

Iowa State University

Educator Preparation Program: Conceptual Framework

Vision

The framework of the Educator Preparation Program at Iowa State University aspires to provide a premier pathway of rigorous research-based academic experiences complemented by exceptional quality and diverse field experiences leading to the skillful preparation of highly effective teachers and school leaders.

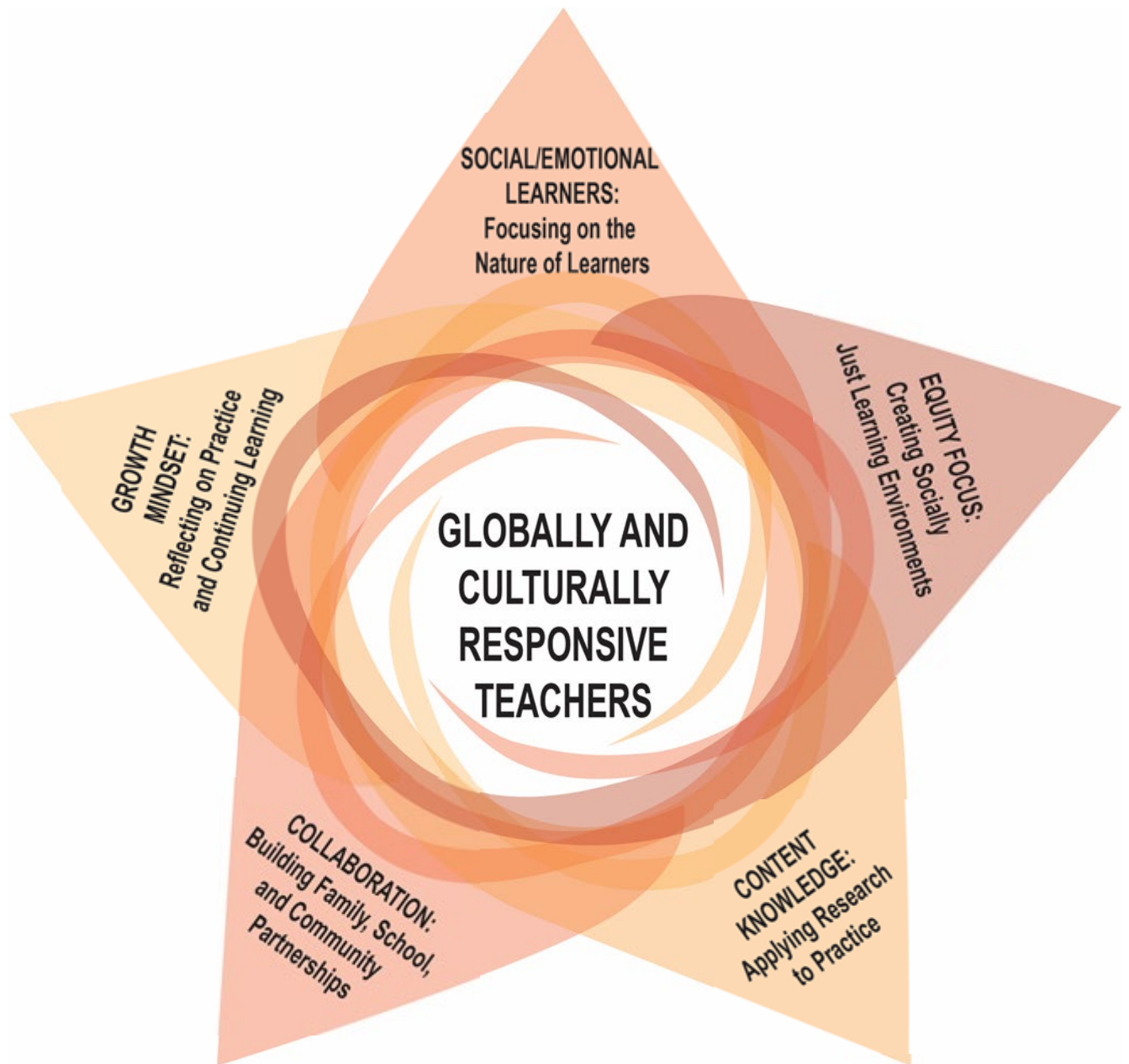
Mission

The conceptual framework of the ISU educator preparation program is to prepare teachers and administrators as continuous learners, collaborators, and transformational leaders through the application of rigorous research-based content and advanced pedagogy integrated with rich field experiences and fundamentally grounded in the land-grant mission of community access and opportunity.

