PERFORMANCE STANDARDS
FOR
INITIAL CERTIFICATION PROGRAMS

SECONDARY SCIENCE EDUCATION

PREAMBLE

VINCENTIAN SPIRIT AND URBAN MISSION

Given that the School of Education subscribes to the Vincentian spirit and urban mission of DePaul University:

- we are committed to the improvement of pre-collegiate education, particularly in Chicago, and more generally in the Chicago metropolitan area;
- we are committed to programs which promote recognition of the dignity of every human being, especially the poor and abandoned, respect for persons, personal responsibility, appreciation of diversity, and the ongoing examination of values; and
- we are committed to fostering change in those educational and social structures and institutions that reinforce and perpetuate poverty and an inequitable distribution of resources.

These commitments permeate the performance standards expected of each student in the School of Education.

STANDARDS

The Candidate:

DIVERSITY & POSITIVE TRANSFORMATION

Disciplinary Foundations. (SOE) Demonstrates interpretive, normative, critical understanding of educational phenomenon and/or praxis through the use of the humanities, social sciences and psychological sciences within the disciplinary foundations of education (anthropology of education, history of education, philosophy of education, psychology of education and sociology of education.).

Transformation. (SOE) Demonstrates understanding of the human transformative dimensions of educational phenomenon and/or praxis at the level of the self and/or the social.

Identity Development. (SOE) Understands the dynamic nature of identity development and maintain the role of individual agency in bringing about personal and social transformation.

Understanding Differences. (SOE) Understands the multiple subjectivities and social relations of race, ethnicity, class, gender, and sexuality as they define a range of lived experiences and understand pedagogy as a project aimed at helping to realize the greatest range of possibilities for all youth irrespective of difference

MULTIPLE PERSPECTIVES & INQUIRY, THEORY, AND PRACTICE

Core Science Content – Molecules, Cells, Organisms, & Ecosystems (IPTS 1, ISBE science core 3, 4). Structures and interprets the central concepts and principles understood through biology including molecular and cellular sciences, organisms and ecosystems.

Core Science Content – Matter, Energy, Force, & Motion (IPTS 1, ISBE science core 5, 6). Structures and interprets the central concepts and principles understood through chemistry and physics, including matter, energy, force and motion.

Core Science Content – Earth & Universe (IPTS 1, ISBE science core 7, 8). Structures and interprets the central concepts and principles understood through earth/space science; including the earth and the universe.

Science Content in the Area of Specialization (IPTS 1, ISBE science, NSTA 1). Demonstrates in-depth knowledge of the concepts and principles understood through the science discipline of specialization (biology, chemistry, environmental science, physics)

Unifying Concepts of Science (IPTS 1, ISBE science core 11, NSTA 1). Understands the major unifying concepts of all sciences (systems, order, and organization; evidence, models, and explanation; constancy, change, and measurement; evolution and equilibrium; form and function), and how these concepts relate to other disciplines, particularly mathematics and the social sciences.

Nature of Science (IPTS 1, ISBE science core 9, NSTA 2). Defines the values, beliefs and assumptions inherent to the creation of scientific knowledge within the scientific community; contrasts science to other ways of knowing; understands the characteristics distinguishing basic science, applied science, and technology; understands the processes and conventions of science as a professional activity; and understands the standards defining acceptable evidence and scientific explanation.

Science Inquiry (IPTS 1, ISBE science core 1, NSTA 3). Engages students effectively in science inquiry (e.g., questioning and formulating solvable problems; reflecting on, and constructing, knowledge from data; collaborating and exchanging information while seeking solutions; and developing concepts and relationships from empirical experience) and facilitates understanding of the role inquiry plays in the development of scientific knowledge.

Issues of Science (IPTS 1, ISBE science core 9, 10, 17, NSTA 4). Relates science to the daily lives and interests of students and to a larger framework of human endeavor and understanding (e.g., relationships among systems of human endeavor including science and technology; relationships among scientific, technological, personal, social and cultural values; and the relevance and importance of science to the personal lives of students).

Technological Design. Understands the concepts, principles, and practices of technological design.

Human Development and Learning (IPTS 2). Understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.

Diverse Students (IPTS 3). Understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Learning Environment (IPTS 5). Uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

Planning for Instruction. (IPTS 4). Plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

Skills of Teaching (IPTS 6,ISBE science core 13, 15, NSTA 5) Creates a community of diverse student learners who can construct meaning from science experiences and possess a disposition for further inquiry and learning and applies appropriate pedagogical skills to science teaching

Classroom Communication (IPTS 7). Uses knowledge of effective verbal, nonverbal, and media communication techniques to foster inquiry, collaboration, and engagement in the classroom.

Curriculum (IPTS 6, ISBE core science 12, NSTA 6). Develops and applies a coherent, focused science curriculum (an extended framework of goals, plans, materials, and resources for instruction and the instructional context, both in and out of school, within which pedagogy is embedded) that is consistent with state and national standards for science education and appropriate for addressing the needs, abilities and interests of students.

Science and Community (ISBE science core 18, ISBE science, NSTA 7). Relates science teaching and learning to the needs and values of the community; and uses human and institutional resources in the community (i.e., social and community support network and involvement of people and institutions from the community) to advance the education of their students in science.

Assessment (IPTS 8, ISBE science core 16, NSTA 8). Uses a variety of contemporary assessment strategies to evaluate the intellectual, social, and personal development of the learner in all aspects of science (e.g., alignment of goals, instruction and outcomes; measurement and evaluation of student learning in a variety of dimensions and the use of outcome data to guide and change instruction).

Safety and Welfare (ISBE science core 14, NSTA 9). Designs and manages safe and supportive learning environments (e.g., physical spaces within which learning of science occurs; psychological and social environment of the student engaged in learning science; treatment and ethical use of living organisms; and safety in all areas related to science instruction) that reflect high expectations for the success of all students.

Disabilities (ISBE core). Implements appropriate assessment and instruction that supports students with disabilities in mainstream/inclusive settings.

Technology I. **(ISBE core, NSTA 5)** As appropriate for the discipline, enables students to learn about and to use technology.

