



BranchED AI Compass

Domain-to-Practice Guide

Domain 7

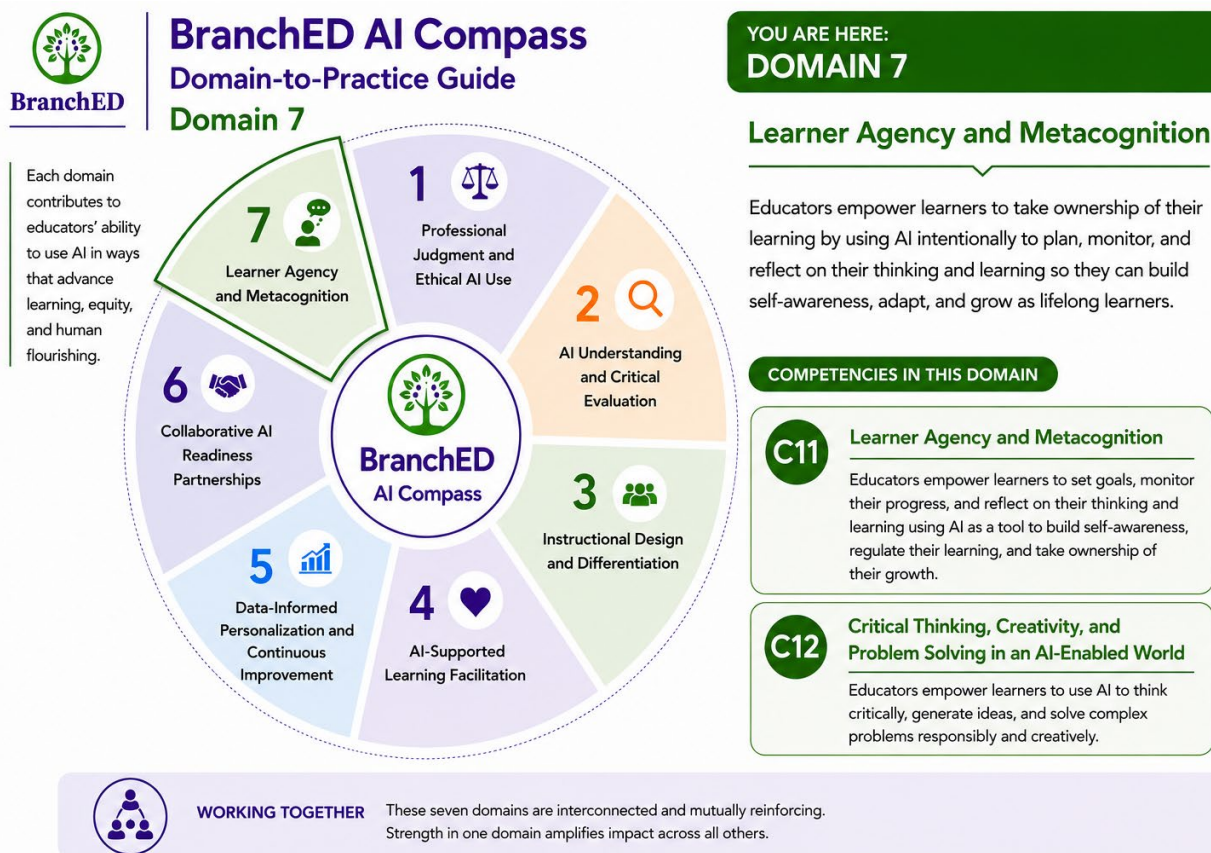
This guide¹ helps teacher educators support teacher candidates' (TCs) readiness for an AI-enabled world. It translates the BranchED AI Compass domain and competency language into concrete learning experiences, evidence sources, and course- and clinical-design decisions that teacher educators can incorporate into existing preparation experiences. The sections below show how the domain's competencies work together and provide practical guidance to help TCs develop and demonstrate the knowledge, skills, dispositions, and professional judgment reflected in the AI Compass.

How the Competencies Work Together

The competencies within this domain are distinct but interdependent. Learner Agency and Metacognition focuses on helping students understand and regulate their own thinking and make intentional decisions about AI's role in learning. Critical Thinking, Creativity, and Problem-Solving in an AI-Enabled World focuses on designing opportunities for students to investigate, evaluate evidence, generate original ideas, solve authentic problems, and create meaningful work. Together, they prepare TCs to help students remain the authors of their learning and contributors of distinctly human judgment and creativity.

A Note on Policy and Context

AI use takes place within institutional, professional, and educational contexts. Teacher educators and teacher candidates should be familiar with and adhere to applicable program, institutional, school, district, state, and other relevant policies and guidance related to AI use, data privacy, approved tools, academic integrity, and professional practice. The AI Compass and accompanying resources are intended to support the development of AI readiness and informed professional judgment within these contexts; they do not establish or supersede institutional or district policy.