Belief Statements

At Iowa State University, our educator preparation community of professional educators and students believe:

- Education provides learners with equitable opportunities to acquire the knowledge, skills, and dispositions to achieve cognitive, affective, social, physical, and economic well-being.
- The educational process is intentional and learner centered. It requires the application of rigorous research-based content and pedagogical knowledge that is supported with the innovation of technologies.
- Formal education does not occur in isolation. It exists in synergy with the education provided by families and communities and will enrich and be enriched by those connections.
- High-quality educator preparation includes collaborative field-based experiences that promote on-site learning opportunities that are varied, developmentally appropriate, and linked closely with academic preparation.
- Education prepares learners to positively influence people's lives by successfully engaging in our democratic society and in the broader global community.
- Ongoing, multi-dimensional assessment is a critical tool of educators leading towards a better understanding and improvement of student learning.
- Transformational educators engage in a continual cycle of learning, practice, and reflection that informs their curricular, instructional, evaluative, and interactional decisions. Transformative educators have an ethical responsibility to expand human potential and improve people's lives.



CONTEXT for the CONCEPTUAL FRAMEWORK (CF)

Commitment to Candidates

The Teacher Preparation program at Iowa State University will prepare socially just, equity-focused educators who will be prepared to create equitable learning environments within their school classroom environments.

Iowa State University School of Education, the Colleges of Human Sciences, Liberal Arts and Sciences and Agriculture collaborate to prepare teacher candidates at the Early Childhood, Elementary and Secondary areas.

The Educator Preparation Coordinating Council is the policy making body for the Educator Preparation Program and consists of faculty coordinators from each undergraduate and graduate licensure areas.

Problem of Practice

The following questions were identified and considered by the CF Sub-committee:

1. *Why is it important for Iowa State University to support and prepare candidates with a social-justice and equity perspective?*
2. *How does being an equity focused, teacher ensure that every child/student is known and has agency in their own learning?*
3. *How does an equity focused, teacher demonstrate their development, knowledge, and skills in the classroom?*
4. *Does “reflective practice” matter? If we believe that it does, -- How do we instill authentic practice in our candidates?*
5. *How do we navigate the current political climate which “impacts the ability to create spaces where equitable development and learning can occur”?*

Adapted from McDonald & Zeichner (2009)

An evolving Theory of Action (If – Then Statements)

- **IF: ISU teacher candidates**
 - are intentional about reflective practice and utilize a growth mindset for their learning and practice *and*
 - have a strong understanding of the “nature of learners” and the need for intentional social emotional supports *and*
- **IF: ISU faculty**
 - provide robust, research based, content knowledge experiences and guidance, *and*
 - support and prepare candidates with a social justice and equity perspective, *and*
- **IF: ISU teacher candidates**
 - are reflective and authentic in their own instructional practice, *and*
 - apply this learning to instruction, student relationships and the classroom environment,

THEN:

- ISU Teacher Candidates will exhibit, express, and model the traits and understandings of a ***Globally and Culturally Responsive Teacher***, who ensure that every child/student is known and has agency in their own learning and development.

CONCEPTUAL FRAMEWORK

OVERARCHING FOCUS: GLOBALLY AND CULTURALLY RESPONSIVE TEACHERS

The primary focus of the Iowa State University Educator Preparation Program is to develop globally and culturally responsive teachers. As the state and national population becomes more diverse and the world becomes more interconnected, it is important for candidates to develop the pedagogy, knowledge, and dispositions to become educators in a multicultural and pluralistic society (Thayer-Bacon, 2013). In addition, as a land-grant institution, there is a dedication to the founding principles of access, practical education, and shared knowledge (<https://web.iastate.edu/about/history>), which includes a responsibility to prepare diverse, culturally responsive, and community-engaged teachers.

A globally responsive teacher appreciates the diversity of the human population and shows respect for individual talents and viewpoints. These teachers value learning, and believe all students can achieve success and strive for excellence. In pursuance of this ideal, teacher candidates need a course of study that includes a rigorous academic curriculum and practical experiences that examine and incorporate world events, cultures, and perspectives as well as a fundamental belief that all students can learn.

Foremost in teacher preparation is a focus on pedagogy that supports equitable learning and student empowerment, recognizes the importance of integrating content from students' cultural backgrounds, and understands of how cultural identity impacts student learning (Gay, 2014; Ladson-Billings, 1995). Teacher candidates must demonstrate the content knowledge needed to be globally and culturally responsive teachers through placing content within context and connections. This includes content area expertise, instructional strategies and materials, classroom climate, student-teacher relationships, and self-awareness to improve student learning (Gay, 2010).

