Institute of Business Administration Karachi

Leadership and Ideas for Tomorrow

Course Outline

EDUCATIONAL PSYCHOLOGY

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Semester: Fall 2025

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Course Description

This course is an introduction to theories, data, and methods that compose Educational Psychology. It explores the cognitive and social mechanisms that shape how students learn, applying psychological theory to real-world classroom contexts. Framed around the psychology of learning, the course introduces students to foundational topics such as cognitive development, active learning, problem solving, and expertise, while integrating research on mindset, stereotype threat, and individual differences. Readings from leading scholars like Berliner, Bransford, Dweck, and Steele are paired with experimental studies and conceptual frameworks to examine how learning can be enhanced through strategies like spacing, testing, concreteness fading, and teaching others.

Knowledge is gained not just by reading and listening, but also by doing. With this in mind, students will construct much of the knowledge they take away from this course. Students will critically engage with evidence-based instructional practices, design mini-experiments, and explore how factors like identity and instructional design influence educational outcomes. Emphasis is placed on “learning how to learn” i.e. understanding the conditions that support deep, transferable learning. Assignments combine conceptual analysis with practical application, encouraging students to reflect on their own learning processes and evaluate pedagogical interventions. Through lectures, readings, and projects, students will gain tools to analyze, support, and improve learning in diverse educational settings.

Course Objectives

This course has four main goals. First, it introduces students to key theories and research in educational psychology, with a focus on how people learn. Second, it helps students connect psychological concepts to real classroom practices. Third, the course explores how learning is shaped by individual differences and social factors, such as mindset and stereotype threat. Finally, through hands-on projects, students will learn to critically evaluate educational strategies and apply research-based insights to real-world learning situations. Students will communicate their findings through short but substantive research papers, gaining experience in scientific writing and evidence-based reasoning.

Learning Outcomes

By the end of this course, students will be able to:

- Explain foundational theories and research in educational psychology, demonstrating an understanding of how people learn through assigned readings, written assignments, and class discussions.
- Apply psychological concepts to real-world educational settings, using course principles to design teaching presentations and critically evaluate instructional design and educational materials, including curriculum documents.
- Analyse how individual differences (e.g., mindset, identity, prior knowledge) and social factors (e.g., stereotype threat) shape learning, through class discussions and written assignments.
- Design and conduct mini-experiments that test or illustrate key principles of educational psychology, and clearly communicate their findings in a structured, evidence-based written format.

Class Expectations

- All students are required to read the assigned chapters/articles before class.
- Students should be prepared for in-class discussions.
- Cell phones must be silenced and not used during class to maintain focus.
- Students should come to class on time.
- Cheating, plagiarism, scholastic dishonesty or other ethical violations will be dealt with according to IBA policies.

Required Textbook

There is one textbook for this course.

Schwartz, D. L., Tsang, J. M., & Blair, K. P. (2016). The ABCs of how we learn: 26 scientifically proven approaches, how they work, and when to use them. New York: W. H. Norton & Co.

Please download using this link.

Evaluation of Student Performance

Class Participation (10%)
Regular attendance is essential. Each week, we will engage with key readings through in-depth discussions and hands-on activities. Being physically present, mentally engaged, and prepared is necessary for meaningful participation and learning.

Participation involves more than just speaking up. It includes active listening, contributing thoughtfully to discussions, engaging with others' ideas, and drawing on the assigned readings. Students are expected to come to class having completed the readings and ready to reflect, question, and apply course concepts.

Assignments (30%)
There will be five assignments distributed across the semester. Each assignment should be 3 – 4 pages long (double-spaced, Times New Roman 12pt) and will ask students to either critically evaluate a theory/concept or conduct a mini-experiment that applies course ideas to real-world settings. Assignments are due at the end of the week following their distribution (e.g., an assignment handed out in Week 3 is due at the end of Week 4).

Classroom Observations (15%)
Students are required to observe *at least two classroom lessons*, preferably in a school setting. For each observation, they must submit a 3 to 4 page reflection connecting their observations to course content. These reflections should go beyond description to critically evaluate the instructional design using relevant theories and concepts covered in class. Students are encouraged to identify both strengths and areas for improvement in the teaching they observe, while grounding their analysis in educational psychology. The first observation is due any time within the month of October and the second observation is due any time within the month of November.

Presentation (15%)
Students will design a 20 – 30 minute teaching session based on a subject, grade, and lesson from the National Curriculum of Pakistan. This can be done individually or in small groups, depending on class size. The presentation must reflect course concepts and learning strategies and demonstrate thoughtful instructional design aligned with student learning outcomes.

Final Paper (30%)
Students will write a 5–7 page paper reflecting on the teaching session they designed and delivered. This paper should include a critical analysis of the section of the National Curriculum they focused on, their approach to planning and teaching the lesson, and how it connects with key ideas and concepts discussed in class throughout the semester. Students are expected to draw on insights from course readings, class discussions, and their own teaching experience to demonstrate thoughtful integration and reflection. Detailed guidelines will be shared separately.

