### **Conceptual Framework**

# Section I. Vision and Mission

### A. Vision and Mission of Institution

# **Berea College Great Commitments**

Berea College, founded by ardent abolitionists and radical reformers, continues today as an educational institution still firmly rooted in its historic purpose "to promote the cause of Christ." Adherence to the College's scriptural foundation, "God had made of one blood all peoples of the earth," shapes the college's culture and programs so that students and staff alike can work toward both personal goals and a vision of a world shaped by Christian values, such as the power of love over hate, human dignity and equality, and peace with justice. This environment frees persons to be active learners, workers, and servers as members of the academic community and as citizens of the world. The Berea experience nurtures intellectual, physical, aesthetic, emotional, and spiritual potentials and with those the power to make meaningful commitments and translate them into action.

To achieve this purpose, Berea College commits itself

- To provide an educational opportunity primarily for students from Appalachia, black and white, who have great promise and limited economic resources.
- To provide an education of high quality with a liberal arts foundation and outlook.
- To stimulate understanding of the Christian faith and its many expressions and to emphasize the Christian ethic and the motive of service to others.
- To provide for all students through the labor program experiences for learning and serving in community, and to demonstrate that labor, mental and manual, has dignity well as well as utility.
- To assert the kinship of all people and to provide interracial education with a particular emphasis on understanding and equality among blacks and whites.
- To create a democratic community dedicated to education and equality for women and men.
- To maintain a residential campus and to encourage in all members of the community a way of life characterized by plain living, pride in labor well done, zest for learning, high personal standards, and concern for the welfare of others.
- To serve the Appalachian region primarily through education but also by other appropriate services.

Originally adopted by the Board of Trustees in 1969; this revised statement adopted by the Board of Trustees of Berea College, April 24, 1993.

#### B. Vision and Mission of Unit

Recognizing that the world of the twenty-first century presents continuing challenges to all who strive for a more humane world, we affirm our commitment to preparing caring and thoughtful teacher who will lead their own students to address our planet's most pressing concerns. Our work lies in fostering a true community of inquiry in which teachers and student together seek thoughtful and just responses to the dilemmas facing the modern world.

We are supported in our mission by the rich traditions of Berea College. These traditions suggest the development of an education based on concerns for community supported by careful attention to individual needs, independent learning, interdisciplinary study, the development of critical and creative thinking, and the respectful nurturing of the novice teachers who engage in teaching and learning with us. We encourage our students to value and embrace the commitments of Berea College and their significance for our work together as learners, as teachers, and as proponents of social justice.

Committed teaching is no novel idea at Berea College. Founders like John G. Fee resolved to do their part in reforming a nation whose social fabric was ripe with struggle over an economic system dependent on the enslavement of African peoples. In their eyes, Berea College was to be no ordinary school, but an institution grounded in the values of gender and racial equality and the affirmation of human dignity that education could bring. Those values were later codified in Berea's *Great Commitments*. By attending to these commitments as we shape our special purposes as teachers of teachers, we seek to foster an environment that encourages the creation of a genuine community of learners. The *Great Commitments* are presented below, with a brief commentary that relates each of the commitments to the work of teacher education at Berea College.

Commitment to provide an educational opportunity primarily for students from Appalachia, black and white, who have great promise and limited economic resources.

Berea College is not an elitist institution. It neither chooses its students from among the economically privileged, nor aspires to do so. This means that Berea students may not have been beneficiaries of the academic training or the cultural exposure often available to the economically privileged. At the same time, the Teacher Education Programs acknowledge the difference between deficient preparation and promising ability, and we welcome to our community of inquiry students highly committed to making their own education truly excellent. We work to guide such students toward valuing and organizing what they have learned already, and toward encountering new learning experiences. We believe that learners assisted in this way will in turn be inspired similarly to aid their own students.

Commitment to provide an education of high quality with a liberal arts foundation and outlook.

Berea's Teacher Education Programs regard the liberal arts tradition as invaluable in its preparation of future teachers. Truly liberal education leads all concerned to value and conserve learning from the past in the search for meaning in the present world. Understood in this way, the liberal arts tradition becomes truly liberating.

By honoring the liberal arts tradition, we affirm our commitment to a core curriculum and to the critical thinking and historical perspective that such a curriculum represents. We wish to help our students become truly literate, capable of reading not only the great works of the past, but equally importantly, the texts of their own lives and time. Teacher Education Programs encourage students as they struggle to discover and appropriate their own voices so they might become capable of describing the reality they have discerned with the help of tradition. In all of this, our overarching goal is to assist all students in formulating their own philosophies of life and their own theories education.

Commitment to stimulate understanding of the Christian faith and its many expressions and to emphasize the Christian ethic and the motive of service to others.

In the tradition of John Fee, the Teacher Education Programs recognize Christian faith as a source of inspiration, and we affirm the centrality of values in the learning process. We reject attempts toward construction of a "value-free" curriculum as both undesirable and impossible to attain. We recognize as indispensable to holistic education pedagogies that bring to consciousness, clarification, and critique the religious and secular values by which human beings inevitably guide their lives.

Commitment to provide for all students through the labor program experiences for leaning and serving in community, and to demonstrate that labor, both mental and manual, has dignity as well as utility.

Berea College's labor program provides a unique opportunity for all members of the College community to consider the meaning and value of human labor in a variety of forms and settings. The special mission of the Teacher Education Programs relates to this commitment in that we believe work must be meaningful, it must be seen as personally satisfying in the context of a community effort having relevance to students' lives. The ways we teach, the things that we ask students to do, and the thinking that we share with them are designed to foster recognition of the meaningfulness which is inherent in all worthy labor. As students engage in their own purposeful work, whether in the labor program, in service activities, or in the classroom, they are empowered with the dignity of honest effort. As they honor this dignity within themselves, they will be able to celebrate the same quality in others, including the children who will be in their care.

Commitment to assert the kinship of all people and to provide interracial education with a particular emphasis on understanding and equality among blacks and whites.

This statement represents to the Teacher Education Programs a crucial commitment to our common humanity and to the valuing of difference to deepen our understanding of what it means to be a human being in this world. Berea's commitment to promote community and democracy

leads us to embrace multicultural perspectives within our program. We seek especially to include African-American voices in light of the special importance those sharing such heritage have held in Berea's history. We strongly support Berea College's initiative to provide opportunities for international study and travel so that our students may teach in their own classrooms in ways that promote global understanding and respect for all human beings.

Commitment to create a democratic community dedicated to education and equality for women and men.

Berea's Teacher Education Programs reflect Berea's commitment to democratic community by embracing multiple perspectives within our program. We seek to create genuine community among teachers and students, and we expect students to become active participants in their own educational processes. In a community of inquiry all voices are welcomed and listened to with respect. We seek especially to encourage the voices of women, who constitute the majority of those entering the teaching profession and who often have been silenced in traditional Appalachian culture as they have been elsewhere in the world. We commit ourselves to the valuing of all voices, and we seek in every encounter to see and hear through the eyes and ears of the other.

Commitment to maintain a residential campus and to encourage in all members of the community a way of life characterized by plain living, pride in labor well done, zest for learning, high personal standards, and concern for the welfare of others.

The Teacher Education Programs see this commitment as calling us to encourage students to reject the transient and mindless materialism that often corrupt our modern way of life. We believe that education in this era of ecological awareness must lead students to grapple with the fact that much in common ways of thinking and living is harmful to the biosphere on which all life forms depend. This way of life reflects neither simple living nor concern for others in a world in which an increasing proportion of children live in poverty. The pedagogical question in the face of such contradictions is how to formulate environmental and human concerns so that future teachers can help their students construct a better world. Through our advocacy of this commitment we endeavor to help our students accept the centrality of mindfulness in the construction of a value system that incorporates love of learning, compassion for others, an acute sense of social responsibility, and pride in good work.

Commitment to serve the Appalachian region primarily through education but also by other appropriate services.

As a unit, the Teacher Education Programs believe our efforts to serve Appalachia through education will continue in the efforts of our graduates to serve this region as teachers. We see education as the liberating force that can bring direction to our students' potential as they seek to address the pressing problems that beset the Appalachian region. We believe the individuals and communities of Appalachia are wellsprings of internal strength and immense potential, grounded in values too often lacking in the mainstream culture: responsibility to family; love of place; neighborliness and hospitality; sense of beauty; and a perspective on life which takes into

account both the serious and the humorous aspects of the human condition; values and perspectives which must be preserved and nurtured.

In responding to this commitment, as to all of the Great Commitments, we strive to help the teachers of tomorrow gain a deeper understanding of their own educational experiences and an appreciation of similar situations elsewhere that arise when education does not fulfill its promise. In this way, we hope to foster in prospective teachers a sense of their own responsibility for service and leadership in the region, and the understanding that each person who seeks to know and do good can make a difference.

# Section II. Philosophy

#### Introduction

The Unit's philosophical framework is the community of inquiry which encompasses the ideas of community and inquiry in relationship. At the heart of that relationship are the means by which human beings convey and create meaning together. Words are a primary means of communication, but other artistic media find their way into communities comprised of diverse individuals working together to create and share meaning. Common to all means of expression is the necessity of careful thinking, vision, and personal integrity. We believe the community of inquiry is an appropriate framework for Berea's Teacher Education Program because we share its assumptions about the nature of human beings, the nature of learning, and the nature of knowledge:

- Human beings are born with the capacity for wonder.
- Human beings are social beings who learn from and with others.
- Human beings construct their understandings over time by connecting the new to what is already known.
- Human beings have a multiplicity of ways coming to know.
- All knowledge is connected.
- Wisdom comes from the way in which knowledge is held.
- Thinking is central in coming to know.
- Communicating is the foundation of thinking.
- Teachers are also learners, and students are also teachers.
- All students can learn.

Consistent with these assumptions, we believe that the goal of education is to help people become reasonable, just, compassionate, and creative beings who will seek to determine what is of constant value in the world and to live accordingly. The purpose is the same at every level, preschool through post-graduate. Education requires knowledge, but transcends knowledge. It requires reason, though reason without imagination is insufficient. Education requires wonder, without which there can be no awe. Finally, education requires participation in the human community, as we come to truth in dialogue with others. The goal of education may best be described as the development of a permanent disposition: a disposition to ask questions and to seek understanding with reason and wonder; a disposition to search for truth through ongoing inquiry into our common and differing experiences as human beings; a disposition to think for ourselves, while knowing that it is through engaging in the pursuit of truth with others that we find hope and the strength to work toward good for all.

### **Teacher Commitments**

Teacher Education Programs at Berea College seek to prepare teachers who will manifest the values and commitments, the understandings and knowledge, and the skills and abilities necessary to cultivate the disposition of judicious inquiry in themselves and in their students. We believe that it is teachers' values and commitments which direct their work with students in the classroom. We seek evidence in all prospective teachers of the following commitments, and we seek to nurture and extend these commitments through every facet of their preparation:

- Teachers should be committed to the value of all individuals as unique, responsible, and worthy human beings.
- Teachers should be committed to the intellectual, social, emotional, artistic, physical, and moral growth of all learners.
- Teachers should be committed to the worth of knowledge and to the value of all ideas as worthy of consideration and reflection.
- Teachers should be committed to role of inquiry and to reasoned discourse in the search for truth and wisdom.
- Teachers should be committed to the value of judicious and compassionate action in relationships with other human beings and with the environment.
- Teachers should be committed to an ethic of service through teaching that extends beyond the classroom.
- Teachers should be committed to the understanding and value of practices rich in dialogue that construct meaning from culturally diverse perspectives, especially with respect to the articulations of pedagogies and school culture.

To enact these values and commitments in their classroom and school communities, teachers must be both knowledgeable and skillful. They must seek continually to deepen and broaden their understandings of children, of content, of teaching, and of learning, and they must be able

to act on those understandings in humane, educative, and efficient ways. To guide our students' development toward these ends, we place our work within the context of Berea College's mission and vision.

# **Teacher Education Program Goals**

Berea College was founded on the personal responses of individuals to the needs of the most vulnerable members of society. Its founding was an expression of personal and communal integrity, bringing together knowledge, values, and action. It required a willingness to risk giving one's life in service, to risk being taught by the other, to risk choosing humility. The founders were committed to creating a place where relationships would be based on kindness rather than domination, on human kinship rather than power. Our work today is based upon those values.

As we struggle to comprehend what it means for people to live in kinship together, we can also strive to extend the boundaries of the human community. We can ask ourselves what it might mean for people to live with all things as stewards of the earth's household. We can ask ourselves whether a call to responsibility can be found in everything.

Democracy comes alive when questions about how things should go on become real. If education is to serve democracy, then the charge of those who propose to educate becomes that of helping to bring such questions to life.

Our purpose is to bring these questions to all of our students, whether their intention is to serve as teachers in our schools or to serve our world in other ways. Our work is framed by the belief that a liberal education offers the foundation for human beings of all ages to witness our essential humanity, to contemplate our shared responsibility for living justly in this world, and to act for good, with humility, through our chosen means of service.

These beliefs, together with the knowledge and faith that support them, permeate the goals listed below for all our students.

- 1) As people who have found joy in life, learning, and teaching, and who trust in the power of human relationships to call forth inner strengths, teachers strive to relate to their students in ways that free both teacher and learner to engage in joyful, responsible and disciplined inquiry into the workings and possibilities of our world.
- As people who value difference in human interactions, ideas and nature; who understand that identity is shaped by diversity, experiences, and environment; and who recognize that we must all work together to build a more just society, teachers create learning environments based on democratic principles which ensure that multiple perspectives are valued and considered, and which encourage students to speak from their own diverse experiences, to give value to those expressions, to explore their own diversity, and to bring those experiences to the broader community.
- 3) As people who appreciate the interconnectedness and interdependence of our world, teachers seek to add depth and breadth to their general knowledge as well as in-depth understandings of the content they teach. These teachers provide experiences that allow

learners to recognize and value the interconnections that emerge as they explore their unfolding world.

- As people who have experienced the power and beauty of creating their own knowledge and constructing their own understandings, and who are committed to enabling their students to share this experience, teachers create dynamic learning environments providing both direct and vicarious experiences oriented around student interest and characterized by active inquiry, liberal use of time, self-correction, and engagement with others.
- As people who see the promise in every person and believe that individuals have the ability and duty to create a more just society, teachers attend to each and every student by planning, implementing, and assessing meaningful learning experiences and systematically engage in critical reflection and self correction.
- 6) As people who understand and appreciate the capacity of tools—informational, technological, physical and intellectual—to extend the reach and enhance the quality of work to be done, teachers incorporate appropriate tools into their own work-lives and integrate their use into the instructional environments they create with learners.
- A people who are committed to thinking together with others in the search for truth, wisdom and beauty, teachers create learning communities grounded in inquiry where students come to understand the critical role of communication in inquiry and where they feel the confidence that grows with the development of their ability to participate in a community of inquiry.

These goals inform all teacher education courses and experiences. They have been aligned with Kentucky's Teacher Standards (Kentucky Education Professional Standards Board, 2008) and guide us in the structuring of experiences both in our college classrooms and in student teaching to prepare our graduates to create content-rich, inquiry-focused communities in their own classrooms consistent with Berea's mission and with their own values and commitments.

### **Teacher Education Dispositions**

We take the foundation of our understanding of teacher dispositions from Dewey's (1922) discourse on *Habits*. As our Program Goals discuss people in general who are moral and just, the goals then delineate the characteristics of excellent teachers. We believe the kind of teachers our students become is dependent on the kind of people they are first. An individual's characteristics of temperament, attitudes and/or inclinations, taken together, define what we refer to as dispositions. Dispositions undergird and direct our acts as human beings. There is no one "right" set that assures teaching success, however, teaching is first and foremost a relationship between teacher and student. Therefore, it is crucial to take relevant dispositions into account when assessing a given candidate's readiness to teach other human beings. The best teachers—those worthy of the name—are noted both for the dispositions they reveal as they work with students and other educational partners and for their commitment to support the development of positive dispositions in their own students.

Because dispositions are so vitally important in the development of excellent teachers and because they can be strengthened and built through careful consideration and on-going reflection, careful examination of dispositions is an on-going feature of all aspects of Berea's Teacher Preparation Programs. Each professional course is designed to address one or more Education Program Goals as well as the dispositions we believe are necessary to meet these goals. A spiraling curriculum allows students to explore the goals and related dispositions over time, with increasing depth as they progress in their programs.

The development of candidate dispositions is carefully monitored throughout the program in order to provide appropriate support as students grow from their first education course toward student teaching. Because teaching requires continual attention to on-going development, the emphasis on dispositional assessment and goal setting helps to create a habit of mind that supports candidates' becoming critical thinkers, life-long learners, and self-directed managers of their professional development.

We seek evidence that all prospective teachers exhibit the following foundational dispositions, and we seek to nurture and extend these dispositions through every facet of preparation. These dispositions are clearly tied to Berea College's Great Commitments and to the Teacher Education Programs Goals.

- Exhibits behaviors that indicate a commitment to introspection and reflection.
- Exhibits behaviors that indicate a commitment to the value of relationships with others and to diverse perspectives, and with nature. (Includes an indicator assessing candidate's commitment to fairness).
- Exhibits behaviors that indicate a commitment to life-long learning for self and others.
- Exhibits behaviors that indicate a commitment to the growth and development of all learners (includes the following indicators related specifically to all children learning: "Displays understanding that in an appropriate and enriched environment all students can learn." And "Recognizes and accepts own responsibility to engage all learners."
- Exhibits behaviors that indicate a commitment to the value of agency for oneself, others and in the community.
- Exhibits behaviors that indicate a commitment to engage in critical, creative, and ethical thinking.
- Exhibits behaviors that indicate a commitment to the role of inquiry and to reasoned discourse.

- Exhibits behaviors that indicate a willingness to take initiative and assume responsibility.
- Exhibits behaviors that indicate understanding of professional work environments and expectations.
- Exhibits behaviors that indicate a commitment to an ethic of service that extends beyond the classroom.

The goal of education (at every level) is to help people become reasonable, just, compassionate, and creative human beings who will seek to determine what is of constant value in the world and to live accordingly. The education programs at Berea College seek to prepare individuals who will manifest the values and commitments, the understandings and knowledge, and the skills and abilities necessary to cultivate the dispositions of judicious inquiry in themselves and in their students.

# **Community of Inquiry: An Overarching Commitment**

The Teacher Education faculty's shared passion for and commitment to the beliefs and values expressed above have led us to consider carefully how we can best create a learning environment where these are lived, modeled, and explored among ourselves and with our students. It is our belief that the ideas and ideals that we hold most precious can, taken together, best be realized through the adoption of our understanding and interpretation of the *community of inquiry* as the overarching organizational concept.

Throughout our programs, we focus on teaching and learning in ways that will help our students experience, participate in, and learn to create powerful learning environments deeply rooted in the community of inquiry. This commitment begins in EDS 150 *Introduction to Education: Thinking about Learning, Teaching and Schooling,* the first teacher preparation course required of all teacher candidates. In this class, students are introduced to the teacher education program goals, teacher dispositions, and the conceptual framework. They are also helped to deconstruct and reconstruct their notions of what it means to teach and learn, what is important to learn, how we know what is learned, and a variety of other questions designed to help students develop habits of mind and dispositions that will serve them throughout the program and in their teaching careers. Students revisit these key concepts and their relationship in various contexts in subsequent classes.