Finally, globally responsive teacher candidates must display professional dispositions including the willingness to self-examine beliefs, values, assumptions, biases, and experiences related to diverse individuals, populations, and cultures as well as the ability to value the diversity and build connections between content, culture, and experiences of those in the classroom. Also important are willingness to participate in and facilitate dialogue involving controversial topics in order to learn and grow, to incorporate new ideas and create inclusive, diverse classroom culture, and to collaborate with family and community in the educational process to ensure student success.

References

- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York, NY: Teachers College Press.
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53(2), 106–116. <https://doi.org/10.1177/0022487102053002003>

- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). New York, NY: Teachers College Press.
- Gay, G. (2014). Culturally responsive teaching principles, practices, and effects. In Milner IV, H. R., Lomotey, K. (Eds.), *Handbook of urban education* (pp. 353–372). Routledge.
- Ladson-Billings, G. (1995). Toward a Theory of Culturally Relevant Pedagogy. *American Educational Research Journal*, 32(3), 465–491.
<https://doi.org/10.3102/00028312032003465>
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: aka the remix. *Harvard Educational Review*, 84(1), 74–84. <https://doi.org/10.17763/haer.84.1.p2rj131485484751>
- Lomotey, K. (Eds), *Handbook of Urban Education*, Routledge, New York, NY, pp. 353-372.
- Morrison, K. A., Robbins, H. H., & Rose, D. G. (2008). Operationalizing culturally relevant pedagogy: A synthesis of classroom-based research. *Equity & Excellence in Education*, 41(4), 433–452. <https://doi.org/10.1080/10665680802400006>
- Nieto, S., Bode, P., Kang, E., & Raible, J. (2008). Identity, community, and diversity: Retheorizing multicultural curriculum for the postmodern era. In F. M. Connelly, M. F. He, & J. Phillion (Eds.), *The SAGE handbook of curriculum and instruction* (pp. 176–198). Thousand Oaks, CA: SAGE. <https://doi.org/10.4135/9781412976572.n9>
- Santamaria, L. J. (2009). Culturally responsive differentiated instruction: Narrowing gaps between best pedagogical practices benefiting all learners. *Teachers College Record*, 111(1), 214–247.
- Thayer-Bacon, B. J. (2013). *Democracies always in the making: Historical and current philosophical issues for education*. Lanham: Rowman & Littlefield.
<https://doi.org/10.1177/016146810911100105>

SOCIAL/EMOTIONAL LEARNERS: FOCUSING ON THE NATURE OF LEARNERS

Each learner is a whole person for whom the ability to learn and grow relies in part on a foundation of social and emotional competencies. A meta-analysis from Durlak et al. (2011) concludes that social and emotional learning programs improve academic outcomes, both on achievement tests and across grades, among other behavioral benefits. Knowledge of social and emotional development across ages, with the understanding that it in part defines the nature of each learner, is critical in supporting the developmental, behavioral, and academic needs of students. Iowa State University InTASC standards 1 and 2 emphasize not only the ability to recognize the trajectory of development across academic, cognitive, and social domains, but expect teacher candidates to be able to meet that myriad of needs through responsive and sustainably equitable teaching practices.

In addition to being shaped by innate characteristics such as temperament, candidates must recognize that each person is shaped by their environment, community, and culture. All of these should be taken in to account in the design of instruction, assessment, and the learning environment. ISU InTASC standard 3 recognizes the influence of each learner's surroundings on their overall success. The Whole School, Whole Community, Whole Child Model (WSCC) which has been developed as a joint effort by the U.S. Centers for Disease Control and Prevention (CDC) and the Association for Supervision and Curriculum Development (ASCD) states that "A positive social and emotional school climate is conducive to effective teaching and learning" (Lewallen et al., 2015). Teacher candidates will learn about classroom practices and design strategies that intentionally support the development of the whole learner.

It must be addressed that the social, emotional, and overall mental health of the classroom teacher can have a significant impact on relationships with students, the climate of a classroom, and the overall success of learners. A study found that, while nearly all teachers in the sample reported high stress, in those classrooms where the teacher experienced high stress but low success in coping with that stress, students exhibited the most challenging behaviors and the lowest academic achievement (Herman, Hickmon-Rosa, & Reinke, 2018). Teacher candidates in this program will develop skills in recognizing their own mental health needs and will work to balance personal wellness while upholding professional expectations. Mental health supports and strategies to be explored include the importance of adequate sleep, exercise, developing professional networks, stress management techniques such as meditation, trauma informed care, and more.

Teacher candidates will develop knowledge about how stages of social and emotional development intersect with classroom guidance, teaching practices, and their own emotional intelligence. With this understanding, they will not only support students who they serve in the moment, but provide them with lasting skills to be active and engaged members of society.