Class attendance and participation	10%
Assignments	30%
Classroom Observations	15%
Presentation	15%
Final paper	30%

Week 1: Introduction

Lecture 1

- Introduction to the course

Lecture 2

Class cancelled

Week 2: Anchored Instruction

Lecture 3

Required reading:

- Berliner, D. C. (1993). *The 100-year journey of educational psychology*. In T. K. Fagan & G. R. VandenBos (Eds.), *Exploring applied psychology: Origins and critical analyses*. American Psychological Association.

Lecture 4

Required reading:

- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school* (Expanded ed.). National Academy Press. (chapter 1)

Week 3

Lecture 5 and 6

Classes cancelled

Week 4: Cognitive Development

Lecture 7 and 8

Required reading:

- Schaefer, D. R., & Kipp, K. (2010). *Developmental psychology: Childhood & adolescence* (8th ed.). Wadsworth. (chapter 7)

Assignment:

Anchored instruction assignment handed out

Week 5: Active Learning

Lecture 9 and 10

Required reading:

- Bransford, J. D., Franks, J. J., Vye, N. J., & Sherwood, R. D. (1989). New approaches to instruction: Because wisdom can't be told. In S. Vosniadou & A. Ortony (Eds.), *Similarity and analogical reasoning*. Cambridge University Press.

Optional reading:

- "E is for Elaboration"
- "M is for Making"
- "Q is for Question-Driven"
- "S is for Self-Explanation"
- "U is for Undoing"
- "V is for Visualization"

Assignment:

- Anchored instruction assignment due

Week 6: Spacing and Testing

Lecture 11 and 12

Required reading:

- Carpenter, S. K. (2012). Testing enhances the transfer of learning. *Current Directions in Psychological Science, 21*.
- Kornell, N., & Bjork, R. A. (2008). Learning concepts and categories: Is spacing the "enemy of induction"? *Psychological Science, 19*.

Optional reading:

- "G is for Generation"

Assignment:

- Active learning assignment handed out

Week 7: Expertise

Lecture 13

Class cancelled

Lecture 14

Required reading:

- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school* (Expanded ed.). National Academy Press. (chapter 3)
- Hatano, G., & Inagaki, K. (1986). Two courses of expertise. In H. Stevenson, H. Azuma, & K. Hakuta (Eds.), *Child development and education in Japan*. Freeman.

Optional reading:

- "D is for Deliberate Practice"

Week 8

Midterms

Week 9

Mid-semester break

Assignment:

- Active learning assignment due

Week 10: Expertise and Individual Differences and Cognitive Training

Lecture 15

Required reading:

- Robertson, S. I. (2017). *Problem solving: Perspectives from cognition and neuroscience* (2nd ed., pp. 27–54). Routledge.

Optional reading:

- "A is for Analogy"
- Robertson, S. I. (2017). *Problem solving: Perspectives from cognition and neuroscience* (2nd ed., pp. 66–88). Routledge.

Lecture 16

Required reading:

- Klahr, D., & Nigam, M. (2004). The equivalence of learning paths in early science instruction. *Psychological Science, 15*(10), 661–667.

Optional reading:

- "W is for Worked Examples"

Assignment:

- Practice assignment handed out

Week 11

Lecture 17 and 18

Classes cancelled

Week 12: Stereotype Threat

Lecture 19 and 20

Required reading:

- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*, 613–629.
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*, 797–811.

Week 13: Mindset

Lecture 21 and 22

Required reading:

- Yeager, D. S., et al. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature, 573*(7774), 364–369.

Optional reading:

- Blackwell, L. A., Trzesniewski, K. H., & Dweck, C. S. (2007). Theories of intelligence and achievement across the junior high school transition: A longitudinal study and an intervention. *Child Development, 78*(1), 246–263.

Assignment:

- Practice assignment handed out
- Experiment summary assignment handed out

Week 14: Learning by Struggling and Through Teaching + Concreteness Fading and Inquiry-based Learning *(Extra class(es) to be scheduled)*

Lecture 23

Required reading:

- Fiorella, L., & Mayer, R. E. (2013). The relative benefits of learning by teaching and teaching expectancy. *Contemporary Educational Psychology, 38*(4), 281–288.

Optional reading:

- "C is for Contrast"
- "J is for Just-in-Time Telling"
- Schwartz, D. L., & Bransford, J. D. (1998). A time for telling. *Cognition and Instruction, 16*(4), 475–523.

Lecture 24

Required reading:

- Fyfe, E. R., McNeil, N. M., & Borjas, S. (2015). Benefits of "concreteness fading" for children's mathematics understanding. *Learning and Instruction, 35*, 104–120. (experiments 1 and 3 only)

Optional reading:

- "H is for Hands On"
- "P is for Participation"
- "T is for Teaching"
- Kuhn, D., Black, J., Keselman, A., & Kaplan, D. (2000). The development of cognitive skills to support inquiry learning. *Cognition and Instruction, 18*(4), 495–523.

Assignment:

- Practice assignment due
- Experiment summary assignment due
- Classroom observation(s) due
- Executive function assignment handed out

Week 15 *(Extra class(es) to be scheduled)*

Lecture 25 and 26

Small group presentations

Assignment:

- Executive function assignment due

Week 16

Lecture 27 and 28

Small group presentations