A representative segment from a handout in EDS 150 scaffolds the meaning of the conceptual framework for students as follows:

A community of inquiry allows everyone to participate in constructing education. Thus, in a typical classroom, the teacher is not the only one who possesses knowledge; each student possesses profound knowledge, which the teacher must draw on to help build a learning community in the classroom. Note that a community involves different people who might come from various backgrounds, nationalities, ethnicities, and who might also have different views of knowledge and the world, etc. Therefore, in order for the community to educate itself, it has to

draw on the experiences and abilities of all in the community to sustain itself well. Importantly also, a community must draw on other communities to help enrich itself. This same principle applies to a classroom; the teacher must understand the experiences and abilities of all students in order to help every student learn. In addition, what happens in a classroom is not disconnected from other classes, the rest of the school community, and wider communities beyond the school.

What follows is a deep explanation and discussion of our interpretation of the community of inquiry as we understand and live it.

A community of inquiry provides opportunities for people to practice being supported and supporting others in their efforts to find truth, construct understanding and gain wisdom. It takes courage to embrace uncertainty. Thinking with others about things that matter can help a person find the courage. Wisdom is required to engage the complexities we encounter as we discover the world. People can decide together how to bring their best insights to bear on a common purpose. Engagement in community inquiry gives people a way of finding what is of significance in our lives, our thinking, and in living together and with the world, and making the notion of community ever more inclusive. Thinking together, and thinking about our thinking, can enable us to gather "the others"—the people who seem unlike us, and the herons, mountains, air and water—into our community, and letting these become community for us. In doing so, we become more able and willing to commit our lives to create a more just world for the whole community on and even beyond the earth. As we consider the whole of society, the earth, including living and non-living things, inquiry can become a lens through which we learn to live in harmony and with peace and justice. Inquiry has the ability to expand our notions of community and lead us to greater understanding of how our world is deeply connected and intertwined. Inquiry is dynamic, and our roles ever changing, so we must be students, teachers, followers and leaders simultaneously.

Inquiry can begin in many ways, as when wonder, curiosity, reflection or inspiration sparks a need for renewal of an inquiry laid down, reconstruction of a thought or understanding or even for transformation of ourselves as thinkers and doers that cannot be resisted. Inquiry can be conducted in relative isolation, as through engaging in research of various kinds, or in the company of others conducting the same or a similar inquiry.

For example, no thinking goes on trying out hypotheses, making connections, recognizing where connections are well made and where they need reconstruction, without thinking about the process and outcome of our thinking effort, without reflection. Still, each thinker is unique. One may rely on the construction of images to direct or help express the outcome or some part of an inquiry, another will shape an analogy, another will lean heavily on the thinking of others for inspiration and direction in making thoughts to help direct and express the sense they make of some part of the world.

The process of inquiry, and the skills and tools that aid in that process are inseparable. For example, we can self-correct a belief or an understanding, or refine a skill only insofar as we are willing to let go of certainty or complacency, and to engage in the work of re-constructing that idea, belief or understanding. The ability to take a leap of faith is vital to inquiry, as is the ability

to make good judgments; the ability to undertake an examination of the unexpected is important in the process of good thinking, as is the ability to be honest in assigning it significance relative to the context of the inquiry being undertaken.

Finding one or more questions that are central to a given inquiry is part of the inquiry process. One may begin inquiry with a well-articulated question, or simply in response to a dissatisfaction that is hardly formed, even in one's own thinking. *Trust* that the inchoate parts of a particular problem can be related in many ways, some of which will emerge as more relevant as parts of a particular solution, is vital for the ability to continue a truly open-ended inquiry. Such trust is gained with practice, and practice is supported by having good models and good companions who have similar commitments to realizing similar hopes. Communities of inquiry emerge out of the need for such support.

The ability to self-direct inquiry increases with development of the ability to trust one's mind to find and make connections, to judge appropriately, and to find the supports needed to see an inquiry through to a satisfactory end. Self-directed inquiry is *not* synonymous with inquiry conducted by oneself. One inquires *for* oneself, but not *by* oneself. Personal inquiry is shaped with tools inherited from one's culture, such as the concepts its dominant language or languages facilitate, ideas about truth, stories that model ways to inquire, and the logical systems within the world-views that dominate actions and beliefs within the culture.

The work of the self-directed and purposeful inquirer is to select "a few good voices. . ." to take from among all the voices that support different ways of being, valuing and thinking. The process of shaping a way of looking at the world is the process of shaping ourselves in that inner sanctum where values get integrated into vision, courses of action get determined, ways of encountering difference and engaging with ambiguity or complexity get refined. The "good voices" help shape judgments that, in turn, help the thinker construct or sort out subtleties of meaning and significance in the world and in thinking.

We believe with Vera John-Steiner (1985), that inquiry can begin when wonder, curiosity, reflection or inspiration, need or disquiet sparks the need for a reconsideration of an inquiry laid down or never undertaken. Inquiry can be conducted in relative isolation, or in the company of others. In his article, "From Absolutism to Experimentalism," John Dewey (1930) offers an account of personal inquiry sparked by a disquiet that helped him move to regarding knowledge as dynamic rather than static, as a process requiring that the inquirer return again to "read" what was understood. This understanding of inquiry is fundamental in our thinking about inquiry and community, in the connection we see between justice and community.

Even when it is conducted with method and intent, the process of inquiry follows an irregular course, much like a sailboat tacking into harbor, with trying, undergoing and trying again with something new added into the thinking effort. It is also possible for inquiry to be a repeat of an earlier inquiry, whether of one's own or that of another. One can be fairly certain of the outcome of such an inquiry, as long as that outcome is held hypothetically throughout the process of coming to know. Such mental acts (Lipman, Sharp and Oscanyan, 1980) as withholding judgment, looking in order to see, listening in order to hear in the process of inquiry allow a search for truth to guide the construction or transformation of our understandings of ourselves, other people, the language and relationships central to any discipline, and of the world. In this

model "truth" need not generate from a desire for finality nor does it need to be left in isolating relativism. Rather, the truth of many generates the world's complexity and provides the impetus for dialogue (Levinas, 1978) which is the only means through which justness can take shape.

The process of inquiry that leads to a more just way of living is demonstrated by Robert Coles (2010) in his account of interviews he conducted with some of the people whose beliefs, commitments and actions gave rise to the Civil Rights Movement in the United States. Coles describes the internal dialogue he underwent in enabling himself to inquire, rather to confirm his presuppositions, when talking with such people as young Ruby Bridges, her family, the mother who broke the white boycott against integration, and one of the first African American youths to integrate an institution of higher education. Coles' training in psychology had provided him with a language and understandings designed to enable him to interpret the words and actions of these people, to reveal "hidden" truths that even they could not see in themselves or the situation. However, Coles realized that it was only by withholding the judgments his profession had prepared him to make in advance of engaging with these people that he found he could hear and see the truths provided by their words and actions, and by their reflections on their own thoughts and actions. With the help of his wife and others who had influenced his thinking, Coles taught himself to "read" people and situations as one might read a sacred text through an exercise of exegesis. By making efforts to enable the "texts" to speak for themselves in his interviews, his work became inquiry, a search for their truths. Coles' inquiry enabled him to represent the people he interviewed and their situation fairly in his reports. In turn, his reports influenced thinking that helped shape more just policies, social action and interpersonal relationships.

Justice requires inquiry that is conducted by people who are determined to conduct a just inquiry. How does a teacher encourage a learner to decide to inquire justly, and to use just inquiry for living justly?

Both teacher and learner must decide whether the work they do together is understood as the work of discipleship or pilgrimage (Johnson, 1995). Education as pilgrimage includes, but is not reducible to, teaching based on constructivist principles, an individualized approach to active learning, and a commitment to engaging the learner with the social and natural worlds inside and beyond the classroom through the various disciplines.

The inquiry of beginning readers provides a good analogy for thinking about inquiry as pilgrimage. Each reader learns to read through engaging in similar processes—sounding out words, connecting one thought to another idea, making sense of parts of the text in relation to other parts of it, as words to sentences, sentences to paragraphs and paragraphs to text. The process of learning to read is also unique to each reader, as when a text triggers a memory somehow for one, or causes another to conjure up an image or stirs an emotion associated with something that is taking place in the life of yet another. Learning to read is a process involving both critical method and creative activity.

Likewise, exercises of creativity and of critical judgment are inseparable in constructing an idea. Ideas are made by forming hypotheses, creating connections, recognizing where connections are well made and where they need reconstruction and by finding questions. No idea grows without thinking about the process and outcome of one's thinking effort, without reflection and self-

correction. And, each thinker is unique. One may rely on the construction of images to direct or help express the outcome or some part of an inquiry, another will shape an analogy, while yet another will lean heavily on the thinking of others for inspiration and direction in making thoughts to help direct and express the sense they make of some part of the world. Inquiring requires taking the "leaps of faith" in bringing inchoate aspects of a question into a more coherent whole that, in turn, enable the learner to think and to act in new ways.

The process of inquiry is like the journey of a pilgrim going from the known into the unknown, gaining and becoming something new. A pilgrim sets out on an open-ended journey with perhaps provisions for a first day, a first step for an inquirer. He or she must *learn to trust* that the inchoate parts of a particular problem can be related in many ways, some of which will emerge as more relevant parts of a particular solution. This trust is vital for the ability to engage in an open-ended inquiry. Trust in the world and in one's own mind is gained with practice, and practice is supported by having good models and good companions who have similar commitments to realizing similar hopes. Communities of inquiry emerge out of the need for such support. The ability to self-direct inquiry increases with development of the ability to trust minds, including one's own, to find and make connections, to judge appropriately, and to find the supports needed to see an open-ended inquiry through to a satisfactory point.

The process of inquiry and the skills, tools and dispositions that aid in that process are inseparable. For example, we can correct any belief or understanding, or refine any skill only insofar as we can become willing to let go of certainty or complacency. While the ability to make good judgments is crucial in the process of inquiry, the willingness to undertake an examination of the unexpected is also important as is the ability to assign significance to what is found. The dispositions required for engaging in questions are similar to those required for "living the questions," (Rilke, 1929), for *keeping* knowledge dynamic rather than static, inclusive in reach rather than conclusive in judgment.

Inquiry is shaped with tools inherited from one's culture, such as the concepts its dominant language or languages facilitate, ideas about truth, stories that model ways to inquire, stories that preserve wisdom gained and refined over generations, and the logical systems within the world-views that influence actions and beliefs within the culture. The work of the learner is to find influences, shape values, construct ideas, form understandings that will support further development. The learner takes from among all the accessible voices offering ways of knowing, being, valuing and thinking and extends his or her access to others' thinking about the world and how it is good to live, in order to further transform understandings, wisdom and ways of looking at the world.

The process of shaping a way of looking at the world is the process of shaping ourselves in that inner sanctum to which the pilgrim's journey begins and returns, where values get integrated into vision, courses of action get determined, ways of encountering difference and engaging with ambiguity or complexity get refined. Here too, the influence of others can help shape judgments that, in turn, help the thinker construct or sort out subtleties of meaning and significance. Kieran Egan (1997) offers the idea of a "fullness" rather than completeness of understanding. This idea builds on Dewey's gift of the dynamic character of knowledge, and provides a helpful way of thinking about helping a learner gain the "depth" of knowledge necessary for engaging

responsibly with the complexities of his or her world. The model of a "full" understanding includes gaining knowledge through the body, through philosophic inquiry, through story, through emotional engagement and through following the ironies involved in a given inquiry through to their implications for realigning belief.

Si Johnson, a Tohono O'Odham elder, tells a personal story that provides an example of how understanding can influence the resolve to think and act with justness.\* When Si was a young man undergoing problems common among many newly married people, his father-in-law asked him for help in building a cattle fence. Before the first morning of work had ended, Si's father-in-law asked Si to leave and not come back until his mind and heart were right for fence-building. Si had spent hours trying to "make" the pieces of dry wood gathered from the desert floor fit solidly together. His efforts had yielded a portion of fence that was unsightly and ineffective.

When Si returned at the end of that day, it was to ask his father-in-law what it meant to set his mind and heart right for fence-building. The elder explained that Si had been acting with a lack of respect for the desert that had provided the wood, for the uniqueness of each piece of wood and how it would fit with other pieces, for himself as a fence-builder, for the cattle the fence would protect, for the family the cows would help provide for and for the children who were yet to come. Si could not act with respect because he lacked understanding of the interdependence of everything. His lack of understanding showed in the unsightliness of the fence. His disrespectful work produced a fence that could not exist in the world as a fence.

His father-in-law expected nothing less of Si than to build his life with understandings and with the sense of agency that would compel him to act on his understandings. More than that, he was attempting to help Si develop the ability to respond to the influence of the wood, his desert place, his family and unborn children that Wendell Berry describes in *Imagination in Place* (2010, p. 98). He expected Si to think and act *justly* as a fence-builder, as a family member and as a part of the interdependent community that sustained the plants that gave rise to the wood, the cattle that would be protected by the fence, the fence-builder who would give rise to the fence and the children who would learn how to live, under his tutelage.

Like Si Johnson's father-in-law, we see our task as being threefold: to help our students leave us with the knowledge, skills and dispositions to learn, to teach, and to act as agents for change in the world. We work with the faith of pilgrims, beginning from the hopes we hold most dear and journeying with our students insofar as we can, through the shaping of their own hopes and visions. We hold ourselves responsible for helping enable our students to help their students develop, through any field of study, the understandings that will support them in developing and carrying out commitments to work, in their turn, for a more just world.

\*The use of the story as a way of looking again at the concept being developed was influenced by Emannuel Levinas, (1978). *Otherwise than being or beyond essence*. (Lingis, Alphonso, Trans.). Dordrecht and Boston, MA: Kluwer Academic Publishers.

# Section III: Professional and Content Knowledge Base

It is your responsibility to change society if you think of yourself as an educated person.

-Baldwin, 1988, p. 11

Fundamental to Berea's Teacher Preparation Programs is the belief we are all responsible for the creation of a just society both within and beyond the classroom. As teachers, we believe the model of democratic principles, fairness, and responsibility we create in the classroom prepares learners to live democratic, principled lives in which they are prepared and committed to action. In our thinking, we are reminded that the Preamble to the United States Constitution promises *not* a perfect union but instead offers only the creation of "a more perfect union." Acknowledging its imperfections, then and now, calls upon us as citizens to continually work *toward* the creation of an ever-more perfect union. We need only to look to Berea's founder, John G. Fee, to see a citizen who took this charge to heart, and we need only to look at Berea College to see the impact one person can have in creating a more perfect union.

Creating classrooms, communities, and worlds steeped in principles of justice depends on teachers' willingness and ability to engage in careful attention, reflection and self-correction. Teachers who teach for justice must be willing to require of themselves the personal discipline of reflecting on what is learned and correcting thoughts and ways of thinking in order to be able seek truth, understanding, and knowledge for themselves and with learners. A teacher who teaches for justice must be committed to democratic principles. But that, in and of itself, is insufficient. These teachers must also have a depth and breadth of general and content knowledge and be skilled in planning, assessing and reflecting for teaching and learning. They must understand learners' developmental needs and be deeply and wholly committed to teaching every learner, accepting each where she is and supporting her as she reaches toward new levels of challenge and understanding. Learners' abilities to develop agency, to become critical citizens, and to work as fairness and equity requires thoughtful, knowledgeable, and responsible learning communities.

The knowledge base for Berea's Teacher Education Programs are broad. It includes scholarship and research that informs the thinking and practice of program faculty, and works that are central in the professional education of prospective teachers. It includes institution-particular works which describe the history and commitments of Berea College as well as scholarship and research in general education, in the academic specialties, and in professional education. The knowledge base also encompasses the personal experiences brought by individual students and faculty to our common inquiry, and understandings created through that inquiry.

# Breaking the Chain of Uninspired and Uninspiring Teaching

Training in the right principles the wrong way means in effect to create a split between the moral and the intellectual training of the teacher. To the extent that their training is effective...they will teach as they have been taught, not as they have been taught about teaching.

-John Dewey, 1952

As Dewey warns us, we learn to teach as we were taught. Based on our own experiences as students in elementary school, high school, and college, that too often has meant the perpetuation of poor teaching. Through the leadership provided by Ernest Boyer (1993), John Goodlad (1997, 2004), Maxine Greene (1989), Vito Perrone (1991, 1998), Patricia Carini (2001), and Theodore Sizer (1992), and others we have been helped to understand that hope for the improvement of education rests in a concerted effort which engages faculty, students, and administrators at all levels of schooling and in all kinds of schools. The problems in education are too deep and too pervasive for change for the good to be accomplished by any one group or at any one level. We owe a considerable debt to these educators for their wholehearted and longstanding engagement in educational reform at all levels. Their work gives us direction and hope.

In trying to help prospective teachers break the chain of uninspired and uninspiring teaching, it is essential that we strive to demonstrate good teaching ourselves. It is equally important that we make our own teaching and learning processes transparent and that we engage our students in conversations about our own teaching—that we make our goals and purposes clear, that we dissect our strengths and challenges with them, especially when our teaching sometimes goes awry. In that way, we model the self-correction, reflection, and openness we encourage in our students. As Samuel Wineburg (1995) reported, when he shared his own pedagogical failure with his students such disclosure was often powerfully educative for all concerned. It can also help to create a true community of inquiry. And if, as Dewey insists, teachers must be students of teaching as well as students of their subjects, we must all become willing to acknowledge how uncertain we often are about what we do in our classrooms. Philip Jackson (1990) and Parker Palmer (1989) both suggest, there seems to be a fundamental insecurity inherent in the practice of teaching which can stand in the way of our becoming better at doing it. We contend, for the reflective, self-correcting teacher, it can also be the motivator of continual self-directed professional development. In this connection, Goswami and Stillman's (1987) early work with the concept of teachers as researchers into their own practice has demonstrated over and over the power of careful, thoughtful self study in teachers' continuous development.

## From Goals to Preparation

In this discussion, we will explore each of the goals that guides our preparation of teachers. These goals, like teaching and learning are complex and overlapping, creating the need for complex understandings. Our purpose is not to encode narrow understandings in candidates but rather to encourage them—and us—to fully engage each goal and make meaning of the goals and their implications within their own understandings based on their personal reflections, values, and educational purposes. Therefore, the discussions that follow provide a general understanding of goals but are designed to leave interpretations open.

The discussion of each goal is presented in two sections. The first section outlines a general conceptual understanding of the goal's meaning and implications. The second identifies the theories and thinkers who have informed our understandings. As an educational unit, we are committed to living these goals in our own individual and collective practice and lives and to preparing our students to live them in their lives and practice, as well.

Finally, these goals demonstrate the relationship we see between the beliefs, values, and dispositions of teachers and the educational choices those teachers make. Stated plainly, we believe the kind of people we are determines the kind of teacher we will be. For this reason, each goal is divided into two sections. The first describes the dispositions and values that identify the kind of people we hope to be and that we hope our students will become. The second identifies the kind of teacher we believe these people will become. It should be clearly stated here that we do not want our students to be "like us." Rather the goals are broadly stated, in part, to recognize the diverse meaning and interpretations we might each make based on each individual's experiences and personal values

#### Goal 1

As people who have found joy in life, learning, and teaching, and who trust in the power of human relationships to call forth inner strengths, teachers strive to relate to their students in ways that free both teacher and learner to engage in joyful, responsible and disciplined inquiry into the workings and possibilities of our world.

# **Conceptual Understanding**

Education is the point at which we decide whether we love the world enough to assume responsibility for it and by the same token to save it from that ruin, which, except for renewal, except for the coming of the new and the young, would be inevitable. An education, too, is where we decide whether we love our children enough not to expel them from our world and leave them to their own devices, nor to strike from their hands their choice of undertaking something new, something unforeseen by us, but to prepare them in advance for the task of renewing a common world.

