

EDUC 616: Foundations of Teaching and Learning  
Fall 2018  
Professor Ryan Baker

**SYLLABUS**

**Instructor Info**

Email: rybaker@upenn.edu

Office: GSE 439

Office hours: Tuesday noon-1pm, or by appointment

Course time: Tuesday, 2pm-350pm

**Required Texts**

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Dewey, J. (1938/1963). *Experience and education*. New York: Collier Books.

Other course readings will be available in Canvas.

**Course Goals**

In this class, we explore key theoretical perspectives on teaching and learning. What is knowledge and knowing? What is learning? What is teaching? What are good teaching and learning? How do contexts influence teaching, knowing, and learning?

In the course, students will learn foundational theoretical perspectives on these questions, while being encouraged to develop answers for themselves, and develop an underpinning for the work that they will carry forward in their professional careers, whether in research or in practice.

**Course Pre-requisites:** None.

**Assignments**

A theoretical paper will be due on November 30. This theoretical paper will require the student to select a contemporary problem in education or learning (big or small), and then discuss how a core thinker in Education would suggest that it be solved. Students will be required to turn in a 1-page paper prospectus for the theoretical paper on October 19, which will be graded as well. Extensions for the paper and prospectus deadlines will only be available in case of instructor error or extreme circumstances (assignments in other classes, research studies, and so on do not count as extreme circumstances; serious injury, illness, or death in the family do count as

extreme circumstances). Outside of these circumstances, late hand-ins will not be accepted (e.g. zero credit will be given).

All assignments should be sent to the instructor via email to ryanbaker.handin@gmail.com  
The assignment title and email title should be 616-YOURLASTNAME-ASSIGNMENTNAME.  
Assignments can be submitted in Microsoft Word or PDF format.

Please do not submit handins via Canvas.

Midterm and final exams will be given. Both exams are open-book; open-resource; open-web. However, collaborating on the exam with other students or anyone else at all is NOT ALLOWED. The exams will be made available on the course webpage 48 hours before the due date.

Class participation involves both attendance and active (and constructive) participation in classroom discussions. Simply attending class and sitting silently will not result in a high grade for class participation.

Reading is an essential part of this class. Each week except the first and last weeks, there will be a reading activity. You must complete the reading activity before class (or you will receive no credit for that week). You may choose between completing a factual multiple-choice reading activity, or responding to an open-ended reading prompt. Both activities will be available in the ASSISTments system; information about how to create an ASSISTments account will be made available in class. Your lowest two grades on any reading activity will be dropped from calculation.

Please note that assignment criteria and dates may be changed and/or further detailed during the term.

## **Grading**

- Theoretical Paper Prospectus 5%
- Theoretical Paper 15%
- Midterm Exam 20%
- Final Exam 20%
- Class Participation 20%
- Reading Activities 20%

## **PLAGIARISM and CHEATING**

Don't do it. If you are unsure whether an action involves plagiarism or cheating, please talk to me first.

### **Using CANVAS**

1. Go to <http://penngse.instructure.com>
2. Click on Log in and enter your PennNet ID and password.
3. Click on EDUC616-001-2017 MASTERS FNDS TCH & LRN

**Periodically, I will email the class via Canvas. To be sure that you receive these messages, please make sure that your contact information is up-to-date.**

## **COURSE SCHEDULE**

### **August 28** Introductions and Overview

Wortham, S. (2003). Learning in education. In L. Nadel (Ed.), *Encyclopedia of Cognitive Science* (pp. 1079-1082). New York: Macmillan/Nature Publishing Group.

### **September 4** Behaviorism

Skinner, B. F. (1954). The science of learning and the art of teaching. *Harvard Educational Review*, 86-97.

Goodman, J. (2013). Character Management Organizations and the Regulated Environment: Is it worth the prize? *Educational Researcher*, 42(2), 89-96.

Carr, S. (2013) *Hope Against Hope: Three Schools, One City, and the Struggle to Educate America's Children*, 92-112, 144-161.

### **September 11** Cognitive Perspective/Classic Constructivism

Siegler, R. S. (1998). *Children's thinking, Third edition* (Chapter 2). Englewood Cliffs, NJ: Prentice-Hall.

Duckworth, E. (1987). *The having of wonderful ideas and other essays on teaching and learning* (Chapter 1). New York: Teachers College Press.

### **September 18** Constructionism

Papert, S., & Harel, I. (1991). Situating constructionism. *Constructionism*, 36, 1-11.

Hay, K. E. & Barab, S. A. (2001). Constructivism in practice: A comparison and contrast of apprenticeship and constructionist learning environments. *The Journal of the Learning Sciences*, 10 (3), 281-322.

