

Common Theories in Teacher Education Programs
 Integration of Teacher Education Faculty Discussions

The learning theories listed below reflect the most commonly referenced theories in the undergraduate teacher education programs, along with reading references. Candidates are introduced to these theories in their respective required educational psychology/learning theory courses. It is expected that these theories are discussed further and referenced more extensively in subsequent professional education coursework. This table is the result of discussions, beginning in 2020, in the *Convenings* sponsored by the Committee on Teacher Education (CTE) and Office of Undergraduate and Teacher Education (UTE) with examples primarily from our elementary programs.

Theory	Brief Description, Sub-Theory Reading Reference
Behaviorism	<p>Learning is forming specific <i>behavioral associations</i> in response to external stimuli.</p> <p>Radical behaviorism: Standridge, 2002; Skinner 1958 Transition is social cognitive theory: Shunk & Zimmerman (2007)</p>
Cognitivism	<p>Learning is forming <i>cognitive associations and schema processing information</i></p> <p>Cognitive Science: National Research Council (1999, How People Learn I) Chapters 2 & 3 Cognitive-associationism and cognitive load: Sweller, Merrienboer & Pass (1998) Universal Designs for Learning: Hall, Meyer, & Rose (2012)</p>
Constructivism	<p>Learning is forming <i>schema while making sense of the world and reorganizing prior knowledge</i></p> <p>Radical constructivism: Von Glaserfeld (1989), Savion (2009) Social constructivism: Powell & Kalina (2009)</p>
Sociocultural Theory	<p>Learning is using socially defined tools to <i>participate more successfully in social and cultural practices.</i></p> <p>Sociocultural theory Vygotsky (1978) Community of Practice Rose (2001), Cognitive apprenticeship: Brown Collins & Duguid (1989)</p> <p>Knowledge is inherently cultural, and education should draw on the unique funds of knowledge and identity that diverse students bring to school</p> <p>Cognitive Science: National Academy of Science, Engineering, & Medicine (2018, How People Learn II) Chapter 2 Culturally sustaining pedagogy, Paris (2012) UNICEF (1989), Vossoughi (2015)</p>

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Principles of Learning and Associated Theories in Teacher Education Programs
 Integration of Teacher Education Faculty Discussions

Teacher education faculty, in collaboration with the Center for Innovation in Teaching and Learning (CiTL), discussed the *Principles of Learning* for early field experiences over the course of two years. The results of these discussions were shared with public school representatives for their feedback, and the *Principles* listed below are the final result. The associated theories and content specific examples noted reflect the discussions of the *Convenings* sponsored by the Committee on Teacher Education (CTE) and Office of Undergraduate and Teacher Education (UTE) with examples primarily from our elementary programs.

Principles of Learning	Associated Theories and Sub theories	Content Specific References Instructional Theories/ Frameworks/Strategies
<p>Apply a variety of strategies to elicit, activate, and build upon learners’ background knowledge</p>	<ul style="list-style-type: none"> ● Radical/Social Constructivism ● Universal Design for Learning ● Bandura’s Social Learning Theory ● Culturally Responsive Instruction 	<ul style="list-style-type: none"> ● 5 Practices, which are macro level instructional practices (anticipating, monitoring, selecting, sequencing, and connecting). (E343/ math ed) ● Talk Moves, which are micro level instructional practices intended to elicit student contributions. (E343/ math ed) ● Research base about children’s mathematical development in different arenas in mathematics (E343/math ed) ● Funds of Knowledge (Literacy - ECE, EI Ed, TAL) <p>*****</p> <p><i>Other Examples</i></p> <ul style="list-style-type: none"> ● Candidates become familiar with the general nature of students’ prior knowledge in social studies, as well as specific classroom methods for eliciting individual students’ knowledge (e.g., asking questions, having students make predictions, creating webs/concept maps, KWL charts) and for building on background knowledge (e.g., starting with everyday life, web/concept maps, KWL charts) (E325--Social Studies). ● Emphasis on the funds of knowledge students may bring from diverse communities (E325-Social Studies)

<p>Evaluate and scaffold the learners' participation using a variety of instructional strategies.</p>	<ul style="list-style-type: none"> ● Vygotsky and Sociocultural theory ● Radical/Social Constructivism ● Hierarchical Interactionism ● Apprenticeship in Thinking ● Wood, Bruner, & Ross 	<ul style="list-style-type: none"> ● Discussion of scaling up and scaling down in lesson planning as differentiated from accommodations required by law. (E343/math ed) ● Research base about children's mathematical development in different arenas in mathematics (E343/math ed) ● Question types, assessing versus advancing questions (E343/math ed) ● Gradual Release of Responsibility Model of instruction (and variations) (EI Ed, ECE, TAL Literacy) ● Six methods for scaffolding students participation: developing interest, breaking tasks into manageable parts, providing graphic organizers and language templates, modelling procedures, asking probing questions, and providing critical feedback)[all derived from Rogoff] (E325--Social Studies)
<p>Create, support, and manage equitable access to learning opportunities in classroom environments.</p>	<ul style="list-style-type: none"> ● Socio-Cultural theory ● Radical/Social Constructivism ● Cognitive theory ● Multicultural education James Banks ● Multimodal Theory ● Theory of Artifactual Literacies 	<ul style="list-style-type: none"> ● Concepts: self-identity and identity of learners, discuss differentiation of tasks, discuss context as culturally situated, and discuss (E343/math ed). ● Setting norms for Talk Moves where one driver for norm setting is equitable participation (E343/math ed) ● Assistive Technology (Dr. Joy Zabala - Director of CAST Technology - UDL) to provide equitable access to learning ● Attentiveness to students' differing funds of knowledge (E325--Social Studies) ● K305/306 [Intro to Spec Ed. for el and sec]: introduction to types of 'disabilities' (legal v. practical considerations) ● Diverse curriculum that includes people and experiences that a variety of students can identify with, as well as materials that analyze and critique dominant social practices (e.g., racism, sexism, nationalism, homophobia) (E325--Social Studies) <p><i>Other Examples</i></p> <ul style="list-style-type: none"> ● Variety of instructional methods, including varied forms of grouping (individual, small group, whole class); varied forms of presentation (teacher explanation; teacher and individual reading of children's narrative and informational text; visual media; artifacts; direct experiences); and varied forms of response activities (speaking, writing, drawing, moving, constructing). (E325--Social Studies)

