CI 512: TEACHING AND LEARNING
Portland State University
Graduate School of Education- Curriculum and Instruction
CRN# 80359
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Instructor: Carolyn McCaffrey

Email: mccaffrc@pdx.edu

Office: NH 430M

Office hours: Mon 3-4, Thurs 12-1
and by appointment

Course Description

As described in the PSU Bulletin:
Principles of human learning and related practices for classroom teaching. The psychology of learning in a school setting includes both individual and group generalizations. The roles and functions of a classroom teacher as a facilitator of learning, and a decision maker concerning pupil needs and achievement.

Course Goals and Assessments

In this course you will:	TSPC Standards	INTASC Standards	GSE Conceptual Framework	Assessment
1. Establish basic critical literacy in a broad foundation of learning theories, including the work of "distant colleagues" such as B.F. Skinner, Wolfgang Köhler, Jean Piaget, John Dewey, and Lev Vygotsky, by showing how each views knowledge, the learner, the role of the teacher and school, and how each describes the learning process.	1(a), 3(d), 3(e)	2.11	2.1, 2.2	Reflection papers and reading responses
2. Begin building a foundation for reflective practice by formulating and articulating a personal learning theory informed by personal experience and reflection, the voices of our learning community, as well as "distant colleagues."	5(k)	9.11, 9.12, 9.22, 9.32	1.2, 2.1, 2.2	Synthesis Paper
3. Understand how the learning theories we hold as teachers affect both our individual classroom practice as well as the larger community and society, *empowering us to meet diverse communities' lifelong educational needs.*	5(k)	9.22, 9.24, 9.25	1.1, 1.2, 3.1, 4.1	Reflection papers, reading responses, and synthesis paper

The Graduate School of Education's Conceptual Framework
Prepare our candidates to provide leadership in:
1. ***Diversity & Inclusiveness***
   - To work in diverse settings
   - To promote inclusive and therapeutic environments
2. ***Research-Based Practices & Professional Standards***
   - To critically analyze and implement research-based practices
   - To demonstrate appropriate professional knowledge, skills, and dispositions
3. ***Impact on Learning and Development***
   - To ensure all learners and clients succeed
   - To use technology to enhance learning
   - To influence policy and provide leadership for organizations
4. ***Evidence-Informed Decision Making***
   - To use evidence to solve problems of practice and make educational and therapeutic decisions

If you require accommodations (e.g. special seating, interpreter, note-taker, etc.), please inform your instructor immediately. Students with disabilities should register with the PSU Disability Resource Center (503-725-4150; TTY or Relay 503-725-4178) to document their need for accommodations and obtain support services. I will work with you to arrange the supports you need for this class.

Course Grade

Attendance and Participation	40 points
Reading Responses	50 points
Snapshots of Learning	80 points
Collaborative Project: Teaching Application	80 points
Synthesis paper: Personal perspectives on teaching and learning	100 points

Late Work Policy
As a policy I do not accept late work. In the case of special circumstances, late work may be accepted if arrangements are made prior to the due date. Late work may not receive full credit.

Attendance and Participation
Attendance and participation are required elements of this course and are included as part of the course grade. Active participation includes coming to class on time, being prepared (assignments and readings completed), being ready to share thoughts, and willing to ask questions in whole class or in small groups. Please bring either paper or electronic copies of that day's reading to class to assist in classroom discussions. At the end of each class you will self-evaluate your level of class participation with an exit card.

If you will be absent, you must email me before class to make special arrangements. Being absent does not excuse you from turning in assignments when they are due. Daily participation points can be redeemed by arrangement through special assignment for one absence only.

Absence Make-up Assignment

Select an educational article, book, website, video or other educational resource that relates to the topics of teaching and learning. Write a reflection (no more than 750 words) that includes:

1. A copy of the resource or web address where the resource can be found
2. A description of how the resource relates to the topics in this class
3. A description of what you learned and how you will use this knowledge to improve your teaching or learning
4. A critique of at least one weakness of the resource or how it could be improved

The make-up assignment must be submitted no later than one week after your absence or August 18, whichever is sooner. (4 points)

Reading Responses

For every day of readings, each student is required to write one reading response. (There will be 2-3 readings for each reading response.) The reading response serves three primary goals: (1) to help focus the reader to read for understanding, (2) to help improve classroom discussion through preparation, and (3) to serve as a resource for the synthesis paper, future course work, and in your teaching practice. The response should be brief (no longer than 350 words), typed and double spaced. Responses should be printed and brought to class in paper form to help facilitate class discussion. Responses should include the following:

1. A bulleted list of 3 to 10 of the main points of the articles
2. How do your experiences as a teacher or learner relate to these articles **OR** how could these articles relate to your future teaching practice?
3. How do these articles relate to previous theory from this class?