-Hannah Arendt, 1977

Breaking the chain of uninspired teaching requires of us joy—joy in our personal lives, in our learning, and in our teaching. It requires that we experience the exhilaration of forming new ideas from old, of seeing the world around us in new and exciting ways, and of experiencing the sense of eudemonia that rises from working diligently to achieve. We must be able to recognize, to work for, and to celebrate opportunities to teach for advances in equity and justice, and be committed to each and every learner. Coupled with this joy is a deep commitment to a belief that both teachers and learners have inner strengths that—when called forth, nurtured, and allowed to thrive through trusting relationships in safe and welcoming learning communities—can provide unexpected power and confidence to meet challenges, make meaning, and stand by their principles.

As people who experience and value joyful experiences and deep and personal relationships as an aspect of teaching for social justice, teachers must create learning environments in which relationships are central, in which the trustworthiness of themselves and others and of the world provides a foundation for exploration and meaning making, and in which support in learners' search for personal truth, beauty, understanding, and wisdom are relished. In this way, the learning environment creates opportunities for teachers and learners to fully engage subject matter, to explore it in unique ways, to celebrate differences, and support one another as they inquire into the workings of the world and their roles in both understanding and influencing the possibilities for change.

Our shared understanding of this goal places certain requirements on the Teacher Education faculty and on our programs. Because most of our students have not experienced the kinds of teaching, learning and classrooms we value, we believe we have a special responsibility to teach and interact with our students in ways that provide a lived experience that will serve as a model for the kind of classrooms and relationships envisioned in this goal. It requires that we help our students—and ourselves—to find joy in professional education classes and in all of our work together. It requires us to find joy in our collegial relationships, and in our community. It requires us to build strong personal relationships with our students, to be their advocates, and to join with them as they search for *their* truth, *their* beauty, and *their* wisdom. Our students need to see us genuinely celebrating their victories with them and know on a deep level that we believe in their inner strengths—often more than they may—and to trust that we want to help them to develop strategies to overcome challenges.

Moreover, it is important for our students to "notice" and reflect on the impact our personal joy in teaching, learning, and working with them individually and collectively has on their learning and how it frees them to be who they are with us and with each other—and how it frees us to be who we are with them and to work together as learners. In addition, we want them to notice and reflect on the impact joyful learning has on them—and us—as learners and as people.

Finally, through our teaching and learning together, we are responsible for helping our students to not only experience kind of the environment called for in this goal, but also to understand the impact such teaching, learning, and relationship will have on learners in their classrooms. Bridging the experience and the theories, research, and practice, then, becomes a significant element of our professional education courses and experiences.

# **Knowledge Base**

Many of our greatest joys in life are related to our learning. Unfortunately, most of that joyful learning takes place outside school.

-Steven Wolk, 2008

Preparing teachers—and *being* teachers—who value the dispositions and behaviors identified in this goal requires us to seek deep understanding of the theory and research that informs and helps us to frame the meanings we make. When teachers construct classrooms based in trust, communication, and caring, when relationships are true and deep, and when excitement and high expectations are taken for granted, learners are safe to explore ideas, find courage, and grow in individual and exciting ways. In the following sections, we will explore the theory and research related to what we believe to be the outcomes of such learning environments.

To a large extent, we are guided by John Dewey's body of work and especially, here, his in thinking about emotion and learning. Dewey believed "the defects and mistakes of teaching and learning generally...are associated with failure to secure emotional participation" (Dewey, 1989, p. 15). Long before Howard Gardner and others began to speak of multiple intelligences, Dewey posited:

There is such a thing as passionate intelligence, as ardor in behalf of light shining into the murky places of social existence, and as zeal for its refreshing and purifying effect. The whole story of man shows that there are no objects that may not deeply stir engrossing emotion (Dewey, 1932, p. 52).

If Dewey is correct, teaching practice that assumes that intelligence and learning are almost entirely intellectual miss the mark. Emotion plays a central role in learners' willingness to deconstruct and reconstruct understandings.

In addition, learners' ability to make the leaps necessary to make new meanings, try out unique ideas, and see new possibilities is tied to imagination and, as Dewey believed "the connection of emotion and imagination is not accidental" (Dewey, 1989). And what we understand about knowledge construction helps us to understand that imagination is a key component of the risks posed by letting go of what we think we know and creating new understandings. This connection between emotion and learning has been identified by contemporary researchers and theorists. In these discussions, the relationships between environments that support positive, appropriate, healthy relationships with children and adults are shown to significantly influence positive emotional states that, in turn, contribute to learning success (Enyde, De Corte, & Verschaffel, 2006; Turner, 2006; Jenson, 2005). Research has also shown that emotion drives our attention in ways that impact learning. When learners experience negative emotions, learning can be stunted and can have long-lasting implications. For example, learners who have negative emotional experiences with math are apt to report that they "can't do" or hate math. Conversely, when learners experience positive emotions in connection with learning or doing, their confidence grows, their memory is better able to integrate new learning into old, and they are more apt to take risks related to constructing new knowledge.

After his classic research of schools across the nation and the report in *A Place Called School*, John Goodlad (1984) wrote "boredom [in schools] is a disease of epidemic proportions...Why are our schools not places of joy?" We fear that such a study completed today, more than a generation later, would find contemporary schools even more joyless than in the past. With the increase in high-stakes testing and test-driven teaching, with the pressures that brings to teachers and learners, with the decline of culturally-based content and its replacement with standardized curricula, and the measurement of accomplishment residing in competition, empty "self-concept" programs, and the elevation of quick right answers over thoughtful applications of learning, schools seem to be growing increasingly more joyless for both teachers and learners (Kohn, 2011; Ohanian, 2001). Decrying the fragmented use of technology in the classroom, Papert (1998) argues that emphasis on "easy" results in poor learning.

What is worst about school curriculum is the fragmentation of knowledge into little pieces. This is supposed to make learning easy, but often ends up depriving knowledge of personal meaning and making it boring. Ask a few kids: the reason

most don't like school is not that the work is too hard, but that it is utterly boring. (Papert, 1998, p. 17)

Yet, we know that "the hearts and minds of children and young adults [and we would say, teachers] are wide open to the wonders of learning and the fascinating complexities of life" (Wolk, 2008, p. 8).

I am not using the word joy as a synonym for fun...Having fun...brings us joy but children don't need to be having fun in school to experience joy...According to my dictionary, joy means, "The emotion of great delight or happiness caused by something good or satisfying. Surely our schools can do some of that. Joy and learning—including school content—are not mutually exclusive (Wolk, 2008, p. 10)

Calling for us to accept our "responsibility to educate and inspire the whole child—mind, heart, and soul" (p. 10), Wolk emphasizes the need for experiences that require learners to rise to meet standards and demonstrate faith in their capabilities. "Having control over our work and using our minds and hands to create something original give us a tremendous sense of agency. There is a special pride in bringing an original idea to fruition" (p. 11). This kind of rigorous challenge in a safe and supportive environment can give rise to a exhilarating sense of pride and excitement that results in dedication to quality, appreciation for what has been learned, and desire to know and do more—and joy. This kind of joy grows out of having worked hard, met high standards and surprising oneself with the quality of the outcome. Aristotle referred to this joy as eudemonia and we see that once experienced, the satisfaction and pride are sufficient to cause learners to seek the feeling over and over again.

Another significant outcome anticipated through the successful implementation of the ideals expressed in Goal 1 is the environment it creates for the development of resiliency, a quality which can sustain human beings through deeply trying times. Henderson and Milstein (2003) point to the crucial role of the environment in the development of resiliency. Defined as "the capacity to spring back, rebound, successfully adapt in the face of adversity, and develop social, academic, and vocational competence despite exposure to severe stress or simply to the stress that is inherent in today's world" (p. 7), the authors identify several school environmental factors that support the development of resiliency. These include promoting close bonds, using "highwarmth, low-criticism...interactions," expecting high and realistic expectation for success, encouraging goal setting and mastery, and appreciating unique talents of each individual (p. 9). In these environments, learners can develop—with support from a caring facilitator—the individual characteristics that indicate resiliency. Among these are sense of humor, being "good at something," holding a positive view of one's personal future, internal locus of control, ability to form positive relationships, autonomy, and independence (p. 9).

Resiliency researchers suggest that most resiliency traits can be learned (Higgins, 1994) under the right conditions. A primary condition for the development of resiliency is providing caring and personalization including "unconditional positive regard and encouragement (p. 13). In order to help learners develop resiliency through the close bonds and deep relationships that grow out of the ideals articulated in Goal 1, teachers must have a "resiliency-building attitude" that conveys hope and optimism, an "attitude that says, 'I believe you can make it, you are at-promise rather than at-risk" (p.17-18). Ultimately, building resiliency is about building relationships so

strong and trusting that learners discover strengths that neither they nor their teachers are fully aware of. These strengths can emerge when teachers develop deep, authentic bonds with individual learners. Moreover, it is unrealistic to expect learners to become resilient if their teachers are not. Demonstrating resiliency in our daily lives and encouraging it in learners frees both teachers and learners to see past difficulties with hope and to move forward with "a sense of wonder in learning" (p. 31). Or, as one of the main characters in Rodman Philbrick's movie, *Freak the Almighty*, explains it, "our past influences who we are, but it doesn't determine who we will become."

We understand that, while all students benefit from an environment that fosters resiliency, those who face substantial life challenges are supported most. As teachers there is much in students' lives we cannot change, but we can change what happens in our classrooms. Time and time again, Berea College students tell stories of resiliency that clearly point to a school environment that lead to their desire to become teachers. Sometimes these are stories of their having been "saved" by a teacher who cared about them or believed in them. Caring, then, is essential. This has been reinforced by a number of recent studies (North, 2009; Anthrop-Gonzales and DeJesus, 2006, Dance, 2002,). For example, Janelle Dance reported a common characteristic of students' favorite teachers was "the ability to convince students that they genuinely care" (2002, p. 75).

Caring involves stepping out of one's own personal frame of reference into the other's...Our attention, our mental engrossment, is on the cared-for, not on ourselves. Our reasons for acting, then, have to do with the other's wants and desires and with the objective elements of his [or her] problematic situation. (Noddings, 1984, p. 24)

As all things in learning environments support or do not support social justice, so too does the creation of a learning environment that would grow naturally out of Goal 1's application.

North (2008) provides additional insight into the theories underlying this goal. In her discussion of "relational literacy," she "denotes processes that develop student-teacher relationships centered on mutual trust, respect, and responsibility sharing." These relationships can contribute to a classroom community in which "relational reciprocity is honored and every individual's dignity is protected." It is important, North points out, to understand that relational literacy is not explicitly taught, but instead is modeled. She writes, "Students see and feel teachers treating them with respect and, in turn, leave their classrooms with a paradigm of compassionate human relationships" (p. 107). In her view, and in ours, these relationships are significant in teaching for justice because when we fail to recognize and value the cultural and linguistic assets students bring with them into the classroom, we send unintended messages that respect is reserved for those with power. In addition, our inability to see "hinders those students' ability to appreciate their own value, intelligence, and potential as political actors" which has been identified as critical to creating broad-based transformative social movements (Anyon, 2005, p. 179).

Parker Palmer (2007) has said "good teaching cannot be reduced to technique but is rooted in the identity and integrity of the teacher." While good teaching may take many forms, "good teachers are authentically present in the classroom, in community with their students and their subject." These teachers possess 'a capacity for connectedness' and are able to weave a complex web of

connections between themselves, their subjects, and their students, helping their students weave a world for themselves." These connections are held...in their hearts—the place where intellect, emotion, spirit, and will converge in the human self—supported by the community that emerges among us when we choose to live authentic lives."

We see the applications of the development of relationships in the work on many contemporary teachers. These teachers understand that careful observation, reflection, and an unwavering belief that all children can learn creates classrooms where learners engage the content with joy and eagerly search for meaning in the curriculum, in their lives, and beyond the classroom walls.

One of these teachers is Paula Rogovin who tells rich stories about her students' exploration of the community as a learning laboratory and her classroom as a laboratory for democracy. "We need to believe in the empowerment of children. Then we need to find ways we can make that happen" (Rogovin, 2004, p. 7). Her detailed account of "making it happen" and creating a classroom where "it's a joy being in school" (p. 21) provides a lens through which we can see the implementation of teaching practices based in inquiry and designed to support the development of young activists prepared to cling to and stand up for themselves, for their beliefs, and for others.

### Goal 2

As people who value difference in human interactions, ideas and nature; who understand that identity is shaped by diversity, experiences, and environment; and who recognize that we must all work together to build a more just society, teachers create learning environments based on democratic principles which ensure that multiple perspectives are valued and considered, and which encourage students to speak from their own diverse experiences, to give value to those expressions, to explore their own diversity, and to bring those experiences to the broader community.

# **Conceptual Understanding**

Dichotomized thinking prevails so things are either one thing or another, good or bad, right or wrong, and so forth. It is this perspective that makes it easy to divorce ourselves from history, to move only in one direction at a time, to use only a singular perspective to see and understand the world around us.

-Heroes and Holidays, 1998, p. XIV

God has made of one blood all the peoples of the Earth.

-Berea College Motto

We hold our students and ourselves to high standards in coming to understand, value, and support individual difference in the ways we relate to the world, to one another, and to our environment. We prize these differences and the contributions they make to richer, more

complete, and more joyful lives, communities, and societies, and for their contributions to the creation of a more just world. We understand that regardless of our similarities, our individual identities are shaped by our experiences in and with the world and those who inhabit it. And we understand that regardless of our differences, we share common commitments to family, learning, and living in an equitable society.

When we become able to create the kinds of relationships within ourselves, with each other and with the world that grow from careful attention and reflection on our experiences, we become able to learn about ourselves and the world through the differences we encounter. And we learn to recognize, value, and reflect on the differences inherent in worldviews, eras, regions, mountains, water or rocks. We come to know ourselves, others, and the world as more complex and interdependent components of the whole. The recognition of complexity and interdependence helps us to reject quick "right" answers, stereotypes, conventional knowledge and taken-for-granted notions and wisdom. In this process, we work to develop dispositions that allow us to think thoughts and explore beliefs that we do not ourselves hold. We, like Aristotle, believe "it is the mark of an educated mind to be able to entertain a thought without accepting it." Entertaining thoughts, exploring them, challenging them and letting them challenge us allows us to understand and care about one another in new and deeper ways.

As we create the learning environment in our programs, we believe we must provide experiences and examples of our own abilities to work effectively with, respect, and value all students. To this end, we have worked together to create a series of carefully constructed, interwoven, and developmental experiences infused with reflection and focusing on strengthening dispositions, building knowledge, and developing diversities-related teaching competencies. We expect our students and ourselves to demonstrate the ability to teach with, about, and for diversity and to teach every learner. We believe teachers must: understand, value, and honor the diversities that make up their classrooms, schools, and communities; have a knowledge base including effective teaching practices that support the learning and social/emotional growth of each learner; include in the curriculum content that teaches, honors, and celebrates diverse experiences, contributions, histories, values, cultures, and perspectives; and understand the necessity for and have the skills required to build a classroom community steeped in diversities and democratic principles.

Therefore, throughout their preparation, course work is designed to engage our students in increasingly complex developmental experiences designed to: deepen their knowledge and understanding of diversities both in the classroom and in their daily lives; develop the skills necessary to meet their students' individual needs, build positive learning environments with respect for diversities and their core relationship to democracy; and present content that enables learners to take advantage of the opportunities of living in a dynamic and ever-increasingly diverse world.

Our approach to this preparation begins with dispositions interwoven with knowledge, skills, and experience in order to help our students understand what diversities are, why they are important, and their complexities. We also emphasize students' responsibilities as teachers in a democratic society. To make the subject matter more manageable, it is organized around three overlapping categories including *who we are* (the diversities we are born to: e.g. race, gender, sexual orientation), *how we learn* (the diversities that impact our ability to construct knowledge: e.g.

learning quickly or slowly, visual or auditory learning strengths, physical challenges), and *how* we understand (the diversities formed through experiences: e.g. perspectives). Together, these categories include the wide array of diversities our students will meet in their classrooms and in their lives.

As students come to understand the many kinds of diversities that will exist in their classrooms, we emphasize the need for them to develop the skills necessary to teach in these complex learning environments. We prepare students for four strands of work regarding these three diversities. The first strand is teaching in ways that support student learning regardless of what array of diversities exist in and among their students (we call this teaching with diversity: e.g. teaching students with learning challenges or reducing the impact of gender bias on learning). The second strand includes the ability to engage the content in ways that teach about each of these diversities in order to expand knowledge and understanding and build the dispositions that will prepare their students to live well in a diverse and democratic society (we call this teaching about diversities: e.g. teaching students multiple perspectives of historical events). The third strand addresses teaching in ways that help students form positive dispositions toward those who are different from themselves and to appreciate their own diversities (we call this teaching for diversity: e.g. modeling the value of diverse contributions in the classroom). These three strands together form the fourth, candidates' ability to build a learning environment that models the importance of diversity in a democratic society.

Our students' ability to meet the expectation of working effectively with all learners is dependent on their dispositions. Therefore, we pay very careful attention to students' dispositions and their development over time. Students who do not possess the dispositions compelling them to meet each learner's needs and/or to respect individual difference are supported in their development through ongoing dispositional assessment and individualized programs designed to assist in their development of the dispositions necessary to be effective teachers of *all* children.

We understand, however, that dispositions are not, in and of themselves, sufficient to prepare our students to work effectively with all learners. Students must also learn about people who are different from themselves; increase their knowledge of the histories, cultures, and contemporary lives of peoples often not included in traditional studies; and understand the perspectives of those marginalized in contemporary society. To this end, in addition to relevant General Studies courses required of all Berea College students, our students have a variety of directed learning experiences designed to deepen their knowledge and understanding of diversities in the classroom and beyond.

Our students must also develop specific skills necessary to teach in highly diverse environments and to build the rich, democratic classrooms *all* children deserve. These skills are identified and taught developmentally in the program coursework (e.g. planning for multiple learning preferences, scaffolding difficult concepts, teaching for student engagement). Because experience alone does not guarantee understanding, reflection is emphasized at every level of the preparation programs. These reflections are designed to help our students make sense of their experiences and identify learning opportunities and areas in need of further development. Reflection also helps our students make explicit connections between knowledge and skills and their ability to create appropriate learning environments.

Taken together, these experiences prepare our students to recognize the array of diversities in their students and to work effectively with all students. The emphasis on continual growth is monitored through the rigorous assessment of growth and development toward this end.

# **Knowledge Base**

From a multicultural perspective, all students should receive an education that continuously affirms human diversity—one that embraces the history and culture of all racial groups and that teaches people of color to take charge of their own destinies... With regard to teaching, a multicultural perspective assumes that teachers will hold high expectations for all students and that they will challenge those students who are trapped in the cycle of poverty...to rise above it.

-Grant, 1990, p. 31

We all should know that diversity makes for a rich tapestry, and we must understand that all the threads of the tapestry are equal in value no matter what their color.

-Maya Angelou

We live in interesting times where the richness of our tapestry becomes more evident almost daily. Perhaps never before have we struggled so mightily to understand ways of life, cultures, and values different from our own. And never before has it been so important to do so. We understand that differences in gender, race, culture, sexual orientation, religion and many other diversities both impact and contribute to our daily lives as citizens, teachers, learners, and community members. Also more than ever before we are required to prepare teachers who can help children and young adults develop the skills, traits, and dispositions necessary to live well in our world of growing diversity and to reject stereotypes, resist marginalization of others and recognize and challenge institutional oppression. We understand that teaching respect for individual differences requires more than the superficial acknowledgement that differences exist. It requires us to identify and teach for the richness, beauty, and possibility that emerge when diversities are appreciated, valued, and celebrated—and to understand our own cultures and values within the context of a world larger than our own. This requires us to teach for multicultural understandings, perspectives, and justice. Parwkh (2006) posits that multicultural education is an education for freedom essential in today's polarized and troubled world. Moreover, he insists, "diversity fosters new sources of energy, creativity and imagination, and enables us to see the strengths and limitations of our own way of life" (2004).