		<ul style="list-style-type: none"> ● Culturally Responsive Literacy Instruction & Providing diverse literature that allows students to see themselves in books and also to envision otherwise and see the world from other perspectives. “Window and Mirrors” (EI Ed, ECE, TAL Literacy) ● Trauma-Informed Care in Education (TAL)
<p>Understand and be responsive to social context and social interactions - outside school (suggest “as part of multiple communities, in and out of school”)</p>	<ul style="list-style-type: none"> ● Sociocultural theory ● Behaviorism ● Funds of Knowledge 	<p><i>Suggested Illustrative Examples:</i></p> <ul style="list-style-type: none"> ● K305/306 [Intro to Spec Ed. for el and sec] addresses relationship building (adult-student/peer-peer); Maslow, behavioral techniques (ABC, PBIS, intro to FBA); UDL ● Understanding of how social context shapes the content of the curriculum and teaching methods, including the devaluing/omission of minority perspectives, the avoidance of controversial issues, and a focus on nationalism; exploration of the multiple social contexts that students are part of (including racial, religious, ethnic, and geographical communities) and how this affects their interest in and engagement with curriculum content, as well as their interactions with teachers, peers, and the school environment. (E325--Social Studies) ● Taking a strength orientation to cultural and linguistic differences (E339 & E340 - Literacy) <p>*****</p> <p><i>Other examples:</i></p> <ul style="list-style-type: none"> ● Maslow’s Hierarchy of Needs in K352 (Urban Ed. Seminar)
<p>Develop productive relationships with learners</p>	<ul style="list-style-type: none"> ● Care theory and critiques of it 	<p><i>Suggested Illustrative Examples:</i></p> <ul style="list-style-type: none"> ● Maslow’s Hierarchy of Needs in K352 (Urban Ed. Seminar) <p>*****</p> <p><i>Other examples:</i></p> <ul style="list-style-type: none"> ● Creating a student-centered learning community within the literacy classroom (E339 & E340 - Literacy)

<p>Engage learners in cycles of inquiry and reflection (suggest “Engage students in the construction of knowledge through cycles of inquiry and reflection”)</p>	<ul style="list-style-type: none"> ● Cognitive theory ● Radical/Social Constructivism ● Brophy & Alleman, Ed. Researcher doi: 10.2307/1176471 ● Smagorinsky, https://doi.org/10.3102/00346543071001133 ● Levstik & Barton, Doing History/Dewey, How We Think 	<p><i>Suggested Illustrative Examples:</i></p> <ul style="list-style-type: none"> ● Lesson structure (launch, investigate, summarize) (E343 - Math) ● Inquiry as a process of asking meaningful questions, collecting and evaluating evidence, drawing conclusions, and presenting/taking action (E325--Social Studies) <p>*****</p> <p><i>Other examples:</i></p> <ul style="list-style-type: none"> ● Principal, systematic, and continual emphasis on the role of activities as a tool for engaging students in the construction of meaning (E325--Social Studies) ● Project-based learning; students as producers of knowledge (Literacy)
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<p>Utilize assessment to inform learners' understanding and instruction</p>	<p>Popham (and implicitly cognitive theory) Backward Design, Wiggins & McTighe</p>	<p><i>Suggested Illustrative Examples:</i></p> <ul style="list-style-type: none"> • Formative assessment interviews, monitoring with assessing and advancing questions, alignment of lesson and assessment of it (E343-Math) • “Constructive feedback” (based on constructive principles and plays a constructive role in teaching and learning): 1) assessment directly related to major goal of the lesson; 2) provides insight into how students are constructing their understanding of the lesson objective; 3) assessment integrated with instruction; 4) multiple opportunities provided for assessment; 5) specific elements identified that teachers will look for in the product (through a rubric, checklist, or other format). (E325--Social Studies) <p>*****</p> <p><i>Other examples:</i></p> <ul style="list-style-type: none"> • Strategies for evaluation of students' literacy growth/progress based on a substantial body of evidence; questioning across the comprehension continuum; project-based assessments; rubrics; responsive teaching; conferring; observations; anecdotal records (E339 & E340 - Literacy)
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