BEST IN CLASS:

Five Principles of Effective Educator Preparation

2020

The Colorado Department of Higher Education and The Colorado Department of Education
Report to the Colorado Legislature

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Executive Summary

In 2019, the Colorado Legislature enacted Senate Bill 19-190, the *Growing Great Teachers Act*. The legislation declares that “high-quality teaching is the linchpin for effective, high-quality education in the schools of the state. To be an excellent, effective educator, an individual must receive comprehensive, rigorous, and effective training in the art and science of teaching and in the skills and subjects that the individual will teach.” The *Growing Great Teachers Act* directs the Colorado Department of Education and the Colorado Department of Higher Education to review research and identify best practices for teacher preparation programs. This report responds to the 2019 statutory requirements by synthesizing current research with a set of five principles for teacher preparation programs and several best practices under each principle.

Taken together, the five principles demonstrate that teaching is a profession requiring specialized knowledge, clinical preparation, and ongoing candidate development and learning. Teacher preparation programs that employ these five principles establish the foundation for teacher candidates as emerging professionals. As the American Association for Colleges of Teacher Education states, “In recent decades, consensus has grown among researchers and practitioners: Teaching is a complex practice, learned over time, through rigorous and deliberate study combined with thoughtfully orchestrated opportunities to practice.” (2018, p. 14) To foster candidates’ learning of teaching as a complex practice requires that effective preparation programs integrate the knowledge of curricula with knowledge of learners and learning and provide ongoing, meaningful clinical experiences that are tied to a common vision of the teaching profession. The principles outline the foundational tenets of teacher preparation and the practices describe facets of the principles.

“In recent decades, consensus has grown among researchers and practitioners: Teaching is a complex practice, learned over time, through rigorous and deliberate study combined with thoughtfully orchestrated opportunities to practice.”

- AMERICAN ASSOCIATION FOR COLLEGES OF TEACHER EDUCATION
Introduction

This report synthesizes a wide body of research and analyzes practices from across the world to identify five core principles embodied by effective teacher preparation programs. Each principle contains best practices in developing excellent teachers. Taken together, these principles and practices indicate the critical work of high-quality preparation programs move candidates from a set of loosely linked courses or curricula to comprehensive programs grounded in practice, driven by curricula that integrates academic and professional knowledge and skills. They also suggest that teacher preparation leaders create a developmental trajectory for candidates over time with stakeholders. The principles and practices paint a picture of constant feedback and evaluative loops that connect teacher candidates with their preschool through grade 12 (P-12) students as well as groups of candidates and preparation program stakeholders, both university and school-based.

When reading the principles and practices of this report, the following definitions are critical:

The principles

are the research-based tenets for constructing all high-quality teacher preparation programs. These are central to the design of any program across all contexts.

The practices

under each principle are components that require deep understanding of the program’s context in order for them to be operationalized. Understanding context includes, but is not limited to, knowledge of the specific teacher candidates, the specific content area of each program, the mode of program delivery and characteristics of P-12 students and schools being served.
Thus, all teacher preparation programs are held to a set of rigorous and research-based principles. In addition, all programs work to meet the local needs of their candidates and schools. Flexibility in enacting the practices leads to innovative pathways that serve individual groups and communities. Moreover, this report describes macro-level principles and practices; it is not intended to recommend specific actions or micro-level recommendations that suggest there is only one way of carrying out a principle or enacting a practice.

Teacher candidates are continually mentioned throughout this report to reference those who are enrolled in a preparation program. This generic term does not distinguish among all types of candidates or pathways. P-12 students are also mentioned throughout this report; this generic term refers to students in elementary, middle, and secondary schools.

There are, additionally, larger political and financial aspects of becoming a teacher that require attention. While this report does not describe the dire needs to elevate the teaching profession, build financially feasible pathways for becoming a teacher, including paid clinical experiences or paid apprenticeships, and increase teacher compensation, these factors are a critical part of supporting preparation programs and P-12 schools that seek to partner for the sustainability of teachers and their profession.