Technology II. (ISBE core) Understands and uses technology to enhance his/her teaching

Language Arts: Literacy Techniques & Strategies (ISBE Core LA 1). Knows a broad range of literacy techniques and strategies for every aspect of communication and must be able to develop each student's ability to read, write, speak and listen to his or her potential within the demands of the discipline

Language Arts: Modeling Literacy Skills (ISBE Core LA 2). Models effective reading, writing, speaking, and listening skills during both direct and indirect instructional activities

Language Arts: Instruction &Improvement (ISBE Core LA 3). provides a variety of instructional strategies, constructive feedback, criticism, and improvement strategies to help students improve oral and written language skills

Secondary Content Area Reading (ISBE math, science, social sci). Understands the process of reading and demonstrates instructional abilities to teach reading in the discipline (math, science, social science & visual arts).

For T&L Students

Inquiry. (SOE) Undertakes independent inquiry and use technology as one tool to assist him or her in the overall inquiry process

PERSONALISM, PROFESSIONALISM, & LIFE-LONG LEARNING

Collaboration (IPTS 9). Fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

Reflection and Professional Growth (IPTS 10, NSTA 10). Is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Professional Conduct (IPTS 11). Understands education as a profession, maintains standards of professional conduct, and provides leadership to improve student learning and well-being

PERFORMANCE STANDARDS FOR INITIAL CERTIFICATION PROGRAMS

SECONDARY SCIENCE EDUCATION

The Secondary Science Educator:

Disciplinary Foundations. Demonstrates interpretive, normative, critical understanding of educational phenomenon and/or praxis through the use of the humanities, social sciences and psychological sciences within the disciplinary foundations of education (anthropology of education, history of education, philosophy of education, psychology of education and sociology of education).

Indicators

Knowledge

- Understand one or more of the disciplinary foundations of education knowledge bases that inform the anthropological, historical, philosophical, psychological and/or sociological contexts of educational phenomenon and/or praxis.
- Understand theoretical frameworks of one or more of the disciplinary foundations of education for the interpretive study of the complexities of class, ethnic, gender, racial and/or sexual, as well as other cultural, contexts of educational phenomenon and/or praxis.
- Understand modes of educational inquiry of one or more of the disciplinary foundations of education knowledge bases: for example, anthropology, history, philosophy, psychology and/or sociology of education
- Understand the theoretical significance of past and/or present ideas, theories and/or intellectual traditions for the interpretive study of educational phenomenon and/or praxis.

Dispositions

- Appreciates the disciplinary foundations of education knowledge bases as a theoretical context for the interpretive study of educational phenomenon and/or praxis.
- Develop habits of using one or more of the disciplinary foundations of education's modes of educational inquiry for critically understanding educational phenomenon and/or praxis in social and cultural contexts.
- Appreciates past and/or present ideas, theories and/or intellectual traditions for the interpretive study of educational phenomenon and/or praxis.

Performances

- Demonstrates clarity, creativity and critical/analytical understanding in using the concepts and theories of one or more of the disciplinary foundations of education knowledge bases to address the social and cultural contexts and complexities of educational phenomenon and/or praxis.
- Demonstrates an ability to develop a systematic logical argument by using one or more of the disciplinary foundations of education knowledge bases to address the problematics of educational phenomenon and/or praxis.
- Demonstrates the ability to use the disciplinary foundations of education knowledge bases to synthesis issues and ideas related to educational phenomenon and/or praxis.

Transformation. Demonstrates understanding of the human transformative dimensions of educational phenomenon and/or praxis at the level of the self and/or the social.

Indicators

Knowledge

- Understand theoretical frameworks that inform an understanding of the human transformative dimensions of educational phenomenon and/or praxis at the level of the self and/or the social.
- Understand the relationship between the organizing principles of a social order and educational phenomenon and/or praxis, and the influence of that relationship on human self and/or social

transformation.

Dispositions

- Appreciate the significance of educational phenomenon and /or praxis as a social and cultural force in human self and/or social transformation.
- Develop habits for understanding the social and cultural dynamics that define the normative character of human self and/or social transformation as related to educational phenomenon and/or praxis.

Performances

- Demonstrates clarity, creativity and critical/analytical understanding in using theoretical frameworks to understand the social and cultural complexities and contexts of educational phenomenon and/or praxis.

Identity Development. Understands the dynamic nature of identity development and maintain the role of individual agency in bringing about personal and social transformation.

Indicators

Knowledge

- Understands that human development occurs at the intersection of the individual, social institutions, and existing social relations of power and privilege.
- Understands that social identities of race, ethnicity, class, gender, and sexuality reflect hierarchies of power and privilege.
- Understand that human development is multiple, complex, and in constant flux.
- Understands that human development involves individuals actively working to shape identities in accommodation to and resistance against existing relations and structures of power and privilege.

Dispositions

- Appreciates the diversity of identities and lived experiences
- Demonstrates commitment to educational process and practice that recognizes and addresses diverse identities, cultures, and lived experiences

Performances

- Reflects on one□s own identities as they reflect broader hierarchies of power and privilege
- Integrates an appreciation for the diversity of identities, cultures, and lived experiences into curriculum
- Integrates an appreciation for the diversity of identities, cultures, and lived experiences into educational policy
- Works towards the goal of individual and collective empowerment and broader social transformation in diverse and multiple educational contexts

Individual Differences. Understands the multiple subjectivities and social relations of race, ethnicity, class, gender, and sexuality as they define a range of lived experiences and understand pedagogy as a project aimed at helping to realize the greatest range of possibilities for all youth irrespective of difference

Indicators

Knowledge

- Understands that social relations of race, ethnicity, class, gender, and sexuality are arrangements of power and privilege that serve the interests of some groups while significantly marginalizing those of others
- Understands that individuals negotiate a diversity of identities and lived experiences
- Understands that educational contexts can both facilitate and present barriers to individual and collective expressions of difference and diversity

Dispositions

- Appreciates diverse identities and lived experiences

Performances

- Considers diverse identities, cultures, and lived experiences in the design and implementation of curriculum and teaching
- Applies the appreciation of diverse identities, cultures, and lived experiences to the design and implementation of policy

MULTIPLE PERSPECTIVES & INQUIRY, THEORY, AND PRACTICE

Core Science Content – Molecules, Cells, Organisms, & Ecosystems (ISBE science). Structures and interprets the central concepts and principles understood through biology including molecular and cellular sciences, organisms and ecosystems.