References

Durlak, J. A., Dymnicki, A. B., Schellinger, K. B., Taylor, R. D., & Weissberg, R. P. (2011, January). The impact of enhancing students' social and emotional learning: A meta-

analysis of school based universal interventions. *Child Development*, 82(1), 405-432.
<https://doi.org/10.1111/j.1467-8624.2010.01564.x>

Lewallen, T. C., Hunt, H., Potts-Datema, W., Zaza, S., & Giles, W. (2015, November). The Whole School, Whole Community, Whole Child model: A new approach for improving educational attainment and healthy development for students. *School Health*, 85(11), 729-739. <https://doi.org/10.1111/josh.12310>

McLean, L., & Connor, C. M. (2015, June). Depressive Symptoms in Third-Grade Teachers: Relations to Classroom Quality and Student Achievement. *Child Development*, 86(3), 945-954. <https://doi.org/10.1111/cdev.12344>

EQUITY FOCUS: CREATING SOCIALLY JUST LEARNING ENVIRONMENTS

In the development of the ISU Teacher Preparation Program Conceptual Framework, ensuring a focus on the tenets of equity and social justice was important. Equity and social justice are woven into our teacher preparation program fabric and are an integral part of the educational landscape that our candidates will explore and encounter throughout their courses and fieldwork.

To become an effective teacher, candidates must develop an understanding of the student and community landscape where they will be serving. The Iowa State University InTASC Standards 2, 3, 4 and 9 focus on the instructional, relational, and professional skills necessary to support each and every student, their families and their school environment.

Creating a classroom environment that is equitable requires not only content knowledge, but also the knowledge of the community, the resources available, the structures of family and the human/social emotional needs of the students in their classrooms.

Equity in Education and Why it Matters

The authors of the 2018 OECD publication, [Equity in Education: Breaking Down Barriers to Social, Mobility](#), provide this helpful elaboration:

Equity does not mean that all students obtain equal education outcomes, but rather that differences in students' outcomes are unrelated to their background or to economic and social circumstances over which the students have no control. Equity in education also demands that students from different backgrounds are equally likely to earn desirable post-secondary education credentials, such as university degrees, that will make it easier for them to succeed in the labour market and to realise their goals as adult members of society. ([TEL Education \(Transforming Education for Life website\)](#))

As a continuous learner, teacher candidates must develop their content, instructional, and professional skills to be “*effective with students of all backgrounds in the U.S. schools*” (Arronson, et.al, 2020, Nieto 2000). In 2000, Sonia Nieto argued that in order to put equity at the center of teacher education, schools and universities must “*radically transform their policies and practices if they are to become places where teachers and prospective teachers learn to become effective with students of all backgrounds in the U.S. schools*” (p. 180) (Aronson, et. al. 2020, p. 22). This notion is directly connected to InTASC Standard 2 *Learning Differences*:

The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

In reviewing the literature focused on equity and teacher preparation, several questions from researchers emerged. McDonald (2005) posed these two questions for teacher preparation programs to consider.

1. *How do teacher education programs implement social justice in an integrated fashion across the entire program (e.g., including university courses and field placements)?*
2. *What do prospective teachers' opportunities to learn about social justice look like in such programs? (McDonald p. 420)*

McDonald (2008) also focused on the “pedagogy of assignments” that teacher preparation candidates were offered throughout the program. We pose these questions for the ISU Teacher Preparation Program:

- Why should our teacher candidates be prepared to serve each and every student?
- How are our candidates prepared for creating an equitable environment for the students they serve?
- How, when, and where are we providing opportunities for them to learn about the principles and practices that inform their understanding of diversity and equity?
- What should our assignments look like to accomplish these tasks?

McDonald & Zeichner (2009) co-authored a chapter which expanded on the previous work by McDonald. From this study, two key questions for teacher education preparation programs emerged. These focus on developing teachers who have the skills to create an equitable classroom environment.

1. *What is social justice teacher education?*
2. *What are the program structures, policies, and practices that constitute **equity focused** social justice teacher education?*

As other teacher education reform efforts suggest, without the consideration of such questions, programs will likely simply adopt the label of social justice without challenging or changing existing practices. In addition, the ambiguity in terms of the concept and practice of social justice teacher education will allow a wide range of programs, some with very different agendas to lay claim to such a vision of teacher preparation. (p. 606)

Sensoy & DiAngelo (2017) posit that one of the most important tasks for teacher preparation programs is to develop “our own definition of social justice” and equity for curriculum and instruction to be aligned.