Core principles of high-quality teacher preparation programs:

<table>
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<tr>
<th>PRINCIPLE</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>Teacher preparation programs foster candidates’ deep understanding of content knowledge, content knowledge for teaching, and general pedagogical knowledge.</td>
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<td>2</td>
<td>Teacher preparation programs foster candidates’ deep understanding of P-12 learners, including their cognitive and socio-emotional development.</td>
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<td>3</td>
<td>Teacher preparation programs provide intentional, coherent, and extensive clinical experiences for candidates.</td>
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<td>4</td>
<td>Teacher preparation programs regularly monitor, assess, and evaluate the progress of their candidates through multiple measures to support, coach, and determine best steps with candidates.</td>
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<td>5</td>
<td>Teacher preparation programs engage in robust, continuous improvement efforts.</td>
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Research indicates that effective teachers have a strong grasp of their content area(s) and a deep understanding of different instructional practices, or pedagogies, specific to a discipline that allow students to best learn and deeply understand the content. Thus, teacher preparation programs must not only ensure that their candidates possess the requisite content knowledge for teaching but also equip them with the disciplinary pedagogical skills to teach effectively. Program practices need to blend content and pedagogy within curricula to provide the necessary foundation for the success of teacher candidates.

**PRACTICE A:**

Teacher preparation programs effectively integrate content knowledge, content knowledge for teaching, and pedagogical knowledge.

By integrating the various knowledge bases required by effective teaching, programs create a model of teacher preparation that supports candidates to acquire the content-specific knowledge and pedagogies necessary to be successful in the classroom. For example, research shows that the ways in which candidates are taught mathematics content supports them in developing as effective teachers. Candidates need to know how to present math concepts in a way that is understandable to a diverse set of learners. Math teachers, unlike mathematicians, need to understand students’ cognitive development of numerical reasoning and how to use students’ experiences and social references to help facilitate math comprehension.
PRACTICE B: Curricula are co-designed by content experts and experts on teaching.

This practice ensures that candidates master the subject area, learn how students can best understand the content, and learn and practice research-based pedagogies specific to a discipline. Research indicates this is an important practice since strategies vary by content area. Effective science teachers, for example, employ a range of pedagogical methods that include inquiry, constructivism, cooperative learning and authentic science laboratory investigations. Having both content experts and teaching experts co-design curricula creates learning experiences for candidates to learn and practice discipline-specific pedagogies and reflect and collaborate with colleagues, just as candidates will do for their own students.

PRACTICE C: Teacher preparation curriculum includes the science of teaching reading so that teacher candidates learn how to teach all students to read by third-grade.

Almost two decades ago, the National Reading Panel studies arrived at recommendations for how students receive daily, explicit, systematic phonics instruction in the early grades. When students can’t read, they have trouble learning; the great majority of students who fail to master reading by third-grade have significantly higher dropout rates or finish high school with limited opportunities. Teacher preparation programs that endorse elementary, early childhood, or special education teachers shall include coursework that teaches those teacher candidates the science of reading, including the foundational reading skills of phonemic awareness, phonics, vocabulary development, reading fluency including oral skills, and reading comprehension. Reading coursework and field practice opportunities are a significant focus for the endorsement areas for teachers who are being prepared in these three identified licensure areas.

SAMPLE RESOURCES:


Each learner enters a classroom with unique experiences, cultural assets, family background, learning style, talents, and needs. Effective preparation programs equip candidates with the knowledge and skillset to foster safe, inclusive, learning environments and customize learning for a diverse array of students. Candidates acquire techniques to identify student strengths and needs and support each student to achieve academic proficiency and essential skills such as resilience, problem solving, and communication.

PRINCIPLE 2

Teacher preparation programs foster candidates’ deep understanding of P-12 learners, including their cognitive and socio-emotional development.

PRACTICE A:

Curricula support candidates to understand different learning and developmental patterns and how to personalize learning experiences for students.

Preparation programs that include curricula focused on how cognitive, linguistic, social, and emotional development occurs enable teacher candidates to understand the varying ability levels, learning styles, and cultural and family backgrounds of their students. These candidates are then able to leverage those experiences and traits of their students to promote deep learning and high levels of academic growth and achievement. Candidates need opportunities to practice techniques for identifying student needs and then designing multiple approaches to learning based on student needs. Further, best practices indicate that teacher candidates are more effective when they hold high expectations for all students and offer rigorous learning experiences and supports. Thus, teacher preparation programs help candidates understand different methods for holding rigor high and providing challenging lessons while also supporting the developmental needs of all students.
PRACTICE B:
Curricula build candidates’ skills to foster inclusive, safe, and supportive learning environments that enable each learner to meet high standards.