Indicators

Knowledge

- Understands viral, subcellular and cellular structure and function.
- Understands the nature and function of the gene, with emphasis on the molecular basis of inheritance and gene expression.
- Understands how living and nonliving factors interact with one another and with their environment.
- Understands the strategies and adaptations used by organisms to obtain the basic requirements of life.
- Understands the concepts and dynamic nature of populations, communities, ecosystems, ecoregions, and the role of biodiversity in living systems.
- Understands the relationship of humans as living organisms and the environment.

Performances

- Describes the processes of the cell cycle and analyzes the transmission of genetic information.
- Demonstrates an understanding of organelles, cells, tissues, organs, and organ systems and their function.
- Identifies scientific evidence from to demonstrate theories about processes of biological evolution.
- Explains the technologies used to study the life sciences at the molecular, cellular, organism and ecosystem levels.
- Develops a model or explanation that shows the relationships within the environment.
- Describes of how communities, ecosystems, and ecoregions change.
- Describes the human as a living organism comparable to other life forms and functions.
- Describes physical, ecological, and behavioral factors that influence homeostasis within an
- organism and interrelationships among organisms.

Core Science Content – Earth & Universe (ISBE science). Structures and interprets the central concepts and principles understood through earth/space science; including the earth and the universe.

Indicators

Knowledge

- Understands the structure and composition of the Earth's land, water and atmospheric systems.
- Understands the transfer of energy within and among Earth's land, water and atmospheric systems.
- Understands the scope of geologic time and the continuing physical changes of the Earth through time.
- Understands the interrelationships between living organisms and Earth's resources.
- Understands the properties and dynamic nature of the solar system.
- Understands the properties and dynamics of objects external to the solar system.

- Understands the scientific theories dealing with the origin of the universe.

Performances

- Analyzes and explains dynamic forces, events, and processes that affect the Earth's land, water and atmospheric systems.
- Explains Earth's processes and cycles and cites examples in real-life situations.
- Evaluates scientific theories about Earth's origin and history and how those theories explain contemporary living systems.
- Identifies and evaluates the uses of Earth's resources.
- Observes, describes, and explains the relative and apparent motions of objects in the sky.
- Compares and analyzes evidence relating to the origin and physical evolution of the universe.
- Compares the processes involved in the life cycle of objects within the galaxies, including their physical and chemical characteristics.
- Explain the technologies used to study the earth sciences and the universe.

Core Science Content – Matter, Energy, Force, & Motion (ISBE science). Structures and interprets the central concepts and principles understood through chemistry and physics, including matter, energy, force and motion.

Indicators

Knowledge

- Understands the atomic and nuclear structure of matter and the relationship to chemical and physical properties.
- Understands the principle of conservation as it applies to mass, charge, momentum, and energy.
- Understands the cause and effect of chemical reactions in natural and manufactured systems.
- Understands the characteristics and relationships among thermal, acoustical, radiant, electrical, chemical, mechanical, and nuclear energies.
- Understands the concepts and interrelationships of position, time, velocity, and acceleration.
- Understands the concepts and interrelationships of force (including gravity and friction), inertia, work, power, energy, and momentum.
- Understands the nature and properties of electricity and magnetism.
- Understands the nature and properties of mechanical and electromagnetic waves.

Performances

- Analyzes the chemical or physical properties & structures of materials and their uses
- Explains conservation of mass and energy and interactions of energy with matter, including changes in state.
- Uses kinetic theory and the laws of thermodynamics to explain energy transformations.
- Analyzes atomic and nuclear reactions in natural and man-made energy systems.
- Describes and predicts motions of bodies in inertial and accelerated frames of reference and in one and two dimensions in a physical system with association to the basic theories of force and motion.
- Analyzes/predicts motions and interactions within the context of conservation of energy and/or momentum.
- Describes the effects of gravitational, electromagnetic, and nuclear forces in real life situations.
- Analyzes and predicts the behavior of mechanical and electromagnetic waves under varying conditions.
- Explains the technologies used to study matter, energy, force and motion.

Science Content in the Area of Specialization (IPTS 1, ISBE science, NSTA 1). Demonstrates in-depth knowledge of the concepts and principles understood through the science discipline of specialization (biology, chemistry, environmental science, physics)

Indicators

Knowledge

- Understands the concepts and relationships unifying science domains
- Understands processes of investigation in the major science discipline (biology, chemistry, environmental

science, physics)
- Understands applications of mathematics in science research.

Dispositions

Performances
- Analyzes and explains the concepts, relationships, and applications of the content of the discipline

Biology	**Chemistry**	**Environmental Science**	**Physics**
Cell Biology	Science Knowl. Skills	Earth	Science Knowl/Skills
Heredity	Atomic Matter	Environmental Issues	Motion
Evolution	Bonds/Compound	Scientific Processes	Waves
Organisms/Diversity	Molecules/States		Heat/ Matter
Ecology	Solutions		Electricity/Magnetism
Living Systems	Acids		Nuclear Physics
	Thermodynamics		Relativity./Quantum/Solid
	Reactions		
	Organic Chemistry		

Unifying Concepts of Science. Understands the major unifying concepts of all sciences (systems, order, and organization; evidence, models, and explanation; constancy, change, and measurement; evolution and equilibrium; form and function), and how these concepts relate to other disciplines, particularly mathematics and the social sciences.

Indicators

Knowledge
- Understands connections within and among the traditional scientific disciplines
- Understands fundamental comparability of the processes shared within and among the traditional scientific disciplines
- Understands fundamental mathematical language, knowledge and skills
- Understands fundamental relationships among the sciences and the social sciences.
- Identifies and describes the application of the unifying concepts in real-life situations.

Dispositions
- Exhibits enthusiasm for the disciplines of science

Performances
- Develop a thematically unified framework of concepts across the traditional disciplines of science in keeping with the National Science Education Standards.
- Conducts research in science, demonstrating the ability to design and conduct open-ended investigations and report results in the context of one or more science disciplines.
- Uses mathematics and statistics to analyze and interpret data in the context of science
- Uses the unifying concepts from science, as well as concepts from mathematics, the social sciences, and other disciplines in his or her teaching.
- Expresses phenomenological relationships in the language of mathematics, solving simple algebraic equations, using scientific notation, constructing and interpreting graphs and using probabilities.

Nature of Science. Defines the values, beliefs and assumptions inherent to the creation of scientific knowledge within the scientific community; contrasts science to other ways of knowing; understands the characteristics distinguishing basic science, applied science, and technology; understands the processes and conventions of science as a professional activity; and understands the standards defining acceptable evidence and scientific explanation.

