you have learned in the course. The other part of the paper describes in detail the principles of learning and instruction that have guided the development of the lesson or lessons. You should explain specifically how the principles of learning and instruction apply to your particular lessons. Your coverage of principles of teaching and learning should be broad-ranging, describing how you have taken ideas from throughout the course to develop lessons that you believe will be effective.

As with the design of the instructional unit, your lesson need not be on a traditional educational topic. You might design a workshop for students on how to study more effectively or how to make career decisions. Or you might design a workshop for teachers on how to teach something more effectively.

d) **Evaluation of instruction**. This is a paper that presents an analysis and/or evaluation of an existing instructional lesson, pair of lessons, unit, curriculum, software, or the like. Part of the paper describes the instruction you are evaluating. The other part presents the evaluation, with the analysis grounded in principles of learning and instruction. If problems are found, then the paper should include suggestions for improvement. The critique and recommendations for improvement should be broad ranging, taking ideas from throughout the course to formulate your evaluation.

Note: It is not acceptable to use a paper that you have used for another course. However, it is acceptable to do a paper on a similar topic (as long as you take a new perspective and the writing is all new). Please email me if you have questions about this issue.

Paper Guidelines

Here are some guidelines as you write the instructional analysis and the class paper:

- Conciseness – try to write in a simple, clear, and non-repetitive way.
- Completeness and depth - present the necessary amount of detail to support your points. Write as though your audience is not an expert on your topic and in a way that demonstrates depth of analysis of the topic. Bring in psychological evidence and justify your view using psychology, not rumors or anecdotes.
- Independent, balanced judgment – go beyond the information presented by others. Be critical, seeing both strengths and weaknesses and support opinions with your own reasons.
- Attention to professional style and ethics. Quotes must have appropriate references. When paraphrasing you still **MUST** acknowledge the original work. **Plagiarism will be addressed in accordance with the University policy.** Here's a thinking tool to help you decide whether you have quoted inappropriately. Imagine that Google had every word ever written on its servers (all published and unpublished writing, from all of history through this moment). Would a Google search on any extended phrase or clause in your document yield a hit? If so, there is likely to be a problem.

- Critical reading – are you evaluating strengths/weaknesses of the material you are reading?
Are you being objective in your discussions of the material?
- If you choose options (b) or (c), your paper should show clear evidence that you are applying ideas from throughout the course.
- On lateness – if you need an extension of time on an assignment please contact me well before the date when the assignment is due.

Academic Integrity Policy:

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 at http://academicintegrity.rutgers.edu/files/documents/AI_Policy_2013.pdf

Office of Disability Services:

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Course Schedule

Class	Topic	Readings	Discussion	Assignment
Week 1 9/6- 9/12	Online introductions Introduction to the course and syllabus			Read syllabus, Introduce yourself by 9/7
Week 2 9/13-9/19	Theories of Learning I	Chinn (2011) Pool et al. (2003) Rourke et al. (2009) Sweller & Chandler (1994)	Readings Problems	
Week 3 9/20-9/26	Prior conceptions and learning	Chinn (2011) Chinn & Samara-pungavan (2001) Watson & Konicek (1992) Swann (1992) Swann (1997)	Readings Problems	Reflection Paper 1
Week 4 9/27-10/3	Collaborative Case Analysis	Case study uploaded in Doc-Sharing	Problems	No Reflection Paper Case Analysis Paper Due: 10/3
Week 5 10/4-10/10	Self-regulated learning	Chinn (2011) Zimmerman (1998) Wineburg (1991)	Readings Problems	Reflection Paper 2
Week 6	Goals and	Chinn (2011)	Readings	Reflection Paper 3 &

10/11-10/17	assessment	Wilson & Sloane (2000) NRC (2005) Furtak & Ruiz-Primo (2008)	Problems	Proposal for final paper Due: 10/17
Week 7 10/18- 10/24	Classroom management; Motivation I	Garrett & Chinn (2011) Dweck (2010) Mueller & Dweck (1998) Yeager & Dweck (in press)	Readings Problems	Reflection Paper 4
Week 8 10/25-10/31	Motivation II	Chinn (2011) Raphael et al. (2008) Blumenfeld et al. (2006)	Readings Problems	Reflection Paper 5
Week 9 11/1-11/7	Motivation III; Transfer I	Patrick et al. (2001) Schunk (1991) Nokes-Malach (2012)	Readings Problems	Reflection Paper 6
Week 10 11/8-11/14	Transfer II	Bransford et al. (1999) Chinn on transfer Schwartz et al. (2012)	Readings Problems	Reflection Paper 7
Week 11 11/15-11/21	Constructivism	Rogoff et al. (2003) Palincsar & Herren-kohl (1999) Chinn (2011)	Readings Problems	Reflection Paper 8
Week12 11/22-11/28	Thanksgiving Recess			
Week 13 11/29-12/5	Teaching strategies	Chinn (2011) Langer (2001) Stahl (1999)	Readings Problems	Reflection Paper 9
Week 14 12/6-12/12	Collaborative learning	Chinn (2011) King (2002) Nussbaum & Edwards (2011)	Readings Problems	Reflection Paper 10
Week 15 12/13-12/19	This is a week to complete your final paper.		No readings No discussions	Final Paper Due: 12/19