¹ The development and design of this guide was assisted by ChatGPT.

Domain 7: Learner Agency and Future Readiness

Educators prepare students to navigate an AI-enabled world with confidence, curiosity, adaptability, and responsibility.

This domain focuses on ensuring that students remain thoughtful, self-directed, creative, and intellectually responsible as AI becomes increasingly present in learning and life. It brings together competencies that help TCs develop students' awareness and regulation of their own learning while also creating opportunities for critical thinking, creativity, and authentic problem-solving. Read the competencies as connected parts of future readiness: students need both the agency to make intentional decisions about when and how AI contributes to their learning and the intellectual capacity to question, create, evaluate evidence, solve problems, and make judgments that remain their own.

Each competency section below explains the distinct contribution of that competency. The later domain-level sections consolidate development activities, readiness indicators, evidence sources, and Compass connections so teacher educators can see how the competencies work together in practice.

Competency 11 | Learner Agency and Metacognition

AI Compass Competency

Learner Agency and Metacognition: Educators help students understand their own thinking, evaluate the role of AI in their learning, and develop increasing agency, independence, reflection, and responsible decision-making.

What This Means for Teacher Candidate Development

For TC development, this means learning to help students become increasingly aware of and responsible for their own learning when AI is available, in ways that are appropriate to students' age, developmental level, and learning context. TCs need opportunities to design routines and learning experiences that help students set goals, monitor their understanding, reflect on AI's influence on their thinking, and make increasingly intentional decisions about when AI supports or interferes with learning. They should also learn to help students distinguish productive support from dependence and develop increasing confidence and judgment about when to use AI and when independent thinking or practice better serves the learning goal.

Design Principle: Help students use AI with awareness and intention so they remain the authors of their learning.

In Practice

For TCs, this competency means helping students notice and direct their own learning when AI is available. TCs should be able to design reflection and decision-making opportunities that help students recognize when AI supports their goals, when it changes or narrows their thinking, and when they need to work independently.

Why This Matters

AI can make it easy for students to accept suggestions, outsource decisions, or lose track of what they themselves understand. Student agency requires more than choice; it requires awareness of one's thinking, ownership of goals, and the ability to make deliberate decisions about AI's role in learning.

What Teacher Candidates Need to Know & Understand

- Metacognition involves awareness and regulation of one's own thinking, strategies, understanding, and learning processes.
- AI can influence students' ideas, confidence, choices, persistence, and sense of authorship, sometimes in ways they do not immediately notice.
- Agency grows when students set goals, make choices, check their own understanding, reflect on what AI contributed to their learning, and retain responsibility for decisions.
- Responsible AI use includes knowing when to seek help, when to verify or challenge AI, and when independent thinking or practice is necessary.

What Teacher Candidates Need to Practice

- Designing prompts or routines that help students explain what they know, what AI contributed, and what decisions they made.
- Helping students set a purpose for AI use before engaging with a tool and reflect afterward on whether it helped.
- Teaching students to check whether they can explain, apply, or demonstrate what they are learning without relying on AI and to recognize when AI support creates an illusion of understanding or reduces ownership.
- Creating opportunities for students to choose among AI-supported and non-AI approaches and justify their choices.

Competency 12 | Critical Thinking, Creativity, and Problem-Solving in an AI-Enabled World

AI Compass Competency

Critical Thinking, Creativity, and Problem-Solving in an AI-Enabled World: Educators design opportunities for students to investigate complex questions, generate original ideas, evaluate evidence, solve authentic problems, and create meaningful work using AI as a tool rather than a substitute for thinking and creating.

What This Means for Teacher Candidate Development

For TC development, this means learning to design developmentally appropriate AI-supported experiences that increase rather than reduce the intellectual work students perform. TCs need opportunities to create complex questions and authentic problems; structure AI use so students examine evidence, compare perspectives, challenge assumptions, generate and refine ideas, and justify decisions; and assess the reasoning and creative processes behind student work. They should learn to use AI as a resource for exploration, critique, feedback, and iteration while ensuring that students remain responsible for the questions they pursue, the evidence they evaluate, the ideas they develop, and the meaning they ultimately create.

Design Principle: Use AI to expand the space for thinking, creating, and solving—not to occupy that space for the student.

In Practice

For TCs, this competency means designing learning in which students remain responsible for the intellectual work of questioning, interpreting evidence, generating ideas, making decisions, solving problems, and creating. AI may broaden possibilities or support iteration, but it should not become a substitute for original thought or meaningful application.

Why This Matters

As AI makes it easier to generate answers and products, the value of education shifts even more toward the quality of questions students ask, the evidence they evaluate, the ideas they develop, and the judgments they make. TCs need to design learning that uses AI to expand human thinking rather than narrow it.