Moreover, we understand that our curricular, instructional, and materials choices as well as our classroom interactions, routines, and responses convey intended and unintended messages about our values, expectations, and standards. Our emphasis on understanding multiple messages of instruction and life in the classroom rises from Dewey's warnings about the "hidden" learning that results from the choices we make about our teaching and interactions with children.

Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is studying at the time. Collateral learning in the ways

of formation of enduring attitudes, of likes and dislikes, may be and often is much more important that the spelling lesson or lesson in geography or history that is learned. For these attitudes are fundamentally what counts in the future...What avail is it to win prescribed amounts of information about geography and history, to win the ability to read and write, if in the process the individual loses his own soul? (Dewey, 1938/1963, 48-49)

This warning is further illuminated by Dewey's (1933) belief that teachers serve as models for their students—whether they choose to or not. Therefore, "everything the teacher does, as well as the manner in which he [sic] does it, incites the child to respond in some way or the other, and each response tends to set the child's attitude in some way or the other" (p.59). As a result of our understanding of the significant of messages we send—intended and unintended—we are deeply committed to preparing teachers who have the ability and desire to engage in careful reflection about the multiple messages our instruction and actions deliver.

As we strive to teach in ways that help students value and teach for difference, we are reminded that outside our classrooms, differences may create obstacles for a vision of life in a democratic society. Robert Coles' (1997) study of children in crisis shows us that underneath the very real cultural differences that distinguish rich from poor, black from white, and rural from urban, lie hopes, fears, and joys which have a striking commonality. But stark social and economic inequalities conspire to smother the hopes and joys of poor children, and the fears of poor children in urban neighborhoods are often for their very lives. As Jonathan Kozol (1991) makes clear, these children's promise, choked by poverty and low expectations, goes unrecognized and unaided by the very educational institutions charged with their care. Through his work with older students, Mike Rose (1989) shows how poverty, low educational expectations by teachers, and parents who are themselves uneducated and disenfranchised, combine to affect the lives of students who grow up "on the boundary" of traditional culture.

Scholars such as Gloria Boutte (1992), Courtney Cazden (1986), Lisa Delpit (2006), Paulo Freire (1970, 1985), Shirley Brice Heath (1983), Gloria Ladson-Billings (1994), Vivian Paley (2000), and Victoria Purcell-Gates (2007) have addressed the language and cultural experiences which diverse children bring to the classroom. In her longitudinal ethnographic study of children's language development in three different southern Appalachian communities as well as in her later work, Heath shows that teachers must be linguistically knowledgeable in order to be able to be educationally responsible. Cazden's work on the nature of stories told by inner-city children reminds us that stories are vital in every culture, but their structure and the ways in which they are recounted are diverse. Purcell-Gates shows through the eyes of a young boy and his family the ways in which educational institutions can work against a child's cultural strengths to create problems rather than to educate. Like Boutte and Ladson-Billings, Lisa Delpit reminds teachers to take care that the pedagogical methods used to help young black learners attain literacy fit their needs. Like Paley, Delpit emphasizes that white teachers must be willing to seek out, listen to, and learn from what parents of diverse children and adolescents can teach them.

Scholars in other areas have also guided our thinking in understanding the challenges of teaching for diversity. Carol Gilligan (1982, 1997), has helped us to rethink the role of gender in human development. Belenky et al. in *Women's Ways of Knowing* (1997) suggest that connected

teaching best meets the needs of all students, not just women. Eschewing the widely-held dichotomy between subjective and objective, Parker Palmer (2007) asks us to seek the courage to teach in ways that reach the spirits as well as the minds of our students. Mary Rose O'Reilly (1998) argues for the importance of radical presence in the classroom, for leaving room for the silence that signifies human beings in thought together. As our conceptual framework implies, we find this emphasis on language in community, on thinking together with care, supportive and fruitful.

Much has been written about democracy in classrooms and schools. Although we may strive to create democratic learning environments, classrooms cannot be democracies, at least not in the truest sense of the word. Nor would we want them to be. As Dewey pointed out, placing the learner at the center is necessary. However, he did not intend to imply, as some have interpreted, that "the teacher is to stand off and look on" (1933, p. 160). Instead, the teacher should be a "copartner and guide in a common enterprise—the child's education as an independent learner and thinker" (1934, p. 10). Dewey spoke directly to the notion that children, left to their own devices, will "ultimately flower and bear fruit" (1934, p. 4). To Dewey (1938), educators have a moral responsibility to take an active role in planning, leading and facilitating learning. It is, therefore, the responsibility of teachers to make decisions regarding the planning, implementation of lessons, and the assessment of their students.

Since teachers clearly have certain responsibilities and must make certain decisions that cannot be voted on by their students, efforts to call classrooms democratic when they are, in fact, not leads to serious misunderstandings of democratic principles and purposes. When we reduce democracy to quick votes or "majority rules" we leave out important aspects of democratic ideals that reduces democratic decision-making to an oppression of the majority.

Too often the child learns...to equate democracy with two ideas: doing what you like if it apparently hurts no one else and following the will of the majority. Granted, these concepts are not inconsistent with a true democratic ideal, but by themselves they are tragically insufficient and tend to drag democracy down to its lowest common denominator.

Democracy must foster the inclusion of all voices in the community, and democratic principles can be taught and practiced in classrooms. This "practice" of living in a democratic environment can support the development of students prepared to live well as active, reflective citizens in a democratic society. In many ways, this preparation lies at the heart of our approach to multicultural education. James Banks posits that "reflective citizen action is...an integral part of multicultural theory. Multicultural education views citizen action to improve society as an integral part of education in a democracy. It links knowledge, values, empowerment, and action." Banks (2008, p.9).

Finally, we must prepare our students to think deeply about their options and to be critical consumers of "professional development" programs. For example, quick-fix professional development programs have rapidly increased in recent years. Among these are programs that offer easy answers to difficult, complex, and vexing teaching and learning challenges. One such program developed by Ruby Payne has swept the nation since the advent of No Child Left Behind. Based on the notion that a "culture of poverty" exists and that "poor people share

monolithic and predictable beliefs, values and behaviors" (Gorski, 2008), Payne's panacea suggests that teaching poor children to develop middle class behaviors and values will "cure" their ills. Instead, Gorski points out that "to be the best teachers they can be for all students, [teachers] need to challenge this myth and reach a deeper understanding of class and poverty" (p. 32).

We see the applications of ideals articulated in this goal in the work of contemporary teachers who demonstrate their understanding that seeing injustice is not sufficient. Linda Christenson provides one such example for us and our students. In *Unlearning the Myths that Bind Us: Critiquing Cartoons and Society*. Christenson (2007) provides rich descriptions of her efforts to teach students to recognize what Dorfman (1983) called the "secret education" taught through children's movies and cartoons. As she points out, it is easy to help students grasp the intellectual understanding of the messages of "servant-master relationships or the materialism that makes women appealing to men" (p. 7). Moving students to action is a more difficult challenge:

But what am I teaching...if I end the lesson there? That it's enough to be critical without taking action? That we can quietly rebel in the privacy of the classroom while we practice our writing skills, but we don't really have to do anything about problems we uncover, nor do we need to create anything to take the place of what we have expelled (Christenson, 2007, p. 7).

Through the work of teachers like Christenson who openly struggle with their efforts to "read the world through a lens of justice" (p. 7) our students and we can see the practical applications and the difficult realities of teaching in the ways this goal calls upon us to teach.

# Goal 3

As people who appreciate the interconnectedness and interdependence of our world, teachers seek to add depth and breadth to their general knowledge as well as in-depth understandings of the content they teach. These teachers provide experiences that allow learners to recognize and value the interconnections that emerge as they explore their unfolding world.

# **Conceptual Understanding**

The curriculum should equip students to "talk back" to the world. Students must learn to pose essential questions. Who makes the decisions and who is left out? Who benefits and who suffers? Why is a given practice fair or unfair? What alternatives can we imagine? What is required to create change?...[S] tudents should have opportunities to question social reality. Finally, student work must move outside the classroom walls, so that scholastic learning is linked to real world problems.

### -Rethinking Classrooms

With recognition of complexities such as those in relationships among desires and needs, traditions and possibilities, differences and commonality, comes the need to decide what is of greater or less significance to us and why. Goal 3 addresses the relationship between knowledge and the wisdom that comes with learning how to find and use knowledge to address the complexities that emerge as we strive to create a more just world. Experiences of awe, like those that come with recognitions of truth or beauty, and of the joy that comes with insight and understanding can free the mind and heart from the need for certainty, *even as they increase the urgency of creating a more just world.* Such experiences are essential to developing the courage needed to assign ourselves the responsibility for striving to live justly, and to understand what the terms of that responsibility must be.

The focus in this section is on those aspects of our knowledge base that pertain directly to the development of professional and content knowledge. As the assumptions underlying our conceptual framework make clear, learning requires the construction of understanding in dialogue with others and within ourselves by connecting the new to what is already known. We also believe that the process of coming to know is developmental; it takes place over time and requires reflection. Each time a learner encounters a question or problem previously met, or a book previously read, the response is different because the learner is different. If the response is unchanged, it is unlikely that the learner has learned anything of relevance since the first encounters. But if those previous experiences are truly educative, in the Deweyan sense, they affect not only what each learner comes to understand at a given moment, but also their subsequent experiences.

Learning for the joy of knowing is, of course, a highly prized disposition. However, for teachers, a key responsibility is learning in order to more fully engage students in content and to have a rich body of knowledge that allows us to see connections beyond the obvious and to teach in ways that bring innate complexities within learners' grasps. The more we know and understand, the more opportunities we will see to make connections and the more able we will be to seize teachable moments, and the more richly we will be able to help learners see the authentic interconnections in the content and in the world. If we see content as a series of predetermined pieces of knowledge to be transmitted, teaching and learning becomes narrow and students expect that what is learned in one subject or lesson will have little to do with what is learned in the next.

It is here, then, that we understand the importance of asking ourselves why we are educating children. What is the purpose of schooling, and what are our purposes? Since we can't teach everything, what is important to teach? And what will we teach *about* what we teach? All content is complex—or has the potential for complexity. But too often, content is simplified in order to force it to fit into a designated time slot or sequence or to make understanding "easy". Other times, it is "boxed" or "prescribed", sometimes even scripted, in order to keep learners "on the same page at the same time." So we must, in our work with pre-service teachers, prepare them to resist the quick and easy and, instead, embrace the complexities, the abstractions, and the messy overlapping of content.

In our work with our students, we emphasize the importance of knowing for the sake of knowing, and the importance of curiosity and autonomy. In this process, we work closely with students to help them move away from the quick right answers that come from "doing school" and, instead, engage in inquiry, exploration, and discovery. So as we emphasize content knowledge for all our students, just *knowing* is not enough. We support and scaffold students' risks in making connections, finding new ways to look at old knowledge, and asking themselves what is important to *do* with new understandings. It is in this process that we aim to help our students become teachers who model self-directed, self-initiated, reflective engagement. Moreover, we emphasize the need to "dig deep" into content to find intriguing and surprising connections and, in their planning for teaching, to ensure the same degree of discovery and excitement for their students.

Now and again during a class discussion a student will ask us wistfully, "How are you able to make so many connections?! It seems that whatever we say about anything you're able to connect it to something we'd never think of. Once you say it, we can see the connections. And we value them...We just can't see them like you can." We will likely respond with a smile and an explanation about experience, age, and practice. And we are always pleased that our students are able to recognize and honor the interconnectedness that exists between human beings and the world on which we depend.

# **Knowledge Base**

The key to distinguishing the knowledge base of teaching lies at the intersection of content and pedagogy in the teacher's capacity to transform content knowledge into forms that are pedagogically powerful yet adaptive to a variety of student abilities and backgrounds.

-http://www.intime.uni.edu/model/teacher/teac2summary.html

Plainly put, [students] conceive of history as an ordering of already known facts into agreed-upon chronologies. They think history is sealed off both from the lives of ordinary people and from the questions about how the particulars of everyday life become generalizations of historical knowledge. For many students, only a fiction writer shapes and interprets—not a historian. And above all, they think they are the consumers, not the makers, of history. It is there: fixed, final, and waiting to be read.

-Thomas C. Holt, 1990

A major element in our knowledge base is the subject matter preparation of teachers. Beginning broadly, we appreciate Karen Zumwalt's (1990, 2007) thinking on the wide curricular knowledge needed by teachers at all levels, and Frances Klein's (1991) close examination of the elementary curriculum. We have been influenced by the work of Lee Shulman (1989) and his colleagues in their continuing efforts to understand subject matter disciplines more deeply than as a mere collection of facts, generalizations, and rules that are frozen and inerrant. Their exploration of the dynamics of subject matter knowledge in teaching, especially their focus on the role in "good" teaching of substantive structures, syntactical structures, and beliefs about subject matter, offer rich potential to the education of teachers.

As a result of this understanding, much of our work is centered on engaging our students in content in ways that cause them to deconstruct their understanding of how we come to know, what is important to know, and what it *means* to know. Our students, like most, come to college having been successful in "doing school" (Monte-Soto, 2011, p. 260). In these cases, learners are taught that knowledge is fixed and static and "good" instruction includes lecture, textbook work, and multiple choice tests. Sometimes ineffective group work or crossword puzzles and word searches break the monotony of what Goodlad called "the mediocre sameness" that plagues schools. In this process, we are preparing students to present a highly contextualized, challenging, interpretive, and boundar- less content that fully engages students in "experiences" as Dewey has defined them, rather than "activities" strung together to teach narrow concepts and knowledge bits. "Activities" might be defined as "those tasks we pursue that do not demand serious intellectual engagement, nor do they require deep emotional involvement." Experiences, on the other hand, "deeply engage us, on both a cognitive and an affective level" (Wasserman, 2007, p. 292).

In *Experience and Education* (1936), Dewey outlines the criteria for "educative experiences". Not all experiences are educative, he explains. To be educative, they must be authentic, arouse curiosity, and lead naturally to new experiences. Creating these experiences is one of the teacher's most serious responsibilities.

It thus becomes the [responsibility] of the educator to select those things within the range of existing experience that have promise and potentiality of presenting new problems which, by stimulating new ways of observation and judgment will expand the area of further experience (Dewey 1936).

In a recent study of history instruction, Chauncey Monte-Sano poses the question that underlies our efforts in this direction.

Before they can engage in disciplinary ways of thinking, students must understand that historical knowledge is constructed through inquiry and analysis. But if students and conventional instruction convey that history is fixed, how can new teachers learn to *open up their students*' conceptions of history and foster historical thinking? (2011, p. 260) (Emphasis added)

In his discussion of this research, Monte-Soto points out that that novices tend to believe history is a set of facts and dates to be memorized and tested. It is, after all, "what happened." But as teachers of history, we must think more deeply than that. History is, instead, an "interpretive discipline in which one asks questions and constructs accounts based on interrogation of historical artifacts" (p. 261). Because deliberating among interpretations and weighing the merits of different pieces of evidence is so central in the study of history, there are specific teaching strategies that support the development of critical consumers of the content. In order for teachers to teach history well, they must "identify students' conceptions of history, confront them, and develop pedagogical approaches that build off students' incoming ideas in order to advance their content understanding. This same approach is appropriate across the curriculum, as studies of effective science (i.e. Hill, Ball, & Schilling, 2008) and math (i.e. Franke & Kazemi, 2001)

instruction attest. And what we know about how students learn technology is very similar. As Kathleen Cushman points out, "Students learn to be good at technology because something catches their interest and they keep pursuing it." As she reports, a student explained, "It's the hardest fun you will ever have...It's bringing your own ideas to life" (2011, p. 80).

In the face of this understanding of the importance of building learning experiences on the foundation of students' thinking and interests, we understand that there is a gap between what we know about teaching and what often happens in schools. In our efforts to equip our students to rise above the pressures they will no doubt face to conform to prescriptive teaching practices, we focus on this "opening up." While we understand that compromises are often required and preservice teachers should learn to consider and choose carefully what they choose to reject and what they choose to accept, we also strive to prepare teachers who will teach *around* obstacles in order to teach in principled ways. Our concerns here are that teachers remain intellectually involved decision makers with the autonomy and authority to introduce and explore content in ways that make sense in their contexts. Without this freedom, they become what Youngjoo-Kim calls "teachers who deliver the curriculum rather than teaching students to create their own curriculum." Such an approach, he suggests, makes "their roles more akin to a waiter than a cook, a mail carrier rather than a letter writer, or a grocer rather than a food producer" (2011, p. 56).

When teachers understand their duty is to disseminate prearranged curriculum content, there is less spontaneity in the classroom and less time for serendipitous, teachable moments. In a classroom where only authorized curriculum is offered, teachers and learners start to accept that topics not included in the official knowledge are not worth class time and that discussing them is digressing from real teaching...Learning opportunities that allow teachers to teach beyond the limits of their imagination are erroneously labeled as time wasters and counterproductive (2011, p. 56).

Guided by the need to help our students develop both the capacity and agency required to teach as Youngjoo-Kim suggests requires us to ensure that they understand the value of their creative and innovative thinking and their imaginative leaps in connecting content to students, to their community, and to the world. In this context, we find Bruner's (1990) discussion of the spiral curriculum to be a very helpful framework in which to view our curriculum. In Bruner's view, complex concepts are introduced to novices at the beginning of their education and then revisited in increasing depth and in varying contexts at later points. Consistent with this thinking, core concepts in teacher education—concepts such as knowledge, understanding, vision, discipline, interest, community, culture, inquiry, diversity, assessment, goals, strategies, lesson planning, and so on—recur as subjects for inquiry throughout our curriculum so that students can, over time and with the benefit of developmental field and clinical experiences, construct an increasingly complex understanding of their meanings.

Barb Blaney, a teacher on an isolated reservation in South Dakota, illustrated her understanding of and commitment to teaching through experiences and interconnectedness when she engaged her students in a year-long study of their school building as a springboard for exploring the world. "Everything is there and the kids *want* to know about it," she explained.

Her "textbook" was a series of "field trips" in the school. The questions that arose from these trips served as the curriculum for integrated study of social studies, science, current events, and math. The stories and interviews that grew out of the trips provided the foundation for literacy learning.

The importance of what they were learning, its value in their lives and connections to their place, the degree of decision making they engaged in, and its importance to others in their community was immediately obvious. As her students explored the impact of events occurring far from the reservation, she also helped them find the impact their daily lives on their remote reservation had on the world beyond. Through her understanding of subject matter, standards, and experience-based teaching and learning, she was able to see connections that opened the world to her students. In very real ways, she brought the world into her classroom and, through her use of technology, brought her classroom out into the world.

#### Goal 4

As people who have experienced the power and beauty of creating their own knowledge and constructing their own understandings, and who are committed to enabling their students to share this experience, teachers create dynamic learning environments providing both direct and vicarious experiences oriented around student interest and characterized by active inquiry, liberal use of time, self-correction, and engagement with others.

### **Conceptual Understanding**

The ways we organize classroom life should seek to make children feel significant and cared about—by the teacher and by each other. Unless students emotionally and physically safe, they won't share thoughts and feelings....Classroom life should, to the greatest extent possible, prefigure the kind of democratic and just society we envision and thus contribute to building that society. Together, students and teachers can create a "community of conscience."

-Rethinking Classrooms

The Teacher Preparation Programs take an imperative from the history and commitments of Berea College. In committing ourselves to work for a more just world, we also commit ourselves to bringing a liberal arts approach to education. Goal 4 addresses the self-shaping aspect of learning when learning experiences are dynamic rather than passive; when inquiry is actively engaged in with others and when the disposition for self-correction is viewed as evidence of caring and thinking. Experiences of freedom to shape oneself as a learner; support from community, peers and teachers in process of self-shaping as knowledge, understanding and wisdom are being gained; the cultivation of inclusiveness as dispositions of mind and heart; the centrality of hope in the creation of vision, and a search for wisdom in concert with others are characteristic in a liberal arts education. Such experiences offer students opportunities to reflect on the relationship between engaging the world freely and the freedom to hold themselves

responsible for supporting others in achieving the same freedom as being integral aspects of a more just world they can help create.