Indicators

Knowledge

- Explains and provides examples of conventions for research, evidence and explanation, distinguishing laws, theories and hypotheses.
- Understands that the nature of science is a human endeavor characterized as tentative, public, replicable, probabilistic, historic, unique, holistic and empirical.
- Understands the definitions of hypotheses, predictions, laws, theories, and principles and the historic and contemporary development and testing of them.
- Understands research and reports examples of hypotheses, predictions, laws, theories, and principles, and valid and biased thinking.
- Understands the basis for safety practices and regulations in the study of science.

Dispositions

- Is committed to scientific investigation using the scientific process

Performances

- Plans activities to convey the nature of basic and applied sciences, including multiple ways to create scientific knowledge, the tentativeness of knowledge, and creativity based on empirical evidence.
- Compares and contrasts rules of evidence and distinguishes characteristics of knowledge in science to rules and knowledge in other domains.
- Provides examples of changes in science knowledge over time, referring to the historical development of foundational concepts in the teaching field.
- Researches and reports examples of creative and critical thinking skills in scientific research and technological innovation.
- Researches and reports examples of predictions, hypotheses, and theories in both valid and biased scientific thinking.
- Researches and reports examples of the development of science through time and the impact of societal values on the nature of science.
- Documents and practices safety rules and shows evidence of their necessity in the investigation of science.
- Demonstrates the ability to use instruments and is able to explain functions of appropriate safety equipment used to assure and implement safe practices.

Science Inquiry. Engages students effectively in science inquiry (e.g., questioning and formulating solvable problems; reflecting on, and constructing, knowledge from data; collaborating and exchanging information while seeking solutions; and developing concepts and relationships from empirical experience) and facilitates understanding of the role inquiry plays in the development of scientific knowledge.

Indicators

Knowledge

- Understands assumptions, processes, purposes, requirements, and tools of scientific inquiry.
- Understands mathematical processes and tools for collecting, managing, and communicating information.
- Understands different approaches to conducting scientific investigations.

Dispositions

- Values the central role of inquiry in science

Performances

- Plans and implements data-based activities requiring students to reflect upon their findings, make inferences, and link new ideas to preexisting knowledge.
- Plans and implements activities with different structures for inquiry including inductive (exploratory), correlational and deductive (experimental) studies.

- Uses questions to encourage inquiry and probe for divergent student responses, encouraging student questions and responding with questions when appropriate.
- Encourages productive peer interactions and Plans both individual and small group activities to facilitate inquiry.
- Plans and Conducts scientific investigations using appropriate tools and technology.
- Applies mathematical and statistical methods to collect, analyze, and communicate results of investigations.
- Displays, illustrates, and defends the results of an investigation.
- Uses evidence and logic in developing proposed explanations that address scientific questions and hypotheses.

Issues of Science. Relates science to the daily lives and interests of students and to a larger framework of human endeavor and understanding (e.g., relationships among systems of human endeavor including science and technology; relationships among scientific, technological, personal, social and cultural values; and the relevance and importance of science to the personal lives of students).

Indicators

Knowledge

- Understands the ways that science and technology affect people's everyday lives, societal values, and systems; the environment; new knowledge; and technologies throughout history.
- Understands the processes and effects of scientific and technological breakthroughs and their effect on other fields of study, careers and job markets.

Dispositions

- Understands the relevance and importance of science to the personal lives of students

Performances

- Engages students in activities and projects in which they examine important social or technological issues related their discipline(s)
- Analyzes values and processes of decision-making about science and technological issues and applications.
- Relates science to the personal lives and interests of students, to potential careers, and to knowledge in other domains.
- Evaluates the efficacy of criteria for determining the effects of policies on local scientific, environmental, and technological issues.
- Investigates and evaluates the credibility of scientific claims made in the media, during public debates, or in advertising or marketing campaigns.
- Investigates issues by defining and clearly articulating the scientific, technological, and societal connections to be investigated, as well as evaluating the consequences, implications, and potential options for resolution.

Technological Design. Understands the concepts, principles, and practices of technological design.

Indicators

Knowledge

- Understands the processes, capabilities, limitations and implications of technology and technological design and redesign.
- Understands technology and technological design as the use of tools throughout human history.

Performances

- Identifies real-world problems or needs to be solved through technological design.
- Addresses a problem situation by identifying a design problem, proposing a design solution, implementing the solution, evaluating the solution, revising the design upon evaluation, and communicating the design and

the process.
- Uses the inquiry process in the investigation of past, current, and potential technological designs.

Human Development and Learning. Understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.

Indicators

Knowledge
- Understands how learning occurs--how students construct knowledge, acquire skills, and develop habits of mind--and knows how to use instructional strategies that promote student learning.
- Understands the psychological principles of learning and how they apply to visual arts education.
- Understands that students' physical, social, emotional, moral and cognitive development influence learning and knows how to address these factors when making instructional decisions.
- Is aware of expected developmental progressions and ranges of individual variation within each domain (physical, social, emotional, moral and cognitive), can identify levels of readiness in learning, and Understands how development in any one domain may affect performance in others.

Dispositions
- Appreciates individual variation within each area of development, shows respect for the diverse talents of all learners, and is committed to help them develop self-confidence and competence.
- Is disposed to use students' strengths as a basis for growth, and their errors as an opportunity for learning.

Performances
- Assesses individual and group performance in order to design instruction that meets learners' current needs in each domain (cognitive, social, emotional, moral, and physical) and that leads to the next level of development.
- Stimulates student reflection on prior knowledge and links new ideas to already familiar ideas, making connections to students' experiences, providing opportunities for active engagement, manipulation, and testing of ideas and materials, and encouraging students to assume responsibility for shaping their learning tasks.
- Assesses students' thinking and experiences as a basis for instructional activities by, for example, encouraging discussion, listening and responding to group interaction, and eliciting samples of student thinking orally and in writing.

Diverse Students. Understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Indicators

Knowledge
- Understands and can identify differences in approaches to learning and performance, including different learning styles, multiple intelligences, and performance modes, and can design instruction that helps use students' strengths as the basis for growth.
- Knows about areas of exceptionality in learning--including learning disabilities, visual and perceptual difficulties, and special physical or mental challenges.
- Knows about the process of second language acquisition and about strategies to support the learning of students whose first language is not English.
- Understands how students' learning is influenced by individual experiences, talents, and prior learning, as well as language, culture, family and community values.