You should format the response in a way that is most helpful for you, (you might choose to group based on readings or by question), but please do not exceed the 350 word limit.

Snapshots of Learning

This is an individual project applying a variety of learning theories to your personal stories (snapshots) of learning. Through class writing prompts and your own thinking about learning, you will develop three "snapshots" or concise, poignant vignettes of personally significant learning experiences. You will then apple 2-3 learning theories (or a mix of theories) to the snapshot as a lens for interpreting and making sense of the learning moment. A final "snapshot" will include a brief (not more than one well-developed paragraph), followed by equally concise thoughtful interpretations using theory as interpretive lenses. These learning experiences and your deconstruction of them through the application of theory may have an enduring influence on your image of who you want to become as a teacher.

Words are important in the development of the *Snapshots of Learning* projects. Choose them carefully and thoughtfully. It is not quantity that is important, but quality. There will be time to revise and conference with colleagues. You may find it useful to write more than three snapshots and then to "play" with the ideas of theory as a lens throughout the course. Choose the three you are most satisfied with to submit as your final project. *Snapshots* may

be submitted electronically or in paper. *Snapshot* draft 1 is due 7/26 (10 points), *Snapshot* draft 2 is due 8/2 (10 points), and the final draft is due 8/11 (60 points).

Collaborative Project: Teaching Application

This is a collaborative project applying your emerging knowledge of learning theories. Each group of 4-5 people will decide upon an appropriate secondary school math or science topic (i.e. linear functions) and design a 20-minute teaching/learning activity that engages the class in learning something "new." Feel free to draw upon pre-existing curriculum, online activities or resources (such as Illuminations at www.nctm.org). The lesson should draw upon at least two different learning theories to provide a rationale for the instructional approaches taken. Each presentation will be followed by a class discussion of the application of learning theory in the lesson. In addition to the presentation, each individual is responsible for a write-up with the following elements:

1. A description of how the lesson relates to teaching/learning theories (1-2 pages)
2. A personal reflection on what you learned and how this project will impact your future teaching (1-2 pages)
3. An evaluation of every group member (including yourself) based upon the principles of group participation created by the class community.

The individual write-up will be due the date of your presentation, either 8/16 or 8/18. (20 points for the group's presentation, 50 points for the write-up, 10 points based upon your group member's evaluations.)

Synthesis Paper: Personal Perspectives on Teaching and Learning

After completing the assigned readings and participating in this course, you will write a final paper (6-8 pages, double spaced, standard margins and font) summarizing your positions regarding teaching and learning. The paper will have three complementary sections:

1. A summary of the most relevant theories of teaching and learning, mainly from the history of 20th century U.S. educational learning theory;
2. A clear description of the theory or theories that you view as most closely aligned with your own educational philosophy; and
3. A description of how you imagine this perspective to manifest in your classroom with respect to your teaching and your students' learning.

A rough draft of the synthesis paper is due 8/9 (10 points) and the final draft is due on the last day of class, 8/18 (90 points).

Course Bibliography

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (1999). *How People Learn: Brain, Mind, Experience, and School*. Washington D.C.: National Academy Press.

*Brooks, J. & Brooks, M. (2001). *The Case for the Constructivist Classroom*. Upper Saddle River, NJ: Prentice-Hall, Inc.

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Carraher, T., Carraher, D., & Schliemann, A. (1985). Mathematics in the streets and in schools. *British Journal of Developmental Psychology*, *3*, 21-29.

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Kirschner, P., Sweller,J., & Clark, R. (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.

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*Phillips, D. C., & Soltis, J. F. (2009). *Perspectives on Learning* (5th ed.). New York: Teachers College Press.

Resnick, L., & Ford, W. (1981). The psychology of drill and practice. *The Psychology of Mathematics for Instruction* (pp. 11-37). Hillsdale, New Jersey: Lawrence Erlbaum Associates.

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Star, J. (2005). Reconceptualizing procedural knowledge. *Journal for Research in Mathematics Education*, *36*(5), 404-411.

Thompson, A. G., Philipp, R., Thompson, P. W., & Boyd, B. A. (1994). Calculational and conceptual orientations in teaching mathematics. In A. F. Coxford (Ed.), *Professional development for teachers of mathematics* (pp. 79-92). Reston, VA: National Council of Teachers of Mathematics.

* Primary Texts for the course