There is a feeling of power that arises from creating knowledge—from exploring original ideas, at least original to us, and finding ourselves suddenly or over a period of time experiencing the dawning of a new way of seeing. The joy that arises from such meaning making can be a central motivating factor in classrooms and in life. It is the responsibility of teachers to create opportunities for their students to experience the creation of new ways of seeing and to help them identify the processes that led them from their old ways of knowing to their new meanings.

Guided by the notion of joyful learning, teachers work to develop teaching strategies that engage their students, that capitalize on authentic student interest, and that are rich and meaningful opportunities to stretch their thinking and invite risk taking and problem solving. In this process, it is important to understand and develop a deep understanding of the practices that offer students possibilities to inquire and explore. It is also important to understand that there are both general teaching strategies and content specific strategies that enhance learning. Through the selection of appropriate experiences, dynamic and active learning environments allow time for students to make sense of new ideas and knowledge, to seek connections between two seemingly disconnected notions or knowledge bits, and to develop the habit of mind that compels learners to seek out connections. In order to appropriately match teaching strategies with individual learners, it is necessary that we understand how children develop, how knowledge is constructed, and the conditions that make learning memorable. In this context, we believe there is great value in "re-inventing the wheel" in that the problems posed and solved are authentic, the solutions are the result of hard thinking, and no one understands a wheel as well as its inventor. The power of that "invention" serves to teach learners that they have the power to think well, to act intelligently, and to solve problems that matter to them. When we provide shortcuts to understanding, choices that offer little autonomy, and quick easy answers we communicate low expectations and a lack of faith in the power of our students' abilities.

We are mindful of the need for our students to engage in the invention of wheels as they prepare to teach. To this end, we emphasize the creation of authentic teaching strategies, lesson plans, and curriculum materials. We have carefully aligned our course work to allow for continuous progress toward proficiency over the years they are engaged in preparation to teach. Just as we encourage them to fit their teaching strategies to learners' individual needs, so, too, do we create learning opportunities designed to meet their needs and interests. And just as we encourage students to provide developmentally appropriate teaching strategies, so too, have we developed a curriculum in which experiences are developmentally appropriate and lead naturally to new experiences.

## **Knowledge Base**

Teachers are often...impatient for their students to develop clear and adequate ideas. But putting ideas in relation to each other is not a simple job. It is confusing; and that confusion does take time. All of us need time for our confusion if we are to build the breadth and depth that give significance to our knowledge.

-Duckworth, 2006, p. 81

This Goal also speaks directly to the role of a teacher as a facilitator of learning. We begin our thinking here with John Dewey. Although he advocated placing the learner at the center, this concept did not mean that "the teacher is to stand off and look on" (1933, p. 160). Such a passive approach would, in his view and ours, be educational malpractice. Rather, Dewey saw the teacher as a "co-partner and guide in a common enterprise—the child's education as an independent learner and thinker" (1934, p.10). He believed educators have a moral imperative to take an active role in planning, leading, and facilitating learning. At the same time, he was clear that teachers should not take on the role of "experts." Instead, they assume a facilitative leadership role because of the wisdom and life experiences that allow teachers to see future connections and to deal with contemporary challenges. Therefore, it is imperative for educators to be actively involved in learning and connected to the learner; educators' duties are to use their experience and knowledge to take a leadership role.

To teach well requires much of us, that is evident. Often, however, we focus extensively on the content to be learned and give little thought to the processes by which learners can make meaning. As teachers, we must, as Colgan (2002) asks us, "trust the content and trust the minds of learners" (p. 1). If the content is rich and meaningful and if the lessons have purpose, learners will be caught up in learning making the teacher's priority following "the evolution of the [learner's] understanding and the engagement over time" (Duckworth, 2006, p. xi). Following learners thinking requires teachers to develop the ability to listen and observe as much as "to teach." As Duckworth (2006) explains, "We cannot learn anything about what children think if we signal to them what we hope they will say" (p. 162). Patience and faith in process are two significant components in a teacher's ability to "allow time for confusion."

When we allow time for confusion and exploration, learners can do the explaining. This allows the teacher to focus on finding out what sense the students are making (Duckworth, 2006, p. 184). To raise questions, to push learners to see where their answers hold up and where they do not hold up are central responsibilities of the teacher in this process. We create opportunities for meaning making and expansion of thought when we ask questions such as: What do you notice? What puzzles you? Can you show me? Where do you see that? What do you mean? Why do you think that? Asking, allowing time for thought, and exploring answers takes time but if we are to understand someone else's understandings, time is required.

A common criticism of taking time to construct understandings and explore meanings is that if we take time in one place, we will not "cover the curriculum." Duckworth (2006) has responded to this criticism by pointing out that a tall tower can be built quickly. However, the quickly-built tower will tumble easily. In contrast, while a tower built on a broad base takes longer to construct, it also provides a sturdier foundation and will stand longer. When we choose the quick and easy over the time-consuming and deep understandings, we prepare students to think of learning as narrow and quick rather than broad and complex. Learning requires confusion, or cognitive dissonance. It also requires failed ideas that are set aside and replaced by revised solutions: to fail frequently and to try again until success occurs. We often lament that we do not have time to "re-invent the wheel," meaning we should pick up the ideas and solutions of others rather than create new knowledge—or create the same knowledge in our own ways. However, Duckworth suggests celebrating the exploring of wrong ideas because a wrong idea "provides far

more depth than if one never had a wrong idea to begin with" (p. 70). Laura Thomas (2008) issued a challenge: "I challenge [educators] everywhere to allow time, space, and energy for wheel re-invention...[we need] the good sense to get out of the way of our newly invented, powerfully customized, beautifully crafted, brand-spanking new wheels" (p. 613) and let them do their work.

Dewey's ideas can also be seen in the work of constructivists, supporters of the integrated curriculum, and teaching strategies designed to bridge the classroom and community. As constructivists, we believe learners must make their own meanings from their experiences and their ways of understanding (Caine & Caine, 2008, 2001; Brooks, 2007; Marlowe & Page, 1998; Duckworth, 1978, 1996, 1997; Vygotsky, 1978; Kamii, 1985, 1991). In this way of thinking about teaching and learning students learn new ideas by integrating them into existing knowledge structures.

In their classic *In Search of Understanding* (1999), Brooks and Brooks identify four principles of constructivist teaching and learning that "help keep wonder alive, honor error, and foster justice." These include structuring lessons around big foundational ideas; posing problems of emerging relevance; valuing students' points of view, yet challenging their suppositions; and inventing teaching, while teaching, as we assess student learning.

To teach within a constructivist philosophy requires active listening to students' thinking, and the capacity and the power to make ongoing assessments of students' knowledge and understandings, and adjust curriculum accordingly. To teach and learn within a constructivist philosophy requires intellectual freedom for both teachers and students in order for learning to occur at the students' leading edge. This freedom allows teachers and students to construct unifying concepts within various disciplinary fields, and this learning environment unleashes the power of the students' minds (Brooks, 2006, p. 1).

Dewey's influence can be seen in today's most current and critical thinking about assessment and evaluation. In fact, his work has been cited often in the assessment and evaluation literature. He was particularly adamant about intellectual rigor and the process of creating curriculum experiences out of learners' interests and concerns. For Dewey, the notion of having to choose between rigor and learners' interest was a false one. Dewey (1933) pointed out that to understand what learners know requires, among other things, time, suspended judgment, a collection of evidence, determining what is and is not significant, and the ability to judge. In fact, being a "good" judge was critical in Dewey's perception of assessment and evaluation.

Grant Wiggins' classic work (2007, 1999, 1989, 1987) in assessment provides a more contemporary look at Dewey's foundational ideas of the role of assessment and evaluation. In a recent discussion of this work, Wiggins (2011) seems to call for caution as authentic assessment, performance tasks, and rubrics becomes more accepted in conventional teaching practice.

One measure of how far we've come in the last twenty years is that terms like authentic assessment, performance tasks, and rubrics have become part of the national dialogue in education...The challenge ahead is to safeguard the integrity

of the idea. Just asking students to "perform" doesn't mean the assessment is authentic...The goal of all schooling is transfer; the goal is not to get good at school and prove through assessment that you learned what was taught. On the contrary, in a truly modern assessment, the challenge is to look *forward*, not backward. We must determine if the student is ready for *future* challenges in which they must transfer prior learning. We should look at whether the student can draw creatively and effectively on their repertoire when handling a novel challenge, not merely determine whether they learned stuff (Wiggins, 2011, p. 63).

As teachers select teaching strategies, they must be cautious to ensure that students can demonstrate what they know and can do. Assessments, both formative and summative, should offer students genuine intellectual challenges and must be driven by the context in which the student and teacher work. To this end, we emphasize the development and analysis of assessments that not only tell us what students have learned but also create opportunities for students to learn in the process.

This Goal also speaks to the teacher's responsibility to understand learners, how they develop, and the connections between development and readiness. Understanding the predictable developmental progressions that students can be expected to progress through as they develop physically, mentally, emotionally, and socially allows teachers to plan experiences that take into account: the each learner's development capabilities and capacities; individual strengths and needs; and each learner's unique experiences both in and outside school. According to the North Central Regional Laboratory (2011), developmentally appropriate practices include: active learning experiences; varied instructional practices; balance between teacher and learner-directed experiences with the teacher acting as facilitator; and integrated curriculum (p. 1). In his classic *Creative and Mental Growth*, first published in 1947, Viktor Lowenfeld sounds a warning for what is lost when children's natural inclinations and developmental needs are thwarted.

There is little opportunity today for youngsters to dam up a stream, dig a tunnel to China, or build a tree house. The complete involvement of oneself in a project of a purely physical, sensory nature is rapidly disappearing. Paint-by-number kits and preplanned, precut projects have made art sterile (Lowenfeld, 1987, p. 13).

In many schools today, the packaged programs much akin to the paint-by-numbers sets Lowenfeld described long ago have also made schools sterile. Moreover, these prepackaged, scripted, "canned" programs have also all but eliminated the emphasis on matching teaching strategies and content to student interests, individual needs, and developmental levels.

[Education reforms] have resulted in younger children being taught material suitable for older children. First graders try to learn what third graders used to learn. Kindergartners and 4 year olds are doing first grade work. Teacher directed activity is more common. Children in kindergarten sit in reading circles and complete workbook pages, instead of engaging in active learning and meaningful play.

Some parents and some teachers... mistakenly think they help children by teaching them what they will learn in elementary school: letters, counting to twenty, spelling, and writing their names...Children suffer from stress related illnesses and school failure because of these inappropriate expectations. Parents, teachers and young children feel a sense of failure. Preschoolers typically eager to go to school are hating school. (Ohanian, 2002, p. 23)

In the face of the strong tendency to "standardize" both children and programs, some teachers continue to teach in ways that address the developmental needs of their students. An Ohio kindergarten teacher, Karen Hunter is one such teacher. From the hallway outside her classroom you can see children of varying abilities and skill levels working busily. Once inside, you might wonder where the teacher is. As you look around the room searching for her, you would notice that there is no teacher's desk and no "front" of the room. Instead, you would be struck by the room's activity and color and by the walls filled with children's original art. Around the room are a couch, a loft, and strategically-placed work areas, each containing shelves with neatly organized games, manipulatives, and books. In each area a small cluster of students is engaged in various forms of work. Everywhere children are busy. When you find the teacher, she may be sitting on the floor playing a game with a small group, listening to a child read, providing direct instruction to two or three children, or assessing an individual child's learning. Although you know there are children in the class with special needs and others who are working well above grade level, it is not possible to tell which is which based on groupings or engagement.

In this setting, *all* of Karen's students are engaging in developmentally appropriate learning. However, because of the nature of her instruction, children are not labeled or set apart based on their skills or talents. They are, instead, a community of learners, each engaged in experiences carefully planned to advance their learning in each dimension of development. Learners are confident and articulate and demonstrate self direction and autonomy—and at testing time, their scores are such that Karen continues to be permitted to reject the use of the reading and math programs others in her school use.

#### Goal 5

As people who see the promise in every person and believe that individuals have the ability and duty to create a more just society, teachers attend to each and every student by planning, implementing, and assessing meaningful learning experiences and systematically engage in critical reflection and self correction.

## **Conceptual Understanding**

Teachers entering the profession in the twenty-first century are motivated by all the traditional reasons for teaching—a desire to help, a love of working with the young, pleasant memories of one's own schooling, fun, the intellectual challenge, a passion for the knowledge one gets to teach, an opportunity to "give back"

what one has received, a paycheck for an honest day's work—the list goes on. But to these traditional reasons for teaching, many new teachers...will add another reason—teaching for social justice—teaching to change the world. --Oakes & Lipton, 2003, p. 430

Berea's Teacher Preparation Programs are deeply rooted in the belief that each person has the power and responsibility to work toward the creation of a more just society. We are reminded of the impact one person's vision, courage, and tenacity can have each day as we recall Berea's founder being pulled from his pulpit as he preached for social justice. We believe Berea teachers should nurture that sense of dedication to ideals, justice, and activism in themselves and in the learning environments they create. In environments where their students develop a sense of personal power, autonomy, and agency learners are prepared to live lives working for change. Seeing the promise for creators of a more just society in each person requires the creation of a learning environment steeped in rigorous thinking, development of understandings and dispositions, deep and broad knowledge, the ability to research and reason, and to reflect and self-correct.

Because we value the ability and dispositions to see promise in each and every child, and because we know that in a rich and appropriate learning environment all children can learn, Goal 5 addresses the need to create an environment where each child can be successful. Creating the environment calls on a teacher to plan rich and meaningful learning experiences designed to meet the individual needs of each student. Planning, then, becomes central and requires on-going assessment designed to provide the information necessary to build and modify these experiences.

We believe the "achievement gap" is a result of faulty planning, implementation, and assessment—or, perhaps more accurately, a mismatch of teaching approach and learner needs, desires, and interests. Often these gaps are created by low expectations, teaching for the tests, and the use of standardized curriculum with non-standardized learners. It is the teacher's responsibility to create learning environments where the needs, interests, and abilities of each child are anticipated, planned for, and met. Ensuring all children have opportunities for intellectual, emotional and academic growth requires teachers to know each learner, to plan for the deep learning of all students, and to assess the learning preferences, content knowledge, and progress using both on-going formative and summative assessments. Every child must be a full and contributing member of the classroom community and each child, regardless of abilities, must be seen as full members of the classroom culture.

An additional contributor to the achievement gap, we believe, lies in the failure of some to understand how children learn—and the development of programs and teaching practices designed without attention to how humans construct knowledge. Understanding that all learners construct their own understandings and that prior knowledge and experiences are foundational to new meaning making.

With this in mind, students in Berea's Teacher Preparation Programs are prepared to both accept the responsibility for all students' learning and to plan, organize, and teach in ways that support the development of all learners. There is a common mantra among certification students, "We don't teach some of the children all the time, we teach all the children all the time." Preparing to

teach all the children all the time requires students to develop the skills to plan in complex ways that include rigorous and important content presented in multiple ways. It also requires them to understand the role autonomy plays in developing good learners, and the role it plays in allowing teachers the opportunity to work individually with students.

Such planning and assessment requires reflection. Reflection brings a disciplined and purposeful way of thinking to our work as teachers. It allows and provides structure for us to step outside an activity or experience and carefully examine our thinking, practices and processes. It is essential that both faculty and candidates reflect on their work and thinking in order that they understand the processes and values that guide their decisions. The ideas, insights, and understandings that emerge through such intentional reflection are evident in the quality of the individual and collaborative decisions made by faculty and candidates.

We define reflection as the process of analyzing our actions, decisions, or products by looking at how they were achieved. It calls for examining and re-examining what we did, how it worked, what we think, what led us to think that way, and the connections between what we notice about this activity and similar experiences in the past. What we learn from the reflective process allows us to thoughtfully consider what we might do differently or do the same in similar situations in the future. When such self-questioning becomes a habit of the mind and of practice, we become better thinkers and problem solvers. Also, and equally important, we learn to predict and to anticipate problems that may arise in the future. Using our ability to reflect, we are then able to create strategies to address anticipated problems even before they arise.

Taking the time necessary for reflective thinking requires patience, tenacity, and self-discipline. But perhaps more than anything, it requires trust in the reflective process. It also requires that we take responsibility for the process and results of the decisions we make. A disposition critical for this model to work is a willingness to listen, observe, and consider the perspectives of others.

# **Knowledge Base**

If the student-written text is to go beyond the stories about generals and millionaires and queens and kings, teachers have to help their students, in one way or other, to discover and record the voices of the common men and women who reflect the real life out of which all history is made. This is especially the case in writing about minorities, as well as about women.

-Jonathon Kozol

As we consider the implications for Goal 5, we focus our attention in what may seem to be two directions—on understanding and meeting the challenge of the achievement gap and on creating rich, active, learner centered teaching and learning environments where students are active participants in their own learning and where real and meaningful choices support the development of curious, autonomous, learners. We, however, do not see these as "two directions." Rather, we believe the same attention to individual development, rich content, appropriate planning and instruction, and on-going assessment in a warm and supportive learning

environment will both bridge the achievement gap and help all learners to perform at the peak of their abilities.

As we consider James Banks' classic work on multicultural education in light of this Goal, we can see how careful attention to different ways of knowing can bridge help to the achievement gap.

An important goal of multicultural education is to transform the curriculum so students develop an understanding of how knowledge is constructed and the extent to which it is influenced by the personal, social, cultural, and gender experiences of knowledge producers. Organizing the curriculum around powerful ideas and concepts facilitates the development of teaching strategies and learning experiences that focus on knowledge construction and thinking skills (Banks, 2008, p. 89).

Research has shown that differences in "experiences and conditions" affect development and achievement. It has also illustrated that the in-school experiences are vastly different for low income and minority students. As reported in *Parsing the Achievement Gap II*, teachers tend to be less prepared and less experienced in these settings, teach larger classes, and have less access to technology and support services (Barton & Coley, 2009). It is precisely in light of these conditions that we prepare our students to teach each student in appropriate and meaningful ways.

As our schools have changed over the last two decades, they have faced growing trends toward becoming more segregated and experiencing increasing inequality in funding. In response, teaching materials have become more mundane, more scripted, and less related to students' individual cultures and contexts. As a result, poor and minority children experience "unequal access to...intellectually challenging learning" (Darling-Hammond, 2010, p. 14). There is additional evidence that a return to more challenging and individualized content and approaches will contribute to a diminished achievement gap. Darling-Hammond reported that the achievement gap began to close during the 1970's when "for a brief period, black and Hispanic students were attending college at rates comparable to with whites, the only time this has happened before or since" (p. 18). She also reports large gains in black students' literacy rates throughout the 70s: "Had this rate continued, the achievement gap would have been closed by the beginning of the twenty-first century" (p. 18). As a result, teachers must be prepared not only with the vision, desire, and will to educate each and every child, they must also possess the skills, dispositions, and knowledge required to teach in challenging situations.

It is difficult to overstate the significance of reflection in meeting the demands of preparing to teach and assess. We have been greatly helped to further our own understanding of the complex nature and role of reflection in teaching and learning through the work of educators and researchers like Kenneth Zeichner (1996), Donald Schon (1983, 1991), Alan Tom (1997), Peter Grimmett (1989), Gaalen Erickson (2003), Mary Diez (1990), and her colleagues at Alverno College, and Katherine Rasch (1999) and her colleagues at Maryville College. Reflection is essential if prospective teachers are to be able to sort through essential issues in their own education—such as the widespread but unexamined theory/practice dichotomy—so that they can

draw on the thinking of others both present and past as they consciously formulate their own philosophies of education.