Teacher preparation programs strive to provide candidates with a supportive, personalized setting as candidates consider how to create those same experiences for their students. Field experiences in diverse settings must be prioritized for candidates. Additionally, preparation programs provide recent research and best practices in cultural competence and student well-being. Examples of focus areas for today’s educators include English language development, anti-bullying practices, restorative practices, trauma sensitivity, identifying and responding to signs of mental illness and substance abuse, and supporting students’ healthy use of social media.

PRACTICE C:
Candidates learn an inquiry-based style of pedagogy that supports P-12 learners in building the skills needed to thrive in a dynamic and interconnected society.

Today’s students not only need to master academic core content but also build essential skills, including critical thinking, collaboration, problem solving, resiliency, effective communication, and personal responsibility. Effective preparation programs model inquiry-based practices so that candidates obtain firsthand experiences in an environment that demands active learner engagement. Curricula and fieldwork provide candidates with active learning experiences and time for self-assessment, reflection, and coaching following the experiences. Through their preparation, candidates understand how to use inquiry-based pedagogy to engage their students in thinking critically and creatively about authentic local and global issues.
Teacher preparation programs include a focus on family engagement strategies.

Students are more successful in school and in life when their families are engaged as partners with their educators and schools. Effectively preparing new educators with the skills to partner with families and communities in deep and meaningful ways can have a great impact on students’ social, emotional, and academic growth. It is important to note that candidates’ mindsets are strongly influence their ability to effectively partner with families and tap into their expertise.

Evidence-based practices for pre-service preparation on effective family partnerships include an emphasis on fostering a welcoming environment for families, relationship building, and deep listening.

SAMPLE RESOURCES:


Research indicates that clinical practice is central to effective teacher preparation. Effective teacher preparation programs provide multiple, intentional, clinical experiences throughout candidates’ developmental trajectory. Clinical experiences are aligned with program curricula so that candidates acquire classroom management skills and pedagogical content knowledge. Best practices indicate that candidates observe, experience, and practice the pedagogies about which they are learning in curricula and field settings.

PRACTICE A: Teacher preparation programs provide intentional clinical experiences early and throughout the program.

The actual process of learning to teach requires early and ongoing opportunities to engage in authentic teaching performance in diverse learning environments. A culminating and sustained clinical experience is a core component of high-quality preparation and must be no less than a semester in length. Clinical experiences that provide candidates with the knowledge and skills to establish a successful start and end to the school year prepare those candidates for both short- and long-term effectiveness.
PRACTICE B: Curricula complement and align with clinical experiences so candidates develop their knowledge and skills in meaningful ways.

Effective preparation programs have made field experiences foundational to their programs and have designed their curricula to sequence around those experiences to support candidates’ development of knowledge and pedagogical skills. For example, teacher candidates learning about child development and cognitive science in their coursework might simultaneously participate in structured field experiences to observe developmental theory in practice.

PRACTICE C: Preparation programs ensure clinical experiences are high quality by identifying and supporting strong mentors who provide ongoing coaching and evaluative feedback to candidates.

Research indicates that effective clinical experiences are supported by qualified mentors who possess strong mentoring skills and a demonstrated record of success with student growth and achievement. Preparation programs and P-12 partners can work together to identify the qualities they expect to see in mentors and match candidates with qualified mentors. Research also shows that a best practice of clinical experiences is to ensure that university and school coaches are regularly observing candidates and providing actionable feedback.

PRACTICE D: Partnerships for clinical experiences are mutually beneficial for teacher candidates, P-12 educators, and schools.

To realize mutual benefits, teacher preparation leaders and P-12 educators need to authentically collaborate to design clinical experiences that promote learning for all involved. Regular communication can lead to better alignment of curricula and classroom practice and provides an avenue for deepening relationships, meeting needs, and designing opportunities. As active partners, teacher preparation programs and P-12 schools share responsibility for continuously monitoring and improving field experiences.

SAMPLE RESOURCES:


Learning to teach is a process developed and honed over time through solid instruction, quality practice, and constructive feedback. Effective teacher preparation programs assess candidates formatively and summatively throughout their programs based on a clear vision of novice teacher development that includes explicit programmatic benchmarks. Candidates have opportunities to learn from ongoing assessments and resulting feedback.

Teacher preparation programs regularly and continuously monitor the progress of candidates throughout the program to ensure they are on track for classroom readiness.