A mindset, orientation, a way of thinking, and teacher identity that encourages dialogue among learners. It is a method that explores the emotional and moral dimensions of learning, facilitates problem solving, and interrupts normative narratives. It promotes social awareness and an ongoing process of critical consciousness toward self in relation to others. (p. 23 Aronson, B. et. al., Sensoy and DiAngelo, 2017)

Equity and social justice efforts are an outgrowth of the 30 years of research around multicultural research.

The majority of efforts in multicultural teacher education have focused on preparing teachers to improve the educational opportunities and experiences of students of color, low-income students, and more recently, English language learners (Lucas & Grinberg, in press). Social justice teacher education shares this goal, but differs from the implementation of multicultural education on two fronts—one conceptual and one structural (Feiman-Nemser, 1990; Tom, 1997).⁵ ...the predominant practice of multicultural education tends to celebrate cultural diversity and the experience of the individual while paying less attention to societal structures and institutionalized oppression (Kailin, 2002) ...Sleeter (1993) reminds us...of the importance of justice being central to multicultural education:

...multicultural education came out of the civil rights movement. It wasn't just about, "let me get to know something about your food and I'll share some of my food." The primary issue was one of access to a quality education. (p 596-597 McDonald and Zeichner (2009)

In the Teacher Education Program, we need to ensure that our candidates develop a clear understanding of the significant influence and impact they will have on student visibility, learning and achievement. In addition, a teacher candidate must realize the impact of their professional performance (agency) within the school environment and the community in which it resides. InTASC Standard 9 focuses on a teacher using "evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner. Cochran (2004) defines this as "teacher education outcomes as long- term impacts."

As our candidates experience their learning through the ISU Teacher Preparation Program, they will explore, encounter, and engage with literature, clinical experiences, and strategies that will prepare them for their role as a teacher who brings a strong practice in creating equitable learning environments and sees and knows what each of their students need and require.

References

- Aronson, B., Banda, R., Johnson, A., Kelly, M. Radina, R., Reyes, G., Sander, S., & Wronowski, M. (2020). The social justice teaching collaborative: A critical turn towards critical teacher education. *Journal of Curriculum Studies Research*, 2(2), 21-39.
<https://doi.org/10.46303/jcsr.2020.8>
- Boylan M. & Woolsey, I. (2014). Teacher education for social justice: Mapping identity spaces. *Teaching and Teacher Education*, 46, 62-71. <https://doi.org/10.1016/j.tate.2014.10.007>
- Cochran-Smith, M. (2004). Defining the outcomes of teacher education. What's social justice got to do with it?, *Asia-Pacific Journal of Teacher Education*, 32(3), 193-212.
<https://doi.org/10.1080/1359866042000295370>
- McDonald, M. A. (2005). The integration of social justice in teacher preparation, *Journal of Teacher Education*, 56(5). <https://doi.org/10.1177/0022487105279569>
- McDonald, M. A, (2008). The pedagogy of assignments in social justice teacher education, *Equity & Excellence in Education*, 41(2), 151-167.
<https://doi.org/10.1080/10665680801943949>

CONTENT KNOWLEDGE: APPLYING RESEARCH TO PRACTICE

To be an effective teacher, candidates must develop strong content knowledge in the area they teach. Content knowledge can be broken into two categories: disciplinary area content and pedagogical content. While disciplinary area content is *what* candidates will learn, pedagogy is *how* the candidates will learn to teach it.

Disciplinary area content refers to the content that the professional knows. Iowa State University InTASC Standards 4 and 5 focus solely on the teacher candidate developing disciplinary area content knowledge. Candidates themselves must become lifelong learners in the discipline(s) they teach in order to create authentic learning experiences for their future students. As stated in Cochran-Smith's (2011) article:

They could not know all the answers prior to entering teaching. What they needed to know was how to keep on learning over time—how to pose important questions, how to develop new ways of seeing, how to unpack deeply held assumptions, and how to work with colleagues to transform students' learning opportunities and outcomes. (p. 24)

The ISU Teacher Education Program needs to prepare candidates for changes that will arise in their career. Instilling the necessity for lifelong learning during their preparatory years will help candidates stay abreast of new developments and research in their discipline(s).