- Has a well-grounded framework for understanding cultural and community diversity and knows how to learn about and incorporate students' experiences, cultures, and community resources into instruction.

Dispositions

- Believes that all children can learn at high levels and persists in helping all children achieve success.
- Appreciates and values human diversity, shows respect for students' varied talents and perspectives, and is committed to the pursuit of "individually configured excellence."
- Respects students as individuals with differing personal and family backgrounds and various skills, talents, and interests.
- Is sensitive to community and cultural norms.
- Makes students feel valued for their potential as people, and helps them learn to value each other.

Performances

- Identifies and designs instruction appropriate to students' stages of development, learning styles, strengths, and needs.
- Uses teaching approaches that are sensitive to the multiple experiences of learners and that address different learning and performance modes.
- Makes appropriate provisions (in terms of time and circumstances for work, tasks assigned, communication and response modes) for individual students who have particular learning differences or needs.
- Can identify when and how to access appropriate services or resources to meet exceptional learning needs.
- Seeks to understand students' families, cultures, and communities, and uses this information as a basis for connecting instruction to students' experiences (e.g. drawing explicit connections between subject matter and community matters, making assignments that can be related to students' experiences and cultures
- Brings multiple perspectives to the discussion of subject matter, including attention to students' personal, family, and community experiences and cultural norms.
- Creates a learning community in which individual differences are respected.

Learning Environment. Uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

Indicators

Knowledge

- Can use knowledge about human motivation and behavior drawn from the foundational sciences of psychology, anthropology, and sociology to develop strategies for organizing and supporting individual and group work.
- Understands how social groups function and influence people, and how people influence groups.
- Knows how to help people work productively and cooperatively with each other in complex social settings.
- Understands the principles of effective classroom management and can use a range of strategies to promote positive relationships, cooperation, and purposeful learning in the classroom.
- Recognizes factors and situations that are likely to promote or diminish intrinsic motivation, and knows how to help students become self-motivated.

Dispositions

- Takes responsibility for establishing a positive climate in the classroom and participates in maintaining such a climate in the school as whole.
- Is committed to the expression and use of democratic values in the classroom
- Values the role of students in promoting each other's learning and recognizes the importance of peer relationships in establishing a climate of learning.
- Recognizes the value of intrinsic motivation to students' life-long growth and learning.
- Is committed to the continuous development of individual students' abilities and considers how different motivational strategies are likely to encourage this development for each student.

Performances

- Identifies and promotes the elements of an exciting and stimulating science learning environment; Plans and develops opportunities for students to learn from resources, events and displays in the environment.
- Creates a smoothly functioning learning community in which students assume responsibility for themselves and one another, participate in decision making, work collaboratively and independently, and engage in purposeful learning activities.
- Engages students in individual and cooperative learning activities that help them develop the motivation to achieve, by, for example, relating lessons to students' personal interests, allowing students to have choices in their learning, and leading students to ask questions and pursue problems that are meaningful to them.
- Organizes, allocates, and manages the resources of time, space, activities, and attention to provide active and equitable engagement of students in productive tasks.
- Maximizes the amount of class time spent in learning by creating expectations and processes for communication and behavior along with a physical setting conducive to classroom goals.
- Helps the group to develop shared values and expectations for student interactions, academic discussions, and individual and group responsibility that create a positive classroom climate of openness, mutual respect, support, and inquiry.
- Analyzes the classroom environment and makes decisions and adjustments to enhance social relationships, student motivation and engagement, and productive work.
- Organizes, prepares students for, and monitors independent and group work that allows for full and varied participation of all individuals.

Skills of Teaching. Creates a community of diverse student learners who can construct meaning from science experiences and possess a disposition for further inquiry and learning and applies appropriate pedagogical skills to science teaching (e.g., strategies and methodologies; interactions with students that promote learning and achievement; effective organization of classroom experiences; use of advanced technology to extend and enhance learning; and the use of prior conceptions and student interests to promote new learning).

Indicators

Knowledge

- Understands how to use materials from the students' environment to help them use inquiry strategies to build concepts.
- Understands the appropriate use of various strategies of direct instruction, concept development, inquiry and problem solving that lead to knowledge and skills for scientific reasoning.
- Understands how concepts are developed in students' minds and how to address misconceptions that students have developed from prior experiences.
- Understands the appropriate use of strategies for questioning, facilitating, and coaching to help students develop significant concepts, problem-solving skills, and scientific habits of mind.
- Understands the teacher's role in different teaching strategies, including concept development, inquiry, and direct instruction.

Dispositions

- Values both long term and short term planning.
- Believes that plans must always be open to adjustment and revision based on student needs and changing circumstances.
- Values planning as a collegial activity.
- Values the development of students' critical thinking, independent problem solving, and performance capabilities.
- Values flexibility and reciprocity in the teaching process as necessary for adapting instruction to student responses, ideas, and needs.

Performances

- Plans and incorporates science teaching strategies appropriate for learners with diverse backgrounds and learning styles.
- Demonstrates the ability to effectively engage students in learning science, both individually and in group work of various kinds.
- Identifies goals and provides a well-reasoned rationale, based on student needs, for choosing particular science teaching strategies.
- Uses appropriate technology, including computers, to provide science instruction
- Uses diverse teaching methods to address important concepts from different perspectives; and Uses learning cycles for some instruction.
- Identifies common student misconceptions or naive conceptions in the teaching field, their source, and an appropriate teaching response.
- Relates instructional goals, materials and actions to state and national science education standards, analyzing strengths and weaknesses in a particular classroom context.
- Plans instruction that allows students to develop understanding of significant concepts and skills in science through hands-on experiences with real materials.
- Plans instruction that incorporates a variety of methods and strategies for learning, including demonstrations, the laboratory, and out-of-class resources.
- Plans instruction utilizing instructional technology, instructional materials, and scientific equipment.
- Plans instructional activities that create opportunities for students to test, modify, and sometimes abandon previous ideas about science.
- Implements activities requiring students to collect data, reflect upon their findings, make inferences, and links new ideas to preexisting knowledge.
- Conducts instruction that has appropriate structure with flexibility to allow students to engage in productive inquiry as individuals and groups.
- Conducts instruction that encourages curiosity, openness to new ideas and data, and skepticism that characterize science.