Another philosopher who has strongly influenced us as teachers of teachers is Alfred North Whitehead. In his *Aims of Education and Other Essays* (1929a/1967), Whitehead emphasizes the dangers of "inert ideas," information which is taught to students without any context or purpose which would have meaning for them. As each of us struggles with the explosion of information in our fields, and with all that prospective teachers ought to know about the world in general and about their own special contents and pedagogy in particular, Whitehead reminds us that the construction of understanding takes time, and that we have to make hard choices if we are to help our students transform information into meaning which will truly inform their thinking and actions. Whitehead also helps us understand the moral aspect of education; that the ultimate goal of education is wisdom; and that wisdom comes not from the accumulation of knowledge but from the way in which knowledge is held:

Duty arises from our potential control over the course of events. Where attainable knowledge could have changed the issue, ignorance has the guilt of vice. And the foundation of reverence is this perception, that the present holds within itself the complete sum of existence, backwards and forwards, that whole amplitude of time, which is eternity (Whitehead, 1967, p. 14).

The ideas of other philosophers and scholars who have informed our thinking as teachers include Martin Buber's (1937/2008) understandings of the nature of the "I-Thou" relationship and the significance of conversation, and Nel Noddings' (2003) emphasis on caring, on stories that can save lives, and on the vital necessity of educating high school students for intelligent belief or unbelief. We appreciate Michael Polanyi's (1966/2009) explication of "tacit knowledge" and Noam Chomsky's (2006) work on language and mind. Simone Weil's (1986) elucidation of the crucial role of observation, holding back the self, and intellectual waiting in coming to know is important to us as we work with our students and with each other. We are influenced by Margaret Buchman's (1989) development of the idea that "careful vision" lies at the heart of teaching as both an intellectual and a moral enterprise. We have learned from Maxine Greene's (2000) critical understanding of the relationship among philosophy, the arts, and education; and from her emphasis, like Noddings', on the motive role of stories in informing our lives as human beings and as learners. Robert Coles (1989, 2010) is important to us for his stories as well, and for the way he publicly addresses his need to unlearn looking at patients as objects.

We have gained insight and perspective from the poetry and prose of Wendell Berry (2010), the Kentucky farmer and author. Through Berry's essays, novels, and poetry we have recognized the critical necessity of education both for a sense of place and about place. Toward these ends, we seek to teach for a disposition which values rootedness, simplicity, and place. In addition, David Orr (2005) has inspired us to consider all education, either through omission or commission, as environmental education. In this way, we are spurred to consider anew the possibilities within interdisciplinary curricula.

In the social sciences, there are a number of researchers and scholars whose work informs our thinking as teachers of teachers. Erik Erikson (1963) tells us that life may be conceived as a

series of challenges which can strengthen us and lead to wisdom if properly met; that human development takes place throughout our lives and involves mind, body, and spirit; and that our growth is greatly influenced at all ages by our relationships with others and our developing sense of self. Jean Piaget's study of children's cognitive development has helped us both directly and through the work of others—most notably Eleanor Duckworth, Margaret Donaldson, and David Elkind—to realize that we must observe and listen closely to our students in order to understand how they are thinking, for only through such careful attention can we know how to encourage further inquiry.

Kieran Egan (1983, 2011) re-envisions both the purpose of education and our view of children's cognitive capacities and the importance of teaching for in-depth learning in order to avoid the pitfalls of superficial understandings. The work of William Perry (1981) reminds us that the concept of "developmentally appropriate" applies also to the education of prospective teachers. Howard Gardner's (1993) theory of multiple intelligences and his related work on the arts and human development supports our belief in the existence and importance of multiple abilities in all students. Lev Vygotsky's (1962/1986, 1978) emphasis on the social nature of learning and the zone of proximal development is clearly consistent with our assumptions about the importance of language and community in learning. Jerome Bruner (1990) leads our thinking to the structures of the disciplines and relationships among the structures, effective pedagogy, and child development, and has given us, following the seminal work of Hilda Taba (1962), the very helpful concept of the spiral curriculum.

In these times of increasing emphasis on standardized testing, we are heartened by the strong continuing arguments made by Alfie Kohn (2004, 2011), Grant Wiggins (2011), Ohanian (2001, 2002) and others. We have also found hope in education leaders who have been able to "just say no" to the unrealistic imposition of testing. For example, Denise Juneau, Montana Superintendent of Schools, wrote Arne Duncan, U.S. Secretary of Education, announcing her decision not to raise the target test scores that Montana schools must meet to avoid being labeled as failing under the federal law. "I'm not asking permission," Juneau said, "It's unfair" to make schools work on both the old priorities of the No Child Left Behind law and the new priorities set by the Obama administration. With Montana schools "reeling" from the additional data collection and uncertainty created by the changing priorities set by No Child Left Behind and the Obama administration's new education goals, she called for "alleviation of the strict across-theboard, one-size-fits-all, absolute bar of 100 percent proficiency on state assessments...and...the unrealistic 100 percent goal [that] undermines the work and morale of students and educators and the public's confidence in schools" (2010). Still, even in the face of passionate calls for reason, more and more states are adding more and more testing pressure.

Against the stark reality of contemporary emphasis on uniformity and standardization stands the work of public school educators like Judy Bryson, an Eastern Kentucky sixth-grade science teacher who has over years developed strategies to fully engage her students in learning curriculum content through meaningful work in the community. By engaging them in transformative experiences, her students are able to see direct connections between their classroom instruction and their lives each day in the community and beyond. At the same time, she emphasizes multiple perspectives and helps students understand the complexity of issues. Beginning with science studies on Black Mountain, Kentucky's highest peak, students

recognized that a planned "topping" of the mountain would affect their lives and community in various ways. Bryson saw this as a teaching opportunity, and she was careful to present all sides of the very complex issue of coal mining, through their studies and commitment to action, Bryson's students are credited with preventing the topping by a coal company of Black Mountain, Kentucky's highest peak and, perhaps, saving the endangered species living there.

Working with students considered "less able" because of their culture, socio-economic level, and the isolation of their community, Bryson's emphasis on the importance of commitment to a democratic vision, to community, to inquiry, to every child, and to mutual respect and collaboration between parents and teachers has resulted in high test scores, increases in autonomy and agency, and an increasing sense of respect and value for their own culture, experiences, identities, and place.

### Goal 6

As people who understand and appreciate the capacity of tools—informational, technological, physical and intellectual—to extend the reach and enhance the quality of work to be done, teachers incorporate appropriate tools into their own work-lives and integrate their use into the instructional environments they create with learners.

## **Conceptual Understanding**

Integrating technology is not about technology...Its focus must be on curriculum and learning. Integration is not defined by the amount or type of technology used, but by how and why it is used.

-Judi Harris, 2005

As people who value tools of multiple purposes and kinds, we emphasize their thoughtful use across the curriculum. We view tools are far more than the rather narrow popular definition of technology. We see the significance of preparing teachers who understand and can use informational, physical, and intellectual tools in conjunction and as equal partners with emerging technological tools.

Both imagination and critical thinking are necessary tools for living and for living responsibly. People who can use their knowledge and self-knowledge to help in shaping a more just world are able to pry apart the elements of a complex problem, create visions of alternative addresses for that problem, and discern implications of each one in order to act upon a hope as well as upon a hypothesis. They are able to relate parts and wholes and to play with various ways of relating them with each other without having to enact a plan or response to a problem that may be less appropriate to a situation than another. Imagination and the judgment involved in critical thinking have functioned equally as tools that brought technology into being. The collective tools of culture such as the thinking tools that enable shaping possibilities with our minds, our bodies and the kinds of relationships we make with the world, the arts and the tools we make, are created and reshaped by acts of imagination and judgment. Goal 6 addresses the teacher's use of

these tools and of technology to support learning, and to support thinking about the wise use of tools and technology in the world.

The use of informational, technological, physical, and intellectual tools is central to effective teaching and learning. In order to gain the maximum benefit from tools, their use in the classroom must be carefully planned, must support learning, and must be infused with intentional, authentic, and collaborative learning applications. We prepare teachers who can see and value the use of multiple tools and the matching of the right tool for the right situation. We emphasize that the use of a tool depends on the user's capacity to reason, to make judgments, and to pose and seek answers to questions that arise from authentic curiosity. In these cases, the tool operates in service to an idea, an inquiry, as a means to understand rather than as an empty exercise designed to teach "technology."

## Technology as a Tool

Historically, when new tools have been invented, the full range of uses and possibilities are not known, often resisted, and sometimes misused. This has been true for the educational community's uses and responses to technology—there are a range of efforts and venues within which our faculty grapple with the rapidly advancing technological possibilities. While we can all agree that technology is a "good" thing, a degree of uncertainty remains about what it can do or how to use it to enhance learning.

Faculty have expanded the role of technology in their teaching practices with careful consideration of the purposes and outcomes desired. Focus has been purposefully directed toward integrating technology as an instructional tool to open higher levels of knowing and understanding. We recognize that when technology is used for technology's sake or when we allow technology to drive educational experiences there is a narrowing of teaching strategies and learning becomes limited rather than expanded.

We view technology through critical eyes, constantly reminding ourselves "form follows function." As we work with candidates, our guiding questions are: "In what authentic ways can we integrate instructional technology? What can instructional technology do to support learning that cannot be done as well by other means?" As we answer these questions and others, appropriate and meaningful uses have emerged that are enhancing our capacity and maturity our skills toward proficiency.

In addition to traditional use of technology for accessing research and word processing, our candidates are routinely challenged to use technology to higher and higher levels and for more diverse purposes. As our faculty poses authentic challenges in classes, candidates engage technology to uncover their own answers. As a faculty we are challenged to use our most innovative and creative thinking to build connections and imagine the possibilities.

## **Knowledge Base**

Integrating technology is not about technology...Its focus must be on curriculum and learning. Integration is not defined by the amount or type of technology used, but by how and why it is used.

In these times when the word "tools" is so often perceived to mean technology, we choose to place technology in a broader definition of tools emphasizing the value of physical and intellectual tools. Although technology is only one category of tools, we see that category as the most in need of discussion here due to its often disconnected and technocentric use (Papert, 1998). This technocentric approach results in methods that "often omit sufficient consideration of the dynamic and complex relationships among content, technology and pedagogy" (Harris, et. al., 2005, p. 1).

Studies of K-12 teachers' instructional applications of educational technologies to date show many to be pedagogically unsophisticated; limited in breadth, variety, and depth; and not well integrated into curriculum-based teaching and learning (e.g., Cuban, 2001; Earle, 2002; McCrory-Wallace, 2004; Zhao, Pugh, Sheldon & Byers, 2002). These researchers and others emphasize technology uses that support inquiry, collaboration and reformed practice, while teachers tend to focus upon using presentation software, learner-friendly Web sites, and management tools to enhance existing practice. McCormick & Scrimshaw (2001) label these currently predominant uses for information and communication technologies as "efficiency aids" and "extension devices," differentiating them from "transformative devices" (p. 31), which "transform the nature of a subject at the most fundamental level" (p. 47).

A classroom that has successfully integrated technology into the curriculum would be one where you would not really notice it because it would be so second nature. The teacher would not have to think up ways to use whatever tools were available, but would seamlessly use them to enhance the learning of whatever content was being covered. Technology [would be] used to assist in acquiring content knowledge, and the acquisition of technology skills [would be] secondary.

Classroom Teacher Quoted in Harris (2005, p. 116)

Our use of and emphasis on technology is guided by the notion that technology is a tool that facilitates learners' efforts to explore or express ideas. In constructivist teaching and learning, technology is best described as a partner in the education of all learners. Its use creates a vehicle for increasing opportunities and possibilities, for adding depth and breadth to content, and contextualizing the curriculum. In a constructivist classroom, technology does not drive instruction. Instead, its use is driven by a "need to know or do." The need, or desire, to know and do more and to illustrate and share what is known and done, coupled with technology's ability to meet these needs and desires, make it a valuable instrument in knowledge construction. Through the appropriate use of technology, creative and innovative thinking can be unleashed and because technology can support construction of knowledge by allowing learners to organize and manipulate data, they are able to try new ideas out using safe and manageable means.

Technology use typically in what is typically described as "constructivist is preferable to technology used to reinforce basic academic skills...

Harris (2005, p. 119)

The challenge for constructivist educators is to integrate technology in thoughtful, purposeful, and appropriate ways. Carefully planned activities and experiences create opportunities for learners to use technology as a tool to search for solutions to problems they identify, to illustrate what they know and how they came to know it, and to teach their peers. As these experiences are carefully integrated and thoughtfully executed, technology becomes an "intellectual partner" (Jonassen, 1996) in the teaching and learning environment.

Richter (1998) warns that the infusion of technology and its impact should take us back to Marshall McLuhan's concern: "Be aware, lest the medium becomes the message." Though technology is everywhere, Richter reminds us that it "is useless unless it *enhances the quality of human endeavors...* A lot of technology is there simply because it is new...Educators need effective tools...to assess and evaluate the use of technology."

Questions coming from many educators have challenged us to consider an important issue in the use of technology in instruction: Who controls the technology? This perspective underlies the need for a constructivist vision for technology integration. Because learners "work" is to investigate, collaborate, and construct knowledge, technology should be used to serve these ends. Jonassen, Beissner, and Yacci (1993), early proponents for constructivist uses of technology, saw classroom computers too often used as "delivery vehicles" for tutorials and drill and practice. However, when teachers experience the use of technology as a creative tool, it encourages students to be as imaginative, creative, and flexible as they desire. Jonassen, Peck, and Wilson (1999) viewed technology as a way to provide "multifaceted and multimodal" assessments of the "complex and multifaceted phenomenon" (p. 15) that is knowledge construction. They proposed the following roles for technology as a learning vehicle:

- Tools to support knowledge construction
- Information vehicles for exploring knowledge to support learning-by-constructing
- A context to support learning-by-doing
- A social medium to support learning by conversing
- An intellectual partner to support learning-by-reflecting (p. 13-14).

In addition to the role of technology, the role of teacher and learner in an inquiry-based approach should be clarified. In this context, the role of learner is to "assume personal responsibility for most of their learning. They select problems, conceive of [and conduct] experiments...analyze [incorporate and report] the results, and recommend...action" (Jonassen, Peck, & Wilson, 1999, p. 56). Teachers, then, are seen as facilitators who support student learning and guide the use of technology and other tools in the inquiry.

The role of technology in teaching for justice must open doors to learning about ourselves and others through the access that computers and the Internet and can provide. We must help students to learn to use those technologies in ways that will enhance their opportunities to be fully-functioning members of our society. We must break the trend that supports the use of computers and other technologies to be used only to drill on basic skills or repetitive basic-fact memorization. Rather, teachers must help students learn to use computers and other technologies in creative problem-solving and to understand and explore answers to difficult questions of

justice, equity, and truth telling. Based on his thinking in *Truth, Beauty, and Goodness Reframed*, Howard Gardner (2011) would agree.

Finally, teachers must be knowledgeable regarding the digital divide and ensure that all students have access to technology that is in general use in society. This means that classroom teachers must advocate for the resources necessary to prepare *all* children for full participation in society.

On a small reservation in northern Montana, third-grade teacher Shirley Ingram sought to create learning experiences that would combine a variety of tools to maximize her students' learning. Beginning with a focus on landforms, she chose to use the community and community members as a central learning tool. She also used imagination as a means to help her students see their community from a historical perspective. In addition, she used the integration of math, science, and literacy as tools to add content, context, and depth and breadth to the study. Finally, she chose to integrate technology as a tool to more fully engage students and to allow them creative opportunities to express their ideas and demonstrate their learning.

She began by taking students into the community to find various landforms which students photographed with digital cameras. Students used Photoshop to print the pictures. After researching landforms not found on the reservation and printing pictures from the Internet, they sorted the pictures according to landform and assigned groups to research the various forms. They also searched the internet to find photographs of their assigned landform in other parts of the world. Using this information, they used computers to make posters of "Landforms Near and Far". As part of their study, they searched a data base of historical pictures of their tribes and of the reservation. Using these, groups created timelines showing the changes in how these landforms looked or were used over time. They also interviewed tribal elders to gather memories of these areas of the reservation over time. Culminating in a large multi-media display, community members were invited to see evidence of student learning. As a result of the students' study, all students learned landforms and much more. One surprising outcome was that the third graders had the opportunity to teach community members, including elders, how to locate the database to access the historical photographs.

### Goal 7

A people who are committed to thinking together with others in the search for truth, wisdom and beauty, teachers create learning communities grounded in inquiry where students come to understand the critical role of communication in inquiry and where they feel the confidence that grows with the development of their ability to participate in a community of inquiry.

for personal and societal transformation is shaped by the intent to discover meaningful, often surprising, and sometimes challenging connections across many and varied perspectives. Its demands are both radically social and ethical in that we are called to assume responsibility for drawing forth, clarifying, and eventually providing representation and advocacy for others whose voices are quite different from our own, especially for those whose voices might not otherwise be heard.

We believe learning in community, and specifically in a community of inquiry, provides opportunities to experience participatory, experiential learning that provokes learners to develop democratic capacities and allows them to practice being truth tellers and change makers. Joyful and supportive engagement in learning grounded in students' lives prepares them to collectively solve problems, to make decisions and choices of consequence, to question the taken-forgranted, and to see new possibilities. By having multiple and on-going opportunities to think and explore together, learners come to understand that there are many possible ways to see the world, that their peers can contribute to their understandings and that they, in turn, can contribute to the understandings, vision, and lives of those with whom they engage.

A significant aspect of creating classroom community lies in the hands of the teacher and the choices she makes. We know that a positive classroom community promotes the development of positive social skills and enhances learners' academic achievement. When children feel safe and valued, they are more willing to take risks required to express their ideas, understandings, and challenges. Community doesn't just happen; it requires planning and practice, and careful attention to interactions to ensure that all children can feel secure, nurtured and supported by the environment, each other, and the teacher. Classrooms are made up of individuals who bring with them divergent interests, abilities, experiences, strengths, challenges, cultures, and hopes. Teachers must ensure that the classroom makes clear that all are welcomed, valued, and needed while modeling how we want students "to be" together. The goal is always to demonstrate that all voices must be heard and that the stronger we are as individuals, the more we can contribute to our community. This requires careful attention to celebrating individuality and how our different ways of thinking make us stronger.

Creating such a community requires us to support learners' development of very strong communication skills including careful listening, asking clarifying and probing questions, protecting learners' rights to see the world in different ways, and ensuring that minority ideas are fully expressed and honored. In this process, learners come to see the value of their contributions and develop a sense that they have important ideas to contribute. In that process, they develop a sense of autonomy, recognize their personal agency, and develop the more and more confidence in themselves, in others, and in the power of belonging.

In our work preparing teachers, we realize that most students do not come to us highly experienced in the various aspects of this Goal. For that reason, we begin in our first education course to help students experience community, develop the ability to listen intently, learn to ask clarifying questions, and engage in inquiry. These same dispositions and skills continue to be supported in subsequent classes, field experiences, and in the culture of the program operations. We believe that by teaching with the dispositions, skills, and strategies that allow students to experience learning in a community of inquiry, we can use these experiences as a foundation to prepare students to create a community of inquiry in their own practice.

## **Knowledge Base**

It is in fact nothing short of a miracle that the modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry; for this delicate little plant, aside from stimulation, stands mainly in need of freedom; without this it goes to wrack and ruin without fail.