Pedagogical content knowledge refers to how the candidates will teach their disciplinary area content. Appropriate preparation in pedagogical and disciplinary area content will allow teacher candidates to build their knowledge of the profession and enhance the delivery of their lessons. This knowledge is needed for their professional career to implement a variety of instructional practices. Iowa State University InTASC Standards 6, 7 and 8 focus heavily on pedagogical content knowledge. One essential component to this is classroom management; candidates learn how to maintain engagement through routines, procedures, various instructional strategies, and how to prevent and respond to student misbehavior. According to Caram and Davis (2005), our youth today are overloaded with bright, flashy experiences. Teacher candidates must attain pedagogical content knowledge to develop and deliver lessons that will capture student attention and engage their curiosity and critical thinking. By using research-based planning, instructional, and assessment strategies, teacher candidates will succeed in differentiating lessons and creating inviting classrooms focused on student learning.

References

Caram, C. A., & Davis, P. B. (2005). Inviting student engagement with questioning. *Kappa Delta Pi Record*, 42(1), 19-23. <https://doi.org/10.1080/00228958.2005.10532080>

Cochran-Smith, M. (2011). Does learning to teach ever end? *Kappa Delta Pi Record*, 47(1), 22-24. <https://doi.org/10.1080/00228958.2011.10516719>

COLLABORATION: BUILDING FAMILY, SCHOOL, AND COMMUNITY PARTNERSHIPS

As the learner is a whole person for whom school must address more than cognitive needs, the educator is but one facet of a whole system that includes local communities, school districts, and families. InTASC Standards 9 & 10 are oriented around professional learning, ethical practice, leadership, and collaboration. The educator must reflect “particularly the effects of . . . choices and actions on others (learners, families, other professionals, and the community).” Educators must be servant-leaders, their efficacy measured by how well they serve the learning and growth of their students. Recalling her Black elementary teachers, bell hooks recounts, “my teachers made sure they ‘knew’ us. They knew our parents, our economic status, where we worshipped, what our homes were like, and how we were treated in the family” (1994, pg. 3). Teachers’ engagement with stakeholders is critical for collaborative work. To build up their students’ capacity, teachers represent a single contributor, coming equipped with their skills and knowledge. The teacher is not the sole voice, directing others to work according to their prescriptive vision of what will “better” their students. Instead, the teacher must create authentic and professional collaborations with students, their families, the school and communities.

As a [land-grant institution](#), Iowa State was established upon a mission to be of service to the people (Gordon & Schultz, 2020). Distinct from established institutions of higher education at the time, the charge given by the 1862 Morrill Act was to establish an institution, “where the leading object should be to teach such branches of learning . . . to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life.” Since its founding, Iowa State has worked to extend research and practice to concretely improve the lives of Iowans, Americans, and humans across the globe. This is exemplified by the work of a number of entities within the ISU Educator Preparation programs.

On a larger scale, contrary to public education’s overt call to be an economic equalizer, school systems have instead propitiated inequities that support the status quo in many ways. Additionally, a majority of educator preparation candidates do not currently reflect the diversity of the classrooms that they will serve. We seek to address these gaps by moving beyond a *community-based* educator preparation program with isolated opportunities off campus to work in historically marginalized communities towards a *community-engaged* approach that integrates community members as stakeholders (Clark, 2021). “Community-engaged teacher preparation refutes the self-importance of traditionally recognized sources of wisdom, dismantling institutional barriers and personal pieties and forging a new structure through which previously un- or underrecognized sources of expertise can be heard, recognized, and valued” (Zygmunt et al., 2018). In this way, we prepare our candidates to function as a teammate, working collaboratively with parents and local leaders to value, support, and uplift their communities.

The community-engaged approach is continuously evolving, as local needs are ever-shifting. As an educator preparation program, we will prepare our candidates to collaboratively engage with all stakeholders in their future careers through the development of a growth mindset and continuous reflection upon their professional teaching practice.

References

- Clark, P., Zygmunt, E., Tancock, S., & Cipollone, K. (Eds.). (2021). *The power of community-engaged teacher preparation: Voices and visions of hope and healing*. Teachers College Press.
- Gordon, H. & Schultz, D. (2020). Impact of land-grant institutions on career and technical education. In *The history and growth of career and technical education in America*. (5th ed., pp 51-72). Waveland Press, Inc.
- hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. Routledge.
- Zygmunt, E., Cipollone, K., Clark, P., & Tancock, S. (2018). Community-engaged teacher preparation. *Oxford Research Encyclopedia of Education*. doi.org/10.1093/acrefore/9780190264093.013.476

GROWTH MINDSET: REFLECTING ON PRACTICE AND CONTINUING LEARNING

To be a continuous learner, teacher candidates in practica and student teaching experiences need to establish a growth mindset and practice reflection. Dweck (2007) describes how using a growth mindset involves people “believ(ing) that their most basic abilities can be developed through dedication and hard work This view creates a love of learning and a resilience that is essential for great accomplishment.” To achieve this goal, Schon (1983) provides three types of reflection: reflection-for-action (during the planning phase), reflection-in-action (amidst teaching), and reflection-on-action (after teaching).