Classroom Communication. Uses knowledge and understanding of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom

Indicators

Knowledge

- Understands communication theory and language development
- Understands the role of language in learning

Dispositions

- Is sensitive to how cultural and gender differences can affect communication in the classroom

Performances

- Models effective communication strategies
- Conveys information effectively
- Asks questions effectively
- Uses visual, aural, kinesthetic and nonverbal cues
- Uses oral and written discourse effectively
- Helps students develop and extend their oral and written communication skills to promote subject matter learning

Curriculum. Develops and applies a coherent, focused science curriculum (an extended framework of goals, plans, materials, and resources for instruction and the instructional context, both in and out of school, within which pedagogy is embedded) that is consistent with state and national standards for science education and appropriate for addressing the needs, abilities and interests of students.

Indicators

Knowledge

- Understands the role of technology in education and can define a rationale and long-range strategy for including technology in science education.
- Understands the local, State and national goals and standards for science education.
- Understands the relationship of science concepts to the developmental level of students in classrooms.

Dispositions

Performances

- Assembles a diverse set of potentially useful instructional materials in the teaching field from a variety of sources including the World Wide Web
- Develops and implements long-range and unit Pplans, with clear rationales, goals, methods, materials and assessments.
- Designs and implements learning activities that thematically relate science with other school subjects and community resources.
- Understands how to articulate science instruction across units and from year to year.
- Identifies how an instructional design relates to local, State, and national goals and standards for science.
- Identifies appropriate curricular materials from a variety of sources and selects those that meet the developmentally appropriate, standards-led instructional outcomes.
- Demonstrates the ability to articulate learning across and among units of instruction, courses in science, and other disciplines.

Science and Community. Relates science teaching and learning to the needs and values of the community; and uses human and institutional resources in the community (i.e., social and community support network and involvement of people and institutions from the community) to advance the education of their students in science.

Indicators

Knowledge

- Understands applications of science concepts and inquiry to the context of a community.
- Understands how parents and other community members and institutions support science learning in the classroom.
- Understands how to use the resources of the student's community to support inquiry.

Dispositions

- Values the community as a resource for science teaching

Performances

- Identifies people and institutions in the community who are willing to assist in teaching certain topics, and Plans for their involvement in teaching.
- Uses data about a community, its culture and its resources to plan science lessons that are appropriate for, and relevant to, students from that community.

- Plans activities that involve families in the science teaching/learning process and communicates effectively with families of students.
- Uses data about a community in conducting learning activities in science.
- Conducts activities that involve parents and other members of the community in the science program.
- Uses individuals and agencies that provide science education in the community in the science program.
- Develops and tests a community resource inventory, including its non-formal learning opportunities, business/industry connections, and parent/community resources.
- Uses synchronous and asynchronous telecommunication capabilities to collaborate with community members and other experts as an integral component to projects.

Assessment. Uses a variety of contemporary assessment strategies to evaluate the intellectual, social, and personal development of the learner in all aspects of science (e.g., alignment of goals, instruction and outcomes; measurement and evaluation of student learning in a variety of dimensions and the use of outcome data to guide and change instruction).

Indicators

Knowledge

- Understands the strengths and limitations of different types of assessments (e.g. observation, portfolios of student work, teacher-made tests, performance tasks, projects, student self-assessment, peer assessment, and standardized tests) to enhance her or his knowledge of learners, evaluate students' progress and performances, and modify teaching and learning strategies.
- Knows how to select, construct, and use assessment strategies and instruments appropriate to the learning outcomes being evaluated and to other diagnostic purposes.
- Understands measurement theory and assessment-related issues, such as validity, reliability, bias, and scoring concerns.

Dispositions

- Understands the value of assessment data in guiding and changing instruction in science classrooms.
- Understands the importance of communicating criteria for success to students.

Performances

- Identifies and uses the most appropriate methods for gathering information about student learning, based on student needs and characteristics and the goals of instruction.
- Aligns assessment with goals and actions and Uses results to alter teaching.
- Demonstrates the ability to use multiple strategies to assess teaching and learning authentically, consistent with national standards and goals for science education.
- Plans and conducts assessment to evaluate scientific inquiry assessment tasks in multiple disciplines.
- Plans and conducts assessment to evaluate scientific case study/issue investigation assessment tasks in multiple disciplines

Safety and Welfare. Designs and manages safe and supportive learning environments (e.g., physical spaces within which learning of science occurs; psychological and social environment of the student engaged in learning science; treatment and ethical use of living organisms; and safety in all areas related to science instruction) that reflect high expectations for the success of all students.

Indicators

Knowledge

- Understands and sets up procedures for safe handling, labeling and storage of chemicals, electrical equipment, and knows actions to take to prevent or report an emergency.
- Understands liability and negligence, especially as applied to science teaching and
- Knows the standards and recommendations of the science education community for the safe and ethical use and care of animals for science instruction.
- Understands liability and negligence, especially as applied to science teaching.
- Understands procedures for safe and ethical use and care of animals for science instruction.

Dispositions

- Appreciates the need for safe practices in the science classroom

Performances

- Designs and assesses learning environments to utilize safe practices to prevent potential problems of liability and negligence regarding the inventory, storage, and disposal of chemicals, resources, and equipment.
- Can take action to prevent potential safety and liability problems.
- Develops a set of criteria to measure and assesses the optimum learning environment that promotes scientific inquiry and learning.

Disabilities. Implements appropriate assessment and instruction that supports students with disabilities in mainstream/inclusive settings.

Indicators

Knowledge

- Knows the implications of various disabilities on human development and learning
- Knows legal provisions for assessment, planning, and instruction for students with disabilities
- Knows techniques for assessment and instruction of students with disabilities

Dispositions

- Demonstrates commitment to helping students with disabilities achieve to their highest educational and quality of life potential.

Skills

- Adapts curriculum and uses instructional strategies, materials, and assistive equipment/technology according to the characteristics of the learner.
- Creates a positive climate and promotes social interaction between disabled and non-disabled students
- Collaborates with professional colleagues, families, and communities to support students with disabilities.

Technology I. As appropriate for the discipline, enables students to learn about and to use technology.