-Albert Einstein

When Dewey inquires into the relationship between learning and teaching, he posits, in effect that you can teach and learn because—and only because—you can communicate. It would be hard to overemphasize the importance Dewey places on that last term: *without communication there is no community*. Through communication it becomes possible to bring together things such as reading and learning, that are too often separated from each other, or as Dewey says, "there is a natural bridge that joins the gap between existence and essence; namely, communication, language, discourse" (1925, p. 133).

Vygotsky's view of the social nature of learning also emphasizes the importance of inquiry, albeit in his thinking inquiry is more directly guided by the teacher than is Dewey's. For Dewey, inquiry is grounded in interest, and interest is the motive power in learning: In his words, "interests the sign of developing powers." Shared inquiry, then, is the work of community

While seemingly removed from the providence of education, the work of the National Story Corps Project has a very close connection with this Goal. Relationships matter, as the project makes abundantly clear in its weekly radio broadcasts and in its publication, *Listening is an Act of Love: A Celebration of American Life from the Story Corps Project* (2007). In an individual educational context, we know that the experience of being listened to by a caring teacher can be transformative for a student. In a communal setting, there is similar power in being part of a classroom community in which members demonstrate respect and care for their own and one another's thinking as they engage in shared inquiry (Lipman, 2003). We learn to think in context of thinking with others. In the words of Hannah Arendt, "for excellence in thinking, the presence of others is also required" (1958).

In learning as in life, questions matter. We know that "adults are, generally less inclined to ask good questions than are children" (Myers, 2007, p. 691). Children enter preschool and kindergarten full of questions about themselves and their world. By the end of the primary grades, absorbing questions have given way to right answers, frequently entombed in one word or a short phrase. Philip Jackson, John Goodlad, and others have chronicled the pervasive boredom with characterizes too many American classrooms. The antidote is active engagement in meaningful inquiry, both individual and communal. In *Letters to a Young Poet*, Rilke advised his young friend to "love the questions." We think this is good advice for teachers of every age, as learners themselves and as teachers of learners.

Although we know that learning to ask and explore questions increases engagement, a recent study of implementation of inquiry-based science found "few instances in which teachers went beyond a recipe-like approach to the curricula" (Myers, 2007, p. 312). To break away from the recipe, our challenge is first to help our students engage in authentic inquiry and, second, to help them prepare to create learning opportunities steeped in inquiry.

We know from recent studies that children who feel a sense of identity within a group are the most well-adjusted and successful in school. As children progress developmentally, their group interaction skills become more finely tuned as well. Children's "world view" expands to add a greater understanding of the relationship between self and other. Studies also tell us that some of the most important skills children need for school readiness and success are the "people skills" of social interaction, communication, collaboration, and problem solving.

Speaking of the relationship between creative and mental development, Viktor Lowenfeld (1987) suggests that "one of the basic abilities that should be encouraged in our public schools is the ability to discover and to search for answers, instead of passively waiting for answers and directions from the teacher" (p. 4). He further suggests that the "inquiring mind" can be developed through the arts.

If we really expect to develop an inquiring mind in a child, one that is eager to tackle the problems of today, a mind that is flexible, inquisitive, and seeks for solutions in unusual ways, then attention that we have paid to the so-called basic learning areas may be ill-placed. The arts can play a tremendous role in learning and may be more basic to the thinking processes than the more traditional school subjects. Every drawing, whether by a scribbling child or a high school student at the peak of learning efficiency, demands a great deal of intellectual involvement. (Lowenfeld, 1987, p. 54)

Building community, ensuring that all students participate, solving problems together through authentic communication and inquiry, and honoring difference takes time. However, many teachers find ways to meet that challenge. When Calexico, California English teacher Harold Brown begins a new school year, he and his students face the same challenges faced by many teachers and learners. Their time together is limited, mandated curriculum must be covered on a tight schedule, and classes are large. And Harold is committed to operating his classroom in ways that ensure all voices are heard, decisions are made by consensus, and students are important decision makers. The process of developing a high school classroom community in 45 minute class periods might seem too large for many teachers. But Harold understands that time invested in the development of the ability to listen and ask probing questions, hone decision making skills, and create "space" for students to follow their thoughts may initially put his classes "behind" those of his colleagues. But in the end, the time invested results in committed and motivated learners who work hard to meet standards—both those they set for themselves and those set by the district and state. And by the end of the second quarter, students are beginning to develop curriculum. "If you want not to control...you must relinquish control of the clock," he contends.

#### Conclusion

We can never claim we have learned to teach. It is, instead, a life-long process. We believe that a teacher preparation experience steeped in the ideas, ideals, and values outlined in this Conceptual Framework will prepare our students to be people who are filled with hope and promise, determination and good will, content and professional knowledge, ready to work hard, and yearning to soak up the art and craft of teaching and learning. We believe these students will become teachers who live up to the Education Program Goals and help their own students to

embrace learning and living in a democratic society. And in their life-long quests to become the very best teachers they can be, they will continue to grow and develop with maturity, careful reflection, and experience. After all, as Maya Angelou says, "When we know better, we do better" And knowing and doing better every day is what we are preparing our students to live in their classrooms and in their lives.

### **Bibliography**

- Anderson, C. (1991). Policy implications of research on science teaching and teachers' knowledge. In M. Kennedy (Ed.), *Teaching academic subjects to diverse learners* (pp. 5-30). New York: Teachers College Press.
- Anyon, J. (2005). *Radical possibilities: Public policy, urban education, and a new social movement*. New York: Routledge.
- Antrop-Gonzalez, R. & De Jesus, A. (2006). Toward a theory of critical care in urban small school reform: Examining structures and pedagogies of caring in two Latino community-based schools. *International Journal of Qualitative Studies in Education*, 19, 409-403.
- Arendt, H. (1958). The human condition. Cambridge: Cambridge University Press.
- Arendt, H. (1977). *Between past and future: Eight exercises in political thought.* Harmondsworth: Penguin Books.
- Atwell, N. (1991). Side by side: Essays on teaching to learn. Portsmouth, NH: Heinemann.
- Baldwin, J. (1963). A talk to teachers. In F. Schultz (Ed.), (2001), *Notable Selections in Education*. Guilford: McGraw-Hill/Dushkin.
- Ball, D. (1991). Teaching mathematics for understanding: What do teachers need to know about subject matter? In M. Kennedy (Ed.), *Teaching academic subjects to diverse learners* (pp. 63-83). New York: Teachers College Press.
- Bamberger, J. (1990). The laboratory for making things: Developing multiple representations of knowledge. In D. A. Schon, (Ed.), *The reflective turn: Case studies in and on educational practice* (pp. 37-62). New York: Teachers College Press.
- Banks, J. (1993). Multicultural education: Issues and perspectives. Boston: Allyn & Bacon.
- Banks, J. (1994). Multiethnic education: Theory and practice (3<sup>rd</sup> ed.). Boston: Allyn & Bacon.
- Barton, P. & Coley, J. (2009). *Parsing the achievement gap II*. Princeton, NJ: Educational Testing Service.
- Becker, J. (1990). Curriculum considerations in global studies. In K. A. Tye (Ed.), *Global education: From thought to action* (pp. 67-85). Alexandria, VA: Association for Supervision and Curriculum Development.
- Belenky, M., Clinchy, B., Goldberger, N., & Tarule, J. (1987/1997). *Women's ways of knowing*. New York: Basic Books.
- Bellamy, G. & Goodlad, J. (2008). Continuity and change: In the pursuit of a democratic public mission for our schools. *Phi Delta Kappan*, 89(8), 565-571.

- Berkes, F. & Turner, N. (2006). Learning and the evolution of conservation practice for social-ecological system resilience. *Human Ecology*, 34(4), 479-494.
- Berry, W. (1999). The selected poems of Wendell Berry. Washington, D.C.: Counterpoint.
- Berry, W. (2005). *The way of ignorance and other essays*. Washington, D. C.: Shoemaker & Hoard.
- Berry, W. (2010). *Imagination in place*. Berkeley: Counterpoint Press.
- Boutte, G. (1992). Frustrations of an African-American parent: A personal and professional account. *Phi Delta Kappan*, 73, 786-788.
- Boutte, G. (1999). Multicultural education: Raising consciousness. Belmont, CA: Wadsworth.
- Boyer, E. (1990). Introduction: Giving dignity to the teaching profession. In D. D. Dill, What teachers need to know: The knowledge, skills and values essential to good teaching (1st ed., pp. 1-9). San Francisco: Jossey-Bass.
- Brooks, J. (2006). Strengthening resilience in children and youth: Maximizing opportunities through the school. *Children and Schools*, 28(2), 69-76.
- Brooks, J. & Brooks, M. (1999). The case for constructivist classrooms. Alexandria, VA: ASCD.
- Brophy, J. (1992). Probing the subtleties of subject-matter teaching. *Educational Leadership* 49(7), 4-8.
- Bruner, J. (1990). Acts of meaning. Cambridge: Harvard University Press.
- Buber, M. (1937/2008). I and thou. London: Hesperides Press.
- Buber, M. (1965). The knowledge of man. New York: Harper and Row Publishes.
- Buchman, M. (1989). The careful vision: How practical is contemplation in teaching? *American Journal of Education*, 78, 35-61.
- Carini, P. (2001). *Starting strong: A different look at children*. New York: Teachers College Press.
- Cazden, C. (1986). Classroom discourse. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3<sup>rd</sup> ed., pp 432-463). New York: Macmillan.
- Charney, R. (1997). *Habits of goodness: Case studies in the social curriculum*. Greenfield, MA: Northeast Foundation for Children.
- Charney, R. (2002). *Teaching children to care: Classroom management for ethical and academic growth, K-8.* Greenfield, MA: Northeast Foundation for Children.

- Caine, R. & Caine, G. (2001). *The brain and the competitive edge*. Portsmouth, NH: Scarecrow Press.
- Caine, R., Caine, G., McClintic, C., & Klimek, K. (2008). *The 12 brain/mind learning principles in action* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Corwin Press.
- Chomsky, N. (2006). Language and mind (3rd ed.). New York: Cambridge University Press.
- Christiansen, L. (2007). Unlearning the myths that bind us: Critiquing cartoons and society. In *Rethinking our classrooms, Volume 1*. Milwaukee, WI: Rethinking Schools.
- Christiansen, L. (2007). Reading writing, and rising up: Teaching about social justice and the power of the written word. Milwaukee, WI: Rethinking Schools.
- Christiansen, L. (2010). *Teaching for joy and justice*. Milwaukee, WI: Rethinking Schools.
- Clark, C. (1988). Asking the right questions about teacher preparation: Contributions of research on teacher thinking. *Educational Researcher*, 17(2), 5-11.
- Clark, C. & Peterson, P. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3<sup>rd</sup> ed., pp. 255-296). New York: Macmillan.
- Clemens, H. (1991). What do math teachers need to be? In M. M. Kennedy (Ed.), *Teaching academic subjects to diverse learners* (pp. 84-96). New York: Teachers College Press.
- Coles, R. (1971). *Migrants, sharecroppers, and mountaineers, children of crisis Volume II.*Boston: Little, Brown and Company.
- Coles, R. (1977). *Children of crisis: A study of courage and fear, Children of Crisis Volume I.* Boston: Little, Brown and Company.
- Coles, R. (1989). *The call of stories: Teaching and the moral imagination*. New York: Mariner Books.
- Coles, R. (2010). Handing one another along. New York: Random House.
- Cremin, L. A. (1990). *Popular education and its discontents*. New York: Harper and Row.
- Cuban, L., Kirkpatrick, H., & Peck, C. (2001). High access and low use of technologies in high school classrooms: Explaining the apparent paradox. *American Educational Research Journal*, 38(4), 813-834.
- Cushman, K. (2011). How kids get to be "tech experts." Phi Delta Kappan, 92(4), 80.
- Dance, J. (2002). Tough fronts. New York: Routledge-Falmer.
- Darling-Hammond, L. (2010). Restoring our schools. Retrieved May 3, 2011 from http://www.thenation.com/article/restoring-our-schools

- Delpit, L. (2006). *Other people's children: Cultural conflict in the classroom* (2<sup>nd</sup> ed.). New York: New Press.
- Dewey, J. (1902). The child and the curriculum. Chicago: University of Chicago Press.
- Dewey, J. (1916). Democracy and education. New York: Free Press.
- Dewey, J. (1922). Human nature and conduct. New York: Henry Holt and Company.
- Dewey, J. (1925). Experience and nature. Chicago & London: Open Court.
- Dewey, J. (1930). *Individualism old and new*. Amherst, New York: Prometheus Books.
- Dewey, J. (1933). How we think. Chicago: Henry Regnery.
- Dewey, J. (1934). Education and the social order. New York: League for Industrial Democracy.
- Dewey, J. (1938). Experience and education. New York: Macmillan.
- Dewey, J. (1952). Introduction. *The use of resources in education*. By Elsie Ripley Clapp. New York: Harper & Brothers.
- Dewey, J. (1965). The relation of theory to practice in education. In M. Borrowman (Ed.), *Teacher education in America: A documentary history*. New York: Teachers College Press.
- Dewey, J. & Boydson, J. (Ed.). (1989). *The later works of John Dewey, Volume 6, 1925 1953*. Carbondale, IL: Southern Illinois University Press.
- Dewey, J. & Tufts, J. H. (1932). Ethics (Rev. ed.) New York; Holt.
- Diez, M. (n.d.). A thrust from within: Reconceptualizing teacher education at Alverno College. Unpublished manuscript.
- Diez, M. (1990). *Portfolio assessment at Alverno College*. Unpublished manuscript. Donaldson, M. (1979). *Children's minds*. New York: W. W. Norton.
- Dorfman, A. (1983). *The empire's new clothes: What the Lone Ranger, Babar, and other innocent heroes do to our minds.* New York: Pantheon.
- Duckworth, E. (2001b). "Tell me more": Listening to learners explain. New York: Teachers College Press.
- Duckworth, E. (2006). *The having of wonderful ideas: And other essays on teaching and learning* (3<sup>rd</sup> ed.). New York: Teachers College Press.
- Duckworth, E. (1990). Opening the world. In E. Duckworth, J. Easley, D. Hawkins & A. Henriques (Eds.), *Science education: A minds-on approach for the elementary years* (pp. 21–59). Hillsdale, NJ: Erlbaum.

- Earle, R. (2002). The integration of instructional technology into public education: Promises and challenges. *Educational technology magazine*, 42(1), 5-13.
- Egan, K. (1983). *Education and psychology: Plato, Piaget, and scientific psychology*. New York: Teachers College Press.
- Egan, K. (1989). *Teaching as storytelling: An alternative approach to teaching and curriculum in the elementary school.* Chicago: University of Chicago Press.
- Egan, K. (1990). *Romantic understanding: The development of rationality and imagination, ages* 8-15 (1<sup>st</sup> ed.). New York: Routledge.
- Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. Chicago: University of Chicago Press.
- Eisner, E. (1976). *The arts, human development, and education*. Berkeley: McCutchan Publishing.
- Eisner, E. (1985). Learning and teaching the ways of knowing. Chicago: University of Chicago Press.
- Elbow, P. (1986). *Embracing contraries: Explorations in learning and teaching*. New York: Oxford University Press.
- Elkind, D. (1989). Developmentally appropriate practice: Philosophical and practical implications. *The Phi Delta Kappan*, 71(2), 113-117.
- Elkind, D. (2006). *Miseducation: Preschoolers at risk*. New York: Alfred A. Knopf.
- Elkind, D. (2007). The hurried child: Growing up too fast too soon. Cambridge: Da Capo Press.
- Ellul, J. (1964). The technological society (J. Wilkinson, Trans.). New York: Alfred A. Knopf.
- Ellul, J. (1989). What I believe. Grand Rapids, MI: Zondervan.
- Erickson, G., & Clarke, A. (2003). *Teacher inquiry: Living the research in everyday life*. New York: Routledge.
- Erikson, E. (1963). *Childhood and society* (2<sup>nd</sup> ed.). Toronto: W. W. Norton and Company, Inc.
- Eynde, P., Corte, E., & Verschaffel, L. (2006). Accepting emotional complexity: A socio-constructivist perspective on the role of emotions in the mathematics classroom. *Educational Studies in Mathematics*, 63(2), 193-207.
- Feiman-Nemser, S. (2001). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Feiman-Nemser, S. (2007). Transforming teacher education: Reflections from the field. Cambridge: Harvard Education Press.

- Florio-Ruane, S. (2001). *Teacher education and the cultural imagination: Autobiography, conversation, and narrative.* New Jersey: Lawrence Erlbaum Associates, Inc.
- Fosnot, C. (Ed.). (2005). *Constructivism: theory, perspectives, and practice*. New York: Teachers College Press.
- Franke, M., & Kazemi, E. (2001). Learning to teach mathematics: Developing a focus on students' mathematical thinking. *Theory into practice*, 40, 102-109.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Seabury Press.
- Freire, P. (1985). *The politics of education*. South Hadley, MA: Bergin and Garvey.
- Fromm, E. (1956). The art of loving. New York: Harper.
- Gardner, H. (1983/1993). Frames of mind: The theory of multiple intelligences. New York: Basic Books.
- Gardner, H. (1989). To open minds: Chinese clues to the dilemma of contemporary education. New York: Basic Books.
- Gardner, H. (1991). The unschooled mind. New York: Basic Books.
- Gardner, H. (1994). The arts and human development. New York: Basic Books.
- Gilligan, C. (1997). *Between voice and silence: Women and girls, race and relationships*, Cambridge: Harvard University Press.
- Gardner, H. (1999). The disciplined mind. New York: Simon and Schuster.
- Gardner, H. (2011). Truth, beauty, and goodness reframed: Educating for the virtues in the twenty-first century. New York: Basic Books
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge: Harvard University Press.
- Glasser, W. (1975). Schools without failure. New York: Harper & Row.
- Glasser, W. (1998). *Choice theory in the classroom*. New York: Harper & Row.
- Glasser, W. (1998). *The quality school: Managing students without coercion*. New York: Harper Collins.
- Grimmett, P. (1989). Reflection in teacher education. New York: Teachers College Press.
- Goodlad, J. (1984). A place called school (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Goodlad, J. (1997). In praise of education. New York: Teacher College Press.