What Teacher Candidates Need to Know & Understand

- Critical thinking involves questioning claims, evaluating evidence, recognizing assumptions, comparing perspectives, and making reasoned judgments.
- Creativity involves generating, developing, combining, and refining ideas; AI-generated novelty is different from student ownership or meaningful originality.
- Authentic problem-solving requires understanding context, defining problems, considering constraints and stakeholders, testing possibilities, and learning from results.
- AI can support brainstorming, simulation, comparison, feedback, or iteration, but students should remain responsible for questions, evidence, decisions, and final meaning.

What Teacher Candidates Need to Practice

- Designing complex questions or authentic problems that cannot be completed well through simple AI-generated answers.
- Structuring AI use so students compare possibilities, challenge assumptions, evaluate evidence, and refine ideas rather than accept first outputs.
- Creating opportunities for students to generate and defend original ideas, solutions, or products with transparent AI support.
- Assessing the quality of student reasoning, evidence, creativity, and problem-solving process, not only the polish of the final product.

Ways to Develop the Domain

Teacher educators can develop this domain by giving candidates repeated opportunities to apply the connected competency practices. The experiences below show how each contributes to the domain as a whole.

Learning Experience	Primary Focus	How It Builds the Competency
Before/During/After AI	C11	TCs design a reflection routine that asks students to name their goal before AI use, monitor how the tool influences their thinking, and evaluate its contribution to the goal afterward.
Whose Thinking Is This?	C11	Provide a student artifact developed with AI. TCs identify questions that help the student distinguish their own reasoning, choices, and voice from AI contributions.

Choose Your Path	C11	TCs design a task where students may use AI, another resource, or work independently, but must justify the approach that best supports their learning goal.
Make the Question Harder	C12	Give TCs a task that AI can answer easily. They redesign it around a complex question, authentic audience, contextual constraints, evidence, or decision-making that requires student thinking.
AI as Provocateur	C12	TCs design an experience where AI generates competing explanations, ideas, or solutions that students must critique, compare, improve, or challenge.
Solve for a Real Context	C12	TCs design an authentic problem-solving task in which students use AI for selected supports but must gather evidence, consider stakeholders, justify tradeoffs, and defend a solution.

Indicators of Developing Readiness

These indicators describe how readiness across the domain may develop over time. They should be interpreted across multiple forms of evidence rather than as a rubric for scoring a single learning activity. Teacher educators can use evidence gathered across coursework, clinical experiences, simulations, reflections, and authentic performances to identify where TCs are developing and where additional practice opportunities may be needed.

Developmental Level	Observable Indicators
Emerging	Focuses mainly on whether students used AI appropriately or on the quality of final products, with limited attention to metacognition, ownership, evidence, originality, or the intellectual work students themselves perform.
Developing	Uses reflection, choice, critique, or revision to keep students engaged in thinking, but these opportunities may be occasional or still allow AI to carry substantial intellectual load.
Ready	Intentionally helps students set goals, monitor understanding, evaluate AI's influence, make responsible choices, and remain responsible for questions, evidence, ideas, decisions, and meaningful creation.
Extending	Builds classroom cultures in which students regularly set learning goals, ask critical questions, generate original ideas, and solve authentic problems with AI as a support rather than a substitute; adapts scaffolds for different learners, tasks, and settings; and mentors others to keep student reasoning, creativity, and decision-making at the center of AI-enabled learning.

Possible Sources of Evidence

Teacher educators may draw on multiple sources to understand how a TC is developing this domain, including:

- Student reflection or metacognitive routines designed by TCs
- Lesson plans and student goal-setting tools
- Inquiry, problem-based, or authentic project designs
- Redesigned tasks and student reasoning artifacts
- Creativity/originality criteria and oral defenses
- Clinical observations, design journals, and AI-use annotations

Try It in Your Course

Use these prompts to identify one practical opportunity to strengthen this domain in an existing course or clinical experience.

Where do these connected competencies already show up in my course or clinical experience?

My idea:

Where could TCs more explicitly help students reflect on AI's influence while also designing for critical thinking, creativity, and authentic problem-solving?

My idea:

What existing assignment or learning experience could be adapted so candidates practice both learner agency and future-ready intellectual work?

My idea:

What evidence could I collect to understand whether TCs can keep students responsible for their thinking, choices, ideas, evidence, and solutions?

My idea:



COPYRIGHT © 2026 by BranchED, Inc., Peachtree City, GA 30269.

BranchED Domain-to-Practice Guide Domain 7, October 2026.

All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of BranchED, Inc., including but not limited to, in any network or other electronic or cloud storage or transmission, or broadcast for any form of distribution for distance learning.