In planning lessons, teacher candidates can practice reflection-for action by considering the student audience’s special interests and needs, prior student knowledge and experience, past successful instructional strategies, amount of student interaction and movement, differentiation for learning styles and abilities, placement of the lesson and standards within the unit and semester, and other variables.

By reflecting on these factors, teachers can create more effective lesson plans. Within the class time, teacher candidates can employ reflection-in-action by assessing the situation and making instant decisions of providing additional review, extra examples, repetition or re-emphasis of specific points, classroom management changes, and other needed adaptations. This type of reflection requires teacher ingenuity in deciding that a change needs to occur, how to make the adaptation in an effective manner, and whether more changes are required. The teacher candidate observes what is happening as a type of formative assessment and provides just-in-time student feedback. Because this type of reflection demands instant action, teachers often consider it to be the most challenging type of reflection.

Following instruction, teacher candidates need to make time for reflection-on-action. By re-examining the effectiveness of the class period for meeting the objectives and standards, obtaining student engagement and interaction, and providing connections to previous and upcoming lessons, teachers can assess changes for upcoming class periods and future lessons. This type of reflection can be accomplished individually through journaling, notetaking, or mental thought processing. Collaborative reflection can occur with a cooperating teacher, teaching team of co-teachers, or professional learning community (PLC). The teacher candidate uses both formative and summative assessments in making this post-reflection. While many teacher candidates practice one or two of the types of reflection, they need to work on incorporating all three areas to be truly effective instructors. Students’ needs and interests need to take foreground in each of these reflections. By continually reflecting on planning and teaching, teacher candidates can help students become successful learners, thinkers, and communicators.

The growth mindset and reflection practices are connected to InTASC Standard 9: “Professional Learning and Ethical Practice: The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.” Cochran-Smith (2011, p. 34) states that “the work of learning to teach never ends” since teachers need to know “how to keep

learning over time—how to pose important questions, how to develop new ways of seeing, how to unpack deeply held assumptions, and how to work with colleagues to transform students’ learning opportunities and outcomes.”

By engaging in a growth mindset, teacher candidates can recognize their own role and power in influencing student outcomes. This comprises a continual process in which the in-class teaching (reflection-in-action) can be followed by post-reflection (reflection-on-action), which in turn can be followed by the next planning stage (reflection-for-action), making the growth mindset into a circular process in which reflection continues at each stage of teaching.

References

- Cochran-Smith, M. (2011). Does learning to teach ever end? *Kappa Delta Pi Record*, 47(1), 22-24. <https://doi.org/10.1080/00228958.2011.10516719>
- Dweck, Carol S. (2007). *Mindset: The new psychology of success, how we can learn to fulfill our potential*. Ballentine Books.
- Schon, D. (1983). *The reflective practitioner: How professionals think in action*. Jossey-Bass.

Appendix: Additional References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Baroutsis, A., McGregor, G., & Mills, M. (2015). Pedagogic voice: student voice in teaching and engagement pedagogies. *Pedagogy, Culture & Society*, 24(1), 123-140.
<https://doi.org/10.1080/14681366.2015.1087044>
- Bovill, C. & Bulley, C.J. (2011) A model of active student participation in curriculum design: Exploring desirability and possibility. In: Rust, C. (ed.) *Improving Student Learning (ISL) 18: Global Theories and Local Practices: Institutional, Disciplinary and Cultural Variations*. Series: Improving Student Learning (18), 176-188. Oxford Brookes University: Oxford Centre for Staff and Learning Development.
- Capper, C. (2019). *Organizational Theory for Equity and Diversity: Leading integrated, socially just education*. Routledge. <https://doi.org/10.4324/9781315818610>
- Cochran-Smith, M. (2003). Learning and unlearning: The education of teacher educators. *Teaching and Teacher Education*, 19, 5-28. [https://doi.org/10.1016/S0742-051X\(02\)00091-4](https://doi.org/10.1016/S0742-051X(02)00091-4)
- Cook-Sather, A. (2020). Respecting voices: How the co-creation of teaching and learning can support academic staff, underrepresented students, and equitable practices. *Higher Education*, 79(5), 885-901. <https://doi.org/10.1007/s10734-019-00445-w>
- Dover, A. G. (2013). Teaching for social justice: From conceptual frameworks to classroom practices. *Multicultural perspectives*, 15(1), 3-11.
<https://doi.org/10.1080/15210960.2013.754285>
- Freire, P. (2005). *Pedagogy of the oppressed*. Continuum.
- Goe, L. (2007). *The link between teacher quality and student outcomes: A research synthesis*. National Comprehensive Center for Teacher Quality. Retrieved from
<https://files.eric.ed.gov/fulltext/ED521219.pdf>
- Irizarry, J. G. (2017). "For us, by us:" A vision for culturally sustaining pedagogies forwarded by Latinx youth. In D. Paris & S. H. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.