Peppler, K. A., & Kafai, Y. B. (2007). What Videogame Making Can Teach Us About Literacy and Learning: Alternative Pathways into Participatory Culture. *Proceedings of DIGRA 2017*.

### **September 25** Vygotsky

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (pp. 1-91). Cambridge, MA: Harvard University Press.

### **October 2** Dewey

Dewey, J. (1938/1963). *Experience and education*. New York: Collier Books.

### **October 9** Bloom

Bloom, B. *Taxonomy of Educational Objectives: Book 1: Cognitive Domain*. Pp. 1-24, 62-77, 89-96, 120-124, 144-148, 162-172, 185-192, 201-207. White Plains, NY: Longman.

Bloom, B.: The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher*. 13(6), 4-16 (1984)

### **October 16** Education, Social Change, and Responsiveness

Freire, P. (1973). *Education: The Practice of Freedom*. Ch.5 Education and Conscientização .

Freire, P. (1968) *Pedagogy of the Oppressed*. Ch. 2.

Freire, P. (1986). Letter to north-american teachers. *Obra de Paulo Freire; Série Manuscritos*.

## **October 19 Theoretical Paper Prospectus Due noon**

### **October 23 Community of Learners and Practice**

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.

Ching, C. C. & Kafai, Y. B. (2008). Peer Pedagogy: Student collaboration and reflection in learning through design. *Teachers College Record*, 110(12), 2601-2632.

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation* (Chapters 1 and 2). Cambridge: Cambridge University Press.

### **Midterm handed out in class**

## **October 26 Midterm due 1159pm**

### **October 30 Robust Learning and Engagement**

D'Mello, S., & Graesser, A. (2012). Dynamics of affective states during complex learning. *Learning and Instruction*, 22(2), 145-157

San Pedro, M.O.Z., Baker, R.S.J.d., Bowers, A.J., Heffernan, N.T. (2013) Predicting College Enrollment from Student Interaction with an Intelligent Tutoring System in Middle School. *Proceedings of the 6th International Conference on Educational Data Mining*, 177-184.

Bransford, J. D., & Schwartz, D. L. (1999). Rethinking transfer: A simple proposal with multiple implications. *Review of research in education*, 24, 61-100.

Rohrer, D., & Pashler, H. (2010). Recent research on human learning challenges conventional instructional strategies. *Educational Researcher*, 39(5), 406-412.

### **November 6 Motivation**

Yeager, D. S., Walton, G. M., Brady, S. T., Akcinar, E. N., Paunesku, D., Keane, L., ... & Gomez, E. M. (2016). Teaching a lay theory before college narrows achievement gaps at scale. *Proceedings of the National Academy of Sciences*, 201524360

Elliot, A. J. (2005). A conceptual history of the achievement goal construct. *Handbook of competence and motivation*, 16(2005), 52-72.

Wigfield, A., Tonks, S., & Klauda, S. L. (2009). Expectancy-value theory. *Handbook of motivation at school*, 55-75.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and passion for long-term goals. *Journal of personality and social psychology*, 92(6), 1087.

### **November 13 Identity and Diversity**

Gee, J. P. (2001). Identity as an analytic lens for research in education. In W. G. Secada (Ed.), *Review of research in education* (pp. 99-126). Washington, DC: AERA.

Zhang, J. (2013). Collaboration, technology, and culture. In Cindy Hmelo-Silver, Angela O'Donnell, Carol Chan, & Clark Chinn (Eds.), *International Handbook of Collaborative Learning* (pp.495-508). Philadelphia, PA: Taylor & Francis.

Gutierrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, 32(5), 19-25.

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R., (2009). Learning Styles: Concepts and Evidence. *Psychological Science in the Public Interest*, 9(3), 105-119.

### **November 20 – No class – University Holiday**

### **November 27 Architectures and Frameworks**

Koedinger, K. R., Corbett, A. T., & Perfetti, C. (2012). The Knowledge-Learning-Instruction framework: Bridging the science-practice chasm to enhance robust student learning. *Cognitive science*, 36(5), 757-798.

Bloom, B.S. (1978) *Human Characteristics and School Learning*. Ch.1: Individual Differences in Learners and Learning

Ritter, S., Anderson, J. R., Koedinger, K. R., & Corbett, A. (2007). Cognitive Tutor: Applied research in mathematics education. *Psychonomic bulletin & review*, 14(2), 249-255.

### **November 30 Theoretical paper due 1159pm**

**December 4** Committee of N

No readings

**December 7 1159pm Final Exam due**

**Final Exam handed out in class**