Indicators

Knowledge

- Knows the technology-related Illinois Learning Standards that apply to the teaching certificate area(s) held, as well as the scope and sequence of their instruction
- Knows research-based, developmentally appropriate, □best□ practices focusing on a variety of technological instructional tools
- Knows programs, hardware, etc. appropriate for use with diverse learners, including adaptive/assistive technologies for students with special needs
- Knows how to assess and monitor students□ engagements with technology to insure ethical, legal, and equitable uses
- Demonstrates ability to critique educational software, hardware, and technological innovations from a variety of stances□philosophical, pedagogical, and ethical

Dispositions

- Demonstrates ability to critique educational software, hardware, and technological innovations from a variety of stancesCphilosophical, pedagogical, and ethical
- Demonstrates awareness and sensitivity to the ethical, legal, and human issues involved in using technology with students
- Demonstrates commitment to bridging the access equity gap, or >digital divide=, that affects marginated populations
- Demonstrates commitment to providing engaging, technology-based learning opportunities for all students

Skills

- Uses technology terminology accurately in written and oral communications
- Integrates technology into the curriculum to expand students□ knowledge and skills
- Matches technology to the particular learning situation and each learner□s needs
- Observes and evaluates students□ technology knowledge, skills, and dispositions
- Creates opportunities for students to use technology tools for learning, demonstrating their learning, and reflecting on it
- Uses software and hardware appropriately

Technology II. Understands and uses technology to enhance his/her teaching

Indicators

Knowledge

- Knows particular technology resources to aid in designing learning opportunities for a variety of student grouping situations and diverse learning needs
- Knows the uses of computers and technology in business, industry, and society
- Knows resources for developing a personal professional network or community for ongoing professional development

Dispositions

- Demonstrates commitment to using technology in instruction
- Explores and evaluates technology-based resources regularly, as part of ongoing personal professional development
- Adheres to ethical principles in exploring, using, and sharing technology resources on a personal professional basis

Skills

- Uses technology to research, communicate, and collaborate in an ongoing fashion

- Uses productivity tools (e.g., word processing, presentation graphics) for classroom/program management and instruction

Language Arts: Literacy Techniques & Strategies Knows a broad range of literacy techniques and strategies for every aspect of communication and develops each student's ability to read, write, speak and listen to his or her potential within the demands of the discipline.

Indicators

Knowledge

- understands and can articulate the needs for literacy development in general and in specific disciplines or at specific grade levels.
- understands effective literacy techniques to activate prior student knowledge and build schema to enhance comprehension of "text."
- knows strategies and techniques for teaching communication skills to those students' whose first language is not English.

Dispositions

- Demonstrates commitment to viewing one's self as a literacy teacher, whatever the age/grade level or specialty area of the certificate(s) held
- Demonstrates awareness and sensitivity to the ethical, legal, and human issues involved in helping all students develop their personal literacy
- Demonstrates commitment to bridging the literacy equity gap that affects marginated populations
- Views all students as readers, authors, and thinkers
- Demonstrates respect for all students' literacy voices and languages
- Views literacy as a developmental process for making and representing meaning, not merely a series of discrete skills for reading, writing, listening, and speaking
- Acknowledges the need to instill in students a desire to use literacy skills

Performance

- practices effectively the language processes of reading, writing, and oral communication in the daily classroom exchange between student and teacher, between student and student, between teacher and "text," and between student and "text".
- practices effective literacy techniques to make reading purposeful and meaningful.
- practices effective questioning and discussion techniques to extend content knowledge acquired from "text."
- uses a variety of "text" and research resources with students/ in an attempt to enhance student learning from reading, learning from writing, and learning from oral communication.

Language Arts: Modeling Literacy Models effective reading, writing, speaking, and listening skills during their direct and indirect instructional activities.

Indicators

Knowledge

- knows and understands the rules of English grammar, spelling, punctuation, capitalization, and syntax for both written and oral contexts.
- understands how to communicate ideas in writing to accomplish a variety of purposes.

Dispositions

- Recognizes that the teacher is the most important communicator in the classroom

Performance

- models the rules of English grammar, spelling, punctuation, capitalization, and syntax in both written and oral contexts.
- reads, understands, and clearly conveys ideas from texts or other supplementary materials.
- writes and speaks in a well-organized and coherent manner that adapts to the individual needs of readers/listeners.
- expresses ideas orally with explanations, examples, and support in a clear, succinct style.
- helps students understand a variety of modes of writing (persuasive, descriptive, informative, and narrative).
- listens well.

Language Arts: Instruction & Improvement Provides a variety of instructional strategies, constructive feedback, criticism, and improvement strategies in Language Arts while being aware of diverse learners' needs.

Indicators

Knowledge

- understands how to analyze an audience to determine culturally appropriate communication strategies to share ideas effectively in both written and oral formats with students and their families, other faculty and administrators, and the community and business in general.
- understands how to use diverse instructional strategies and assessments that include an appropriate balance of lecture, discussion, activity, and written and oral work.

Dispositions

- Approaches literacy curriculum planning as a process aimed at meeting learners' individual needs, not the imposition of a prescribed, inflexible program

Performance

- analyzes content materials to determine appropriate strategies and techniques to create successful learning through reading, writing, speaking, and listening.
- assists students whose communication skills may be impeded by learning, language, and/or cultural differences, especially those whose first language is not English.
- conducts effective classroom discussions by managing groups, asking questions, eliciting and probing responses, and summarizing for comprehension.
- uses a variety of media to enhance and supplement instruction.
- uses multi-disciplinary instructional approaches.

Secondary Content Area Reading. Understands the process of reading and demonstrates instructional abilities to teach reading in the discipline (math, science, social science & visual arts).

Indicators

Knowledge

- Understands that the reading process is the construction of meaning through the interactions of the reader's background knowledge and experiences, the information in the text, and the purpose of the reading situation.
- Recognizes the relationships among the four language arts (reading, writing, listening, and speaking), and knows how to provide opportunities to integrate these through instruction.
- Understands how to design, select, modify and evaluate materials in terms of the reading needs of the learner.
- Understands the importance of and encourages the use of literature for adolescents in the curriculum and for independent reading.
- Understands the relationship between oral and silent reading.
- Understands the role of subject-area vocabulary in developing reading comprehension.

- Understands the importance of the unique study strategies required of the specific content area in developing reading comprehension.
- Understands the importance of the relationship between assessment and instruction in planning.