- Könings, K. D., Seidel, T., & van Merriënboer, J. J. (2014a). Participatory design of learning environments: integrating perspectives of students, teachers, and designers. *Instructional Science*, 42(1), 1-9. <https://doi.org/10.1007/s11251-013-9305-2>
- Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in US schools. *Educational researcher*, 35(7), 3-12. <https://doi.org/10.3102/0013189X035007003>
- Mansfield, K. C. (2014). How listening to student voices informs and strengthens social justice research and practice. *Educational Administration Quarterly*, 50(3), 392-430. <https://doi.org/10.1177/0013161X13505288>
- McCombs, B. L., & Whisler, J. S. (1997). *The Learner-Centered classroom and school: Strategies for increasing student motivation and achievement*. The Jossey-Bass Education Series. Jossey-Bass Inc.
- McIntyre, D., Pedder*, D., & Rudduck, J. (2005). Pupil voice: comfortable and uncomfortable learnings for teachers. *Research papers in education*, 20(2), 149-168. <https://doi.org/10.1080/02671520500077970>
- Mills, C. & Ballantyne, J. (2016). Social justice and teacher education: A systematic review of empirical work in the field. *Journal of Teacher Education*, 67(4), 263-276. <https://doi.org/10.1177/0022487116660152>
- Mills, C., & Ballantyne, J. (2010). Pre-service teachers' dispositions towards diversity: Arguing for a developmental hierarchy of change. *Teaching and Teacher Education*, 26(3), 447-454. <https://doi.org/10.1016/j.tate.2009.05.012>
- Milner, H. R. (2017). Race, talk, opportunity gaps, and curriculum shifts in (teacher) education. *Literacy Research: Theory, Method, and Practice*, 66(1), 73-94. <https://doi.org/10.1177/2381336917718804>
- Narayan, S. (2011). Pedagogic voicing: The struggle for participation in an inclusive classroom. *Anthropology & Education Quarterly*, 42(3), 245-262. <https://doi.org/10.1111/j.1548-1492.2011.01130.x>
- Noddings, N. (2013). *Caring: A relational approach to ethics and moral education*. University of California Press. <https://doi.org/10.1525/9780520957343>

- Robertson, J. (2017). Rethinking learner and teacher roles: Incorporating student voice and agency into teaching practice. *Journal of Initial Teacher Inquiry*, 3, 41-44.
<http://dx.doi.org/10.26021/802>
- Schiefele, U., & Schaffner, E. (2015). Teacher interests, mastery goals, and self-efficacy as predictors of instructional practices and student motivation. *Contemporary Educational Psychology*, 42, 159-171. <https://doi.org/10.1016/j.cedpsych.2015.06.005>
- Sensoy, O., & DiAngelo, R. (2017). *Is everyone really equal?: An introduction to key concepts in social justice education* (2nd Ed). Teachers College Press.
- Shields, C.M. (2018). *Transformative Leadership In Education: Equitable and Socially Just Change in an Uncertain and Complex World* (2nd ed.). Routledge.
<https://doi.org/10.4324/9781315207148>
- Theoharis, G., & Causton, J. (2014). Leading inclusive reform for students with disabilities: A school-and systemwide approach. *Theory Into Practice*, 53(2), 82-97.
<https://doi.org/10.1080/00405841.2014.885808>
- Theoharis, G., & O'Toole, J. (2011). Leading inclusive ELL: Social justice leadership for English language learners. *Educational Administration Quarterly*, 47, 646-688.
<https://doi.org/10.1177/0013161X11401616>
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511803932>
- Wheatley, M. J. (2002). *Turning to one another: Simple conversations to restore hope to the future*. San Francisco, CA: Berrett-Koehler Publishers.
- Wronowski, M., Aronson, B., Banda, R., Kelly, M., Johnson, A., Reyes, G., & Sander, S. (under review). Moving towards a comprehensive program of critical social justice teacher education: A QuantCrit analysis of pre-service teachers' perceptions of social justice education. *Race, Ethnicity, & Education*.
- Zeichner, K. M. (2009). *Teacher education and the struggle for social justice*. Routledge.
<https://doi.org/10.4324/9780203878767>