- Goodman, Y. (Ed.) (1991). *How children construct literacy*. Newark, DE: International Reading Association.
- Goodman, K. (Ed.) (1998). *In defense of good teaching*. York, ME: Stenhouse Publishers.
- Gorski, P. (2008a). Peddling poverty for profit: Elements of oppression in Ruby Payne's framework. *Equity and Excellence in Education*, 41(1), 130-148.
- Gorski, P. (2008b). The myth of the culture of poverty. *Educational Leadership*, 65(7), 32-36.
- Goswami, D., & Stillman, P. (Eds.). (1987). *Reclaiming the classroom: Teacher research as an agency for change*. Upper Montclair, NJ: Boynton/Cook.
- Graves, D. (1983). Writing: Teachers & children at work. Portsmouth, NH: Heinemann.
- Graves, D. (2001). The energy to teach. Portsmouth, NH: Heinemann.
- Greene, M. (2000). *Releasing the imagination: Essays on education, the arts, and social change.* San Francisco: Jossey-Bass.
- Greene, M. (2001). Variations on a blue guitar: The Lincoln Center Institute lectures on aesthetic education. New York: Teacher's College Press.
- Greene, M. (1989). The teacher in John Dewey's works. In P. W. Jackson & S. Haroutunian-Gordon (Eds.), *From Socrates to software: The teacher as text and the text as teacher* (pp. 24-35). The National Society for the Study of Education. Chicago: University of Chicago.
- Hansen, J. (1998). When learners evaluate. Portsmouth, NH: Heinemann.
- Haroutunian-Gordon, S. (1991). *Turning the soul: Teaching through conversation in the high school.* Chicago: The University of Chicago Press.
- Harris, J. (2005). Our agenda for technology integration: It's time to chose. *Contemporary Issue in Technology and Teacher education*, 5(2), 116-122.
- Harris, J., Mishra, P., & Koehler, M. (2005). Teachers' technological pedagogical content knowledge: Communication-based technology integration reframed. Retrieved April 25, 2011 from <a href="http://mkoehler.educ.msu.edu/OtherPages/Koehler\_Pubs?TECH\_BY\_DESIGN\_AERA2007\_HarrisMishraKoehler.pdf">http://mkoehler.educ.msu.edu/OtherPages/Koehler\_Pubs?TECH\_BY\_DESIGN\_AERA2007\_HarrisMishraKoehler.pdf</a>
- Harwayne, S. (1999). *Going public: Priorities and practices at the Manhattan New School.* Portsmouth, NH: Heinemann.
- Heath, S. (1983). Ways with words: Language, life, and work in communities and classrooms. New York: Cambridge University Press.
- Henderson, N., & Milstein, M. M. (2003). Resiliency in the schools: Making it happen for students and educators. Thousand Oakes, CA: Corwin

- Higgins, G. (1994). Resilient adults: Overcoming a cruel past. San Francisco, CA: Jossey-Bass.
- Hill, H., Ball, D., &Schilling, S. (2007). Unpacking pedagogical content knowledge: Conceptualizing and measuring teacher's content knowledge of students. *Journal for Research in Mathematics Education*. *39*(4), 372-400.
- Hilton, P. (1953). An introduction to homotopy theory: Cambridge tracts in mathematics and mathematical physics, No. 43. Cambridge: Cambridge University Press.
- Holt, T. (1990). *Thinking historically: Narrative, imagination, and understanding*. New York: College Entrance Examination Board.
- Illich, I. (1972/2000). Deschooling society. London: Marion Boyars Publishers Ltd.
- Jackson, P. (1990). Life in classrooms. New York: Teacher College Press.
- Jenson, E. (2005). *Teaching with the brain in mind* (2<sup>nd</sup> ed.) Alexandria, VA: Association for Supervision and Curriculum Development.
- John-Steiner, V. (1985) Notebooks of the mind. Oxford: Oxford University Press.
- Johnson, D., Johnson, R. & Holubec E. (1994). *The new circles of learning: Cooperation in the classroom and school*. Washington, DC: Association for Supervision and Curriculum Development.
- Johnson, D., & Johnson, R. (1998). Learning together and alone: Cooperative, competitive, and individualistic learning. New Jersey: Allyn & Bacon.
- Johnson, T. W. (1995). *Discipleship or pilgrimage?: The educator's quest for philosophy*. Albany, NY: State University of New York Press.
- Jonassen, D. (1996). *Computers in the classroom: Mindtools for critical thinking*. Englewood Hills, NJ: Prentice-Hall.
- Jonassen, D., Peck, K. & Wilson B. (1999). *Learning with technology: A constructivist approach*. New York: Prentice-Hall.
- Jonassen, D., Beissner, K. & Yacci, M. (1993). Structural knowledge: techniques for representing, conveying, and acquiring. Hillsdale, NJ: Earlbaum.
- Jones, L. (1972). Appalachian values. In *Identity and diversity in the United States* (2006). Littleton, MA: Tapestry Press, Ltd.
- Kamii, C. (2007). Constructivism. In R. New & M. Cochran (Eds.), *The encyclopedia of early childhood education* (pp. 152-155). Westport, CT: Praeger.
- Kass, A. (1989). Autobiographers as teachers: Toward solving the problem of civic education. In P. Jackson and S. Haroutunian-Gordon (Eds.), *From Socrates to software: The teacher as text*

- and the text as teacher (pp. 90-114). Chicago: Eighty-ninth Yearbook of the National Society for the Study of Education.
- Kazemi, E. & Franke, M. (2004). "Teacher learning in mathematics: Using student work to promote collective inquiry." *Journal of mathematics teacher education*, 7, 203-235.
- Kennedy, M. (2008) Teachers reflecting on their practice. In T. Good (Ed) 21st Century education: A reference handbook, Volume 1. Thousand Oaks, CA: Sage Publications.
- Kennedy, M. (2005). *Inside teaching: How classroom life undermines reform*. Cambridge: Harvard University Press.
- Kentucky Teacher Standards. (2008) Education Professional Standards Board. Retrieved October 10, 2010 from <a href="http://www.kyepsb.net/teacherprep/standards.asp">http://www.kyepsb.net/teacherprep/standards.asp</a>
- Kim, Y. (2011). The case against teaching as delivery of the curriculum. *Phi Delta Kappan.* 92(7), 54-56.
- Klein, F. (1991). *The politics of curriculum decision making: Issues in centralizing the curriculum.* New York: State University of New York Press.
- Kohn, A. (1996/2006). *Beyond discipline: From compliance to community*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kohn, A. (1999). The schools our children deserve. NY: Houghton Mifflin.
- Kohn, A. (September 27, 2000). Standardized Testing and Its Victims, *Education Week*.
- Kohn, A. (2000). *The case against standardized testing: Raising the scores, ruining the schools*. Portsmouth, NH: Heinemann.
- Kohn, A. (2004). What does it mean to be well educated? And more essays on standards, grading, and other follies. Boston: Beacon Press.
- Kohn, A. (September 15, 204). Feel-bad education: The cult of rigor and the loss of joy. *Education Week*.
- Kozol, J. (1975). The night is dark and I am far from home. New York: Continuum.
- Kozol, J. (1991). Savage inequalities: Children in America's schools. New York: Crown.
- Kozol, J. (1995). *Amazing grace: The lives of children and the conscience of a nation*. New York: Crown.
- Krovetz, M. L. (1999). Fostering resiliency: Expecting all students to use their minds and hearts well. Thousand Oaks, CA: Corwin.
- Kuhn, D. (2008). Education for thinking. Cambridge: Harvard University Press.

- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey Bass.
- Lawson, A. (2005). What is the role of induction and deduction in reasoning and scientific inquiry? *Journal of Research in Science Teaching*, 42(6), 716-740.
- Lawson, A. (1995). Science teaching and the development of thinking. Belmont, CA: Wadsworth.
- Lee, E., Menkart, M. and Okazawa-Rey, M. (Eds.). (2004). Beyond heroes and holidays: A Practical Guide to K-12 Anti-Racist, Multicultural Education and Staff Development.
- Levinas, E. (1978) *Otherwise than being or beyond essence*. Trans. Alphonso Lingis, Boston, MA: Kluwer Academic Publishers.
- Lightfoot, S. (2003). *The essential conversation: What parents and teachers can learn from each other.* New York: Random House.
- Lightfoot, S. (1978). Worlds apart: Relationships between families and schools. New York: Basic Books.
- Lipman, M. (2003) *Thinking in education*. (2<sup>nd</sup> ed.). New York: Cambridge University Press.
- Lipman, M., Sharp, A., & Oscanyan F. (1980). *Philosophy in the classroom*. (2<sup>nd</sup> ed.). Philadelphia: Temple University Press.
- Littky, D. & Grabelle, S. (2004). *The big picture: Education is everyone's business*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Lowenfeld, V. & Brittain, W. (1987). *Creative and mental Growth, 8<sup>th</sup> edition.* New Jersey: Prentice-Hall.
- Marlowe, B. & Page, M. (1998). *Creating and sustaining the constructivist classroom*. California: Corwin Press.
- Meier, D. (2002). In schools we trust: Creating communities of learning in an era of testing and standardization. Boston: Beacon Press.
- McCormick, R. & Scrimshaw, P. (2001). Information and communications technology, knowledge, and pedagogy. *Education Communication & Information*, 1(1), 39-57.
- Meier, D. (1995). *The Power of their ideas: Lessons for America from a small school in Harlem*. Boston: Beacon Press.
- Morowitz, H. (2004). *The emergence of everything: How the world became complex*. New York Oxford University Press.
- Mumford, L. (1971). *Myth of the machine: Technics and human development*. Orlando, FL: Mariner Books.

- Munby, H., Featherstone, D., & Russell, T. (Eds). (1997). Finding a voice while learning to teach: Others' voices can help you find your own. New York: Routledge.
- Munby, H. & Russell, T. (Eds.). (1992). *Teachers and teaching: From classroom to reflection*. New York: Routledge.
- Myers, P. (2007). "Why? Why?: Future teachers discover mathematical depth. *Phi Delta Kappan*, 88(9), 691-695.
- Nelson, G. (2004). Writing and being: embracing your life through creative journaling. Makawao, HI: Inner Ocean.
- Nodding, N. (1984/2003). *Caring: A feminine approach to ethics and moral education* (2<sup>nd</sup> ed.). Berkeley: University of California Press.
- Noddings, N. (1993). *Educating for intelligent belief or unbelief*. New York: Teachers College Press.
- Noddings, N. (2002). *Educating moral people: A caring alternative to character education*. New York: Teachers College.
- North Central Regional Educational Laboratory. Developmentally appropriate practices. Retrieved April 16, 2011 from http://www.ncrel.org/sdrs/areas/issues/methods/instrctn/in5lk5.htm
- North, C. (2009). Teaching for social justice: Voices from the front lines. Boulder, CO: Paradigm.
- Oakes, J. & Lipton, M. (2003). Teaching to change the world. New York: McGraw-Hill.
- Ohanian, S. (1999). One size fits few. Portsmouth, NH: Heinemann.
- Ohanian, S. (2001). *Caught in the middle: Nonstandard children and the killing curriculum.* Portsmouth, NH: Heinemann.
- Ohanian, S. (2002). What happened to recess and why are our children struggling in kindergarten? New York: McGraw-Hill
- O'Reilly, M. (1998). *Radical presence: Teaching as contemplative practice*. Portsmouth, NH: Boynton/Cook.
- Orr, D. (2005). *Ecological literacy: Educating our children for a sustainable world* (1<sup>st</sup> ed.). San Francisco: Sierra Club Books.
- Oscanyan, F., Lipman, M., Lipman, A., & Sharp, A. (1984). *Philosophical inquiry: Instructional manual to accompany Harry Stottlemeier's discovery* (2<sup>nd</sup> ed.). Lanham, MD: University Press of America.
- Paley, V. (2000). White teacher (2<sup>nd</sup> ed.). Cambridge: Harvard University Press.

- Paley, V. (1997). The girl with brown crayon. Cambridge: Harvard University Press.
- Palmer, P. (1998/2007). The courage to teach: Exploring the inner landscape of a teacher's life. San Francisco: Jossey-Bass.
- Papert, S. (1998). Let's tie the digital knot. Technos Quarterly, 7(4), 10-12.
- Papert, S. (1998). Does easy do it? Children, games and learning', *Game Developer Magazine*, 1998.
- Parekh, B. (2006). *Rethinking multiculturalism: Cultural diversity and political theory*. Basingstroke: Palgrave McMillian.
- Perrone, V. (1998). *Teacher with a heart: Reflections on Leonard Covello and community (Between Teacher & Text)*. New York: Teachers College Press.
- Perry, W. (1981). Cognitive and ethical growth: The making of meaning. In Chickering, A. et al *The modern American college* (pp. 76-116). San Francisco: Jossey-Bass.
- Piaget, J. (1954). The construction of reality in the child. New York: Basic Books.
- Piaget, J. (1960). The child's conception of the world. London: Routledge
- Polanyi, M. (1966/2009). The tacit dimension. Chicago: University of Chicago Press.
- Postman, N. (1993). *Technopoly: The surrender of culture to technology*. New York: Vintage Books
- Purcell-Gates, V. (Ed.). (2007). *Cultural practices of literacy: Complicating the complex*. Mahwah, NJ: Lawrence Erlbaum.
- Rasch, K. (1999). Ripples and waves: The growth of the Parkway South High School-Maryville University Partnership. Peabody Journal of education, 74(3/4), 71-84.
- Resnick, L. (1987). *Education and learning to think*. Washington, DC: The National Academies Press.
- Rilke, A. (1934/1993). Letters to a young poet. New York: WW Norton & Company.
- Rogovin, P. (2004). Why can't you behave? The teacher's guide to creative classroom management, *K-3*. Portsmouth, NH: Heinemann.
- Rose, M. (1989). Lives on the boundary: A moving account of the struggles and achievements of America's educationally underprepared. New York: The Free Press.
- Russell, T. & Loughran, J. (Eds.). (2007). Enacting a pedagogy of teacher education: Values, relationships and practices. New York: Routledge.

- Sarason, S. (1980). Schooling in America: Scapegoat or salvation. New York: Free Press.
- Sarason, S. (1993). *The case for change: Rethinking the preparation of educators.* San Francisco: Jossey-Bass.
- Sarason, S. (1996). *Revisiting "The culture of the school and the problem of change"*. New York: Teachers College Press.
- Schoenfeld, A. (1985). Mathematical problem solving. New York: Academic Press.
- Schoenfeld, A. (1987). *Cognitive science and mathematics education*. Hillsdale, NJ: Erlbaum Associates.
- Schoenfeld, A. (2010). How we think: A theory of goal-oriented decision making and its educational applications. New York: Routledge.
- Schon, D. (1983). *The reflective practitioner: How professionals think in action*. London: Temple Smith.
- Schon, D. (Ed.). (1991). *The reflective turn: Case studies in and on educational practice*. New York: Teachers College Press.
- Schontzier, G. (2011). Denise Juneau, Montana's top teacher is just saying no to No Child Left Behind. Retrieved May 26, 2011 from http://www.bozemandailychronicle.com/news article\_81e37aa4-7b7d-11e0-99-aa-001cc4c03286.html
- Shulman, L. (1989). Toward a pedagogy of substance. *American Association of Higher Education Bulletin*, 41(10), 8-13.
- Shulman, L. (1993). Teaching as community property: Putting an end to pedagogical solitude. *Change*, 25(6), 6-7.
- Shulman, L. (2000). Teacher development: Roles of domain expertise and pedagogical knowledge. *Journal of Applied Developmental Psychology*, 21(1), 129-135.
- Siegel, H. (1987). *Relativism refuted: A critique of contemporary epistemological relativism*. Dordrecht: D. Reidel Publishing Company.
- Siegel, H. (Ed.). (1997). *Reason and education: Essays in honor of Israel Scheffler*. Dordrecht: Kluwer Academic Publishers.
- Sizer, T. (1973). *Places for learning, places for joy: Speculations on American school reform.*Cambridge: Harvard University Press.
- Sizer, T. (2004). *The red pencil: Convictions from experience in education*. New Haven: Yale University Press.
- Isay, D. (2007). Listening is an act of love: A celebration of American life from the StoryCorps Project. New York: Penguin.

- Taba, H. (1962). Curriculum development: Theory and practice. New York: Harcourt, Brace.
- Thomas, L. (2008). "In praise of reinventing the wheel." Phi Delta Kappan, 89(8), 612-614.
- Tom, A. (1997). *Redesigning teacher education*. SUNY Series in Teacher Preparation and Development. Albany, NY: State University of New York Press.
- Vygotsky, L. (1978). *Mind and society: The development of higher psychological processes*. Michael Cole, Vera John-Steiner, Sylvia Scribner, & Ellen Souberman, (Eds.) (14<sup>th</sup> ed.). Cambridge, MA: Harvard University Press.
- Vygotsky, L. (1986). *Thought and language*. (Alex Kozulin, Ed.). (Rev. Ed.). Cambridge, MA: Massachusetts Institute of Technology Press.
- Wallace R. (2004). "A framework for understanding teaching with the internet." *American Educational Research Journal*, 41(2), 447-488.
- Washor, E. (2009). Thoughts on Innovation. *The Huffington Post*. Retrieved October 10, 2010 from http://www.bigpicture.org/2009/10/thoughts-on-innovation/
- Washor E., & Littky, D. (2001). One student at a time: A deeply personalized public high school. New Horizons for Learning. Retrieved October 10, 2010 from http://www.newhorizons.org/lifelong/adolescence/washor.htm
- Wassermann, S. (1991). Asking the right questions. Bloomington, IN: Phi Delta Kappan.
- Wassermann, S. (2004). *This teaching life: How I taught myself to teach*. New York: Teachers College Press.
- Wassermann, S. & Ivany, J. (1994). *The new teaching elementary science: Who's afraid of spiders?* New York: Teachers College Press.
- Weil, S. (1986). An anthology. New York: Weindenfeld & Nicolson.
- Whitehead, A. (1929a/1967). The aims of education and other essays. New York: The Free Press.
- Wiggins, G. (1989). Educative assessment: Designing assessments to inform and improve student performance. San Francisco, CA: Jossey Bass.
- Wiggins, G. (1999). Assessing student performance: Exploring the purpose and limits of Testing. San Francisco, CA: Jossey Bass.
- Wiggins, G. (2011). Moving to modern assessments. Phi Delta Kappan, 92(7), 63.
- Wilen, W. (1991). *Questioning skills, for teachers: What research says to the teacher* (3<sup>rd</sup> ed.). Washington, DC: National Education Association.
- Wilen, W., Hutchison, J., and Ishler, M. (2007). *Dynamics of effective secondary teaching* (6<sup>th</sup> ed.). Boston: Allyn & Bacon.

- Wilson, E. (n.d). Developmentally appropriate practice: A sign of quality childcare. Oklahoma Cooperative Extension Service. Retrieved May 26, 2011 from http://pods.dasnr.okstate.edu/dpcisjare/dsweb/Get/Document-2429/T-2304web.pdf
- Wilson, S. (1990). The secret garden of teacher education. *Phi Delta Kappan*, 72(3), 204-209.
- Wilson, S. (2001). Research on history teaching. In V. Richardson (Ed.), *The handbook on research on teaching* (4<sup>th</sup> ed., pp. 527-544). New York: Macmillan.
- Wilson, S. & Wineburg, S. (1988). Peering at history from different lenses: The role of disciplinary perspective in the teaching of American history. *Teachers College Record*, 89, 525-539.
- Wineburg, S. (2001). *Historical thinking and other unnatural acts: Charting the future of teaching the past.* Philadelphia: Temple University Press.
- Wineburg, S., & Grossman, P. (Eds.). (2000). *Interdisciplinary curriculum: Challenges to implementation*. New York: Teachers College Press.
- Wineburg, S., & Wilson, S. (1988). Models of wisdom in teaching history. *Phi Delta Kappan*, 70, 90-98.
- Wolk, S. (2008). Joy in Teaching. Educational Leadership, 66, 8-15.
- Wolf, D. (1995). *Literacy reconsidered: Literature and literacy in the high school*. New York: The College Board.
- Wolf, D. & Pistone, N. (1995). *Taking full measure: Rethinking assessment through the arts*. New York: The College Board.
- Zeichner, K., & Liston, D. (1996). Reflective teaching: An introduction. New York: Routledge.
- Zhao, Y., Pugh, K., Sheldon, S. & Byers, J. (2002). Conditions for classroom technology innovations. *Teachers college record*, 104(3), 482-515.
- Zumwalt, K. (1990). *Putting curriculum back into teacher education*. Proceedings from Department of Curriculum and Teaching's 50th Year Celebration.
- Zumwalt, K. (2007). The misunderstood curriculum. In Hansen, D., Driscoll, M. E. & Arcilla, R. *A life in classrooms: Philip W. Jackson and the practice of education*. New York: Teachers College Press.
- Zumwalt, K., Darling-Hammond, L., Banks, J., Gomez, L., Gamoran Sherin, M., Griesdom, J. & Finn, L. (2005). Education goals and purposes: Developing a curriculum vision for teaching. In Darling-Hammond, L., & Bransford, J. (Eds.). *Preparing teachers for a changing world:* What teachers should learn and be able to do (pp. 169-200). San Francisco: Jossey-Bass.