Dispositions

- Demonstrates commitment to viewing one's self as a literacy teacher, whatever the age/grade level or specialty area of the certificate(s) held

Performances

- Plans and teaches lessons for students that develop comprehension of content-area materials through instructional practices that include analyzing critically, evaluating sources, and synthesizing and summarizing material.
- Plans and teaches lessons on how to monitor comprehension and correct confusions and misunderstandings that arise during reading.
- Plans and models the use of comprehension strategies before, during, and after reading of text.
- Provides opportunities for students to develop content-area vocabulary through instructional practices that develop connections and relationships among words, use of context clues, and understanding of connotative and denotative meaning of words.
- Plans and teaches lessons that encourage students to write about the content read in order to improve understanding.
- Plans and teaches lessons to help students develop study strategies that include previewing and preparing to read text effectively, recognizing organizational patterns unique to informational text, and using graphic organizers as an aid for recalling information.
- Plans and teaches units that require students to carry out research or inquiry using multiple texts, including electronic resources.
- Provides continuous monitoring of students' progress through observations, work samples, and various informal reading assessments.
- Analyzes and evaluates the quality and appropriateness of instructional materials in terms of readability, content, length, format, illustrations, and other pertinent factors.
- Promotes the development of an environment that includes classroom libraries that foster reading.

For T&L Students

Inquiry. Undertakes independent inquiry and use technology as one tool to assist him or her in the overall inquiry process

Indicators

Knowledge

- Understands the value of research to inquiry in education
- Understands key concepts, assumptions, debates, and ways of knowing that inform the design, collection, and analysis of research in education
- Understands the use of technology as one tool to assist with the overall inquiry process in education
- Understands the roles that technology plays in schools and society

Dispositions

- Appreciates the value of reading and conducting research in education
- Appreciates the role of technology in assisting with the design, conduct, and analysis of research in education

Performances

- Conducts meaningful inquiry on an independent basis in education

- Makes meaningful evaluative judgments about the quality of existing research in education
- Builds on existing theoretical frameworks through independent inquiry in education
- Demonstrates familiarity with a range of technological resources that support educational inquiry
- Accesses a range of technological resources relevant to educational inquiry

PERSONALISM, PROFESSIONALISM, & LIFE-LONG LEARNING

Collaboration. Is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Indicators

Knowledge

- Understands schools as organizations within the larger community context and understands the operations of the relevant aspects of the system(s) within which s/he works.
- Understands how factors in the students' environment outside of school (e.g. family circumstances, community environments, health and economic conditions) may influence students' life and learning.
- Understands and implements laws related to students' rights and teacher responsibilities (e.g. for equal education, appropriate education for handicapped students, confidentiality, privacy, appropriate treatment of students, reporting in situations related to possible child abuse).

Dispositions

- Values and appreciates the importance of all aspects of a child's experience.
- Is concerned about all aspects of a child's well-being (cognitive, emotional, social, and physical), and is alert to signs of difficulties.
- Is willing to consult with other adults regarding the education and well-being of his/her students.
- Is willing to work with parents and guardians from diverse home and community situations, and to develop cooperative partnerships in support of student learning and well being
- Respects the privacy of students and confidentiality of information.
- Is willing to work with other professionals to improve the overall learning environment for students.

Performances

- Participates in collegial activities designed to make the entire school a productive learning environment.
- Makes links with the learners' other environments on behalf of students, by consulting with parents, counselors, teachers of other classes and activities within the schools, and professionals in other community agencies.
- Can identify and use community resources to foster student learning.
- Establishes respectful and productive relationships with parents and guardians from diverse home and community situations, and seeks to develop cooperative partnerships in support of student learning and well being.
- Talks with and listens to the student, is sensitive and responsive to clues of distress, investigates situations, and seeks outside help as needed and appropriate to remedy problems.
- Acts as an advocate for students.

Reflection and Professional Growth. Fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

Indicators

Knowledge

- Understands methods of inquiry that provide him/her with a variety of self- assessment and problem-solving strategies for reflecting on his/her practice, its influences on students' growth and learning, and the complex interactions between them.
- Is aware of major areas of research on teaching and of resources available for professional learning (e.g. professional literature, colleagues, professional associations, professional development activities).

Dispositions

- Values critical thinking and self-directed learning as habits of mind.
- Is committed to reflection, assessment, and learning as an ongoing process.
- Is willing to give and receive help.
- Is committed to seeking out, developing, and continually refining practices that address the individual needs of students.
- Recognizes his/her professional responsibility for engaging in and supporting appropriate professional practices for self and colleagues.
- Is committed to ongoing development of set of professional values and beliefs about teaching, learning, and schooling as a basis for their classroom practice

Performances

- Uses classroom observation, information about students, and research as sources for evaluating the outcomes of teaching and learning and as a basis for experimenting with, reflecting on, and revising practice.
- Engages in reflective self assessment and develops a system for self-assessment as a practicing teacher.
- Is engaged in ongoing professional development, seeking out professional literature, colleagues, and other resources to continually develop and inform their professional perspectives on teaching and learning and enhancing their classroom practice.
- Draws upon professional colleagues within the school and other professional arenas as supports for reflection, problem-solving and new ideas, actively sharing experiences and seeking and giving feedback.
- Advances his or her knowledge of current developments in the field by participating in professional development activities (e.g., coursework, professional organizations, and workshops).

Professional Conduct. Understands education as a profession, maintains standards of professional conduct, and provides leadership to improve student learning and well-being

Indicators

Knowledge

- Understands the unique characteristics of education as a profession and a professional code of conduct
- Understands how school systems are organized and operate
- Understands school policies and procedures
- Understands legal issues in education
- Understands the importance of active participation and leadership in professional education organizations

Dispositions

- Believes that all students have the potential to learn rigorous content and achieve high standards.
- Is prepared to assume roles beyond the classroom for the benefit and welfare of students
- Is committed to the highest ethical standards of professional behavior

Performances

- Contributes knowledge and expertise about teaching and learning to the profession

- Follows codes of professional conduct and exhibits knowledge and expectations of current legal directives
- Follows school policy and procedures, respecting the boundaries of professional responsibilities, when working with students, colleagues, and families
- Initiates and develops educational projects and programs
- Actively participates in or leads such activities as curriculum development, staff development, and student organizations
- Participates as appropriate in policy design and development at the local level with professional organizations, and/or with community organizations