Effective programs have clear strategies for frequent monitoring and feedback cycles based on multiple forms of evidence. Candidates demonstrate that they are developing the necessary content knowledge, pedagogical content knowledge, and pedagogical skills. If a candidate is not adequately demonstrating these competencies, programs offer remediation and coaching based on standards and explicit benchmarks. If candidates continue to struggle after receiving targeted support, preparation programs have clear process regarding program exit points.
Teacher preparation programs develop criteria and measures for key attributes and dispositions beyond academic knowledge that candidates must show to progress through and complete the program. Research and best practices show that educators’ beliefs, attitudes, and habits are a critical component of creating an inclusive and successful learning environment. Communicating program expectations to candidates from the beginning is important to ensure that candidates understand the criteria for the ethical standards and professional dispositions that they must demonstrate. Educators must hold and enact a belief that all children can learn and achieve. To evaluate a candidate’s attributes and dispositions, teacher preparation programs need to develop and use reliable and valid measures to regularly assess candidates, give feedback, and provide coaching.

Valid and reliable performance assessments based on common standards are incorporated into recommendations for licensure. High-quality performance assessments mirror the conditions educators will experience when they are leading their own classrooms. Some examples of performance-based assessments include case studies, exhibitions of performance, videos of performance, and action research. Such assessments provide valuable and consistent information regarding the evaluation of candidates. Candidates’ performance on such assessments is evaluated against a set of common standards such as state standards. Teacher preparation programs can use the data collected from performance assessments to identify areas where the program’s candidates are consistently underperforming. Using the data gathered, programs can then make improvements and track progress.

**SAMPLE RESOURCES:**


Kinderwater, W. A., "The Role of Dispositions in Teacher Candidate Education" (2013). Graduate Student Theses, Dissertations, & Professional Papers. 1388. [https://scholarworks.umt.edu/etd/1388](https://scholarworks.umt.edu/etd/1388)

High-quality teacher preparation programs collect and use data for the purpose of continuous improvement. Programs meaningfully engage multiple groups of stakeholders in cycles of program review and improvement, which is based on stakeholder data during the program and beyond program completion.

**PRACTICE A:**
Teacher preparation programs use data to monitor graduates’ performance, make improvements, and ultimately drive success.

Leaders at effective teacher preparation programs create a positive culture of data use by shifting the mindset from viewing data as a compliance need to leveraging data for continuous improvement. Best practices indicate that program leaders intentionally develop the data literacy skills of their administrative teams. State agencies are active partners and ensure that teacher preparation programs receive data on the classroom performance of their graduates. With data, teacher preparation programs can understand what elements of their program most effectively prepare teachers and which components need improvement.
PRACTICE B: Programs meaningfully engage stakeholders in data sharing and continuous improvement.

A best practice of teacher preparation programs is to include key stakeholders in data collection, analysis, and improvement planning efforts. Engaging stakeholders such as program graduates, P-12 practitioners and leaders, program faculty, and community partners builds a positive culture of continuous improvement and leads to more intentional program design and potential innovation to serve local needs. Teacher preparation programs strive to communicate their successes, challenges, and data-informed improvement strategies with a broad range of stakeholders to advance program evolution that serves teacher candidates and students.

PRACTICE C: Teacher preparation programs engage in strategies to improve the P-20 education system and meet local needs.

Teacher preparation programs that embrace a mindset of continuous improvement are committed to strengthening the greater P-20 education systems in which they operate. Each program has the opportunity to contribute its unique assets to help local communities meet workforce needs and diversify the teacher pipeline. A best practice of high-functioning teacher preparation programs is to intentionally recruit individuals from ethnically, culturally, and geographically diverse groups and/or for content shortage area needs. P-12 and postsecondary institutions can partner to close educational opportunity gaps and ensure all students have access to effective educators and rigorous learning environments.

SAMPLE RESOURCES:


Conclusion

To respond to the Growing Great Teachers Act in Senate Bill 19-190, this compilation of five principles provides the critical components of all effective teacher preparation programs. Taken together, these principles describe high-quality teacher preparation that organizes coursework and clinical experiences around a vision of teacher candidates’ development, bridging coursework and classroom practice. Teacher preparation programs must create consistent and intentional opportunities for candidates to work in classrooms so that candidates are able to build relationships with students, gain a deep understanding of how different students learn, and enact a wide repertoire of strategies that increase all students’ growth and achievement.

It bears repeating that the five principles articulated in this report are not intended to prescribe any one version of best practice. While all educator preparation programs must demonstrate the ways in which they operationalize each of these principles, preparation leaders must be given the professional flexibility to make decisions that best meet the local needs of the communities and schools that they serve. The principles provide the necessary foundation for development and continued refinement of high-quality preparation programs.