The Framework for Grades Pre K-4 Program Guidelines

December 2016

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION
333 Market Street
Harrisburg, PA 17126-0333
www.education.pa.gov

Revised Dec. 2016

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Revised Dec. 2016

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WHY QUALITY TEACHER PREPARATION PROGRAMS ARE IMPORTANT

The fundamental purpose of a teacher preparation program approved by the Commonwealth of Pennsylvania is to admit, prepare, and support candidates for the teaching profession who, upon graduation, have the knowledge and skills to enable Pre K -12 students in Pennsylvania to achieve academic success. Pennsylvania's preparation of new teachers is one component of a Standards-Based Instructional System.

The six components of the Standards-Based Instructional System do not stand in isolation as supports for Pre K-12 student achievement in the Commonwealth of Pennsylvania. Design and delivery of high quality teacher preparation programs are functions of an aligned instructional system; institutional success in producing new teachers with the knowledge and skills to promote student learning is the ultimate outcome of the overall system. High quality teacher preparation programs are an essential part of Pennsylvania's efforts to build capacity for an aligned Pre K-16 system.

PHILOSOPHY FOR PREPARING HIGHLY EFFECTIVE PENNSYLVANIA TEACHERS

Six linked circles in the above standards-based system define core elements of Pennsylvania's emerging instructional system: standards, curriculum, instruction, materials and resources for instruction, fair assessments, and appropriate interventions. Together, these system components are intended to produce strong results for students. For this to happen, the work encompassed in each circle—such as instruction—must build capacity for the activities captured by the other five circles.

In the case of teacher preparation programs and their contribution to ***(1) instruction***, all programs are expected to align their course content with ***(2) state standards***. All teacher preparation programs are expected to provide all candidates with the knowledge and skills to teach a ***(3) standards-based curriculum*** effectively and successfully. Through university coursework and extensive, well-designed clinical experiences, all candidates for the profession are expected to learn how to use ***(4) materials and resources for instruction*** (including technology) to meet the individual needs of each student in their classroom. Each teacher preparation program is expected to give considerable attention to helping all candidates acquire and use ***(5) assessment skills***, enabling them to understand and respond to pupil results on standardized tests (PSSA and others), local school or district assessments, and individualized assessments of the achievements and challenges of each pupil. Taken together, this set of knowledge and teaching skills must enable every candidate for the teaching profession in the Commonwealth to implement ***(6) appropriate interventions*** in the classroom to improve student learning. Teacher preparation programs and the new teachers who complete them will be judged according to their success in achieving the six key goals described above.

Since program and candidate success do not happen by accident, program design, the components of that design, and the ongoing assessment of their effectiveness must all point in the same direction. The needs and interests of Pre K-12 students and their schools are at the center of the program. This means that Pre K-12 teachers and administrators must be involved in program assessment activities, decisions about selection and use of clinical sites, and asked regularly for their feedback on candidate and program performance. Program outcomes must include strong subject matter content preparation, more extensive clinical experiences for students, and the use of technology in curriculum and instruction.

Because teaching is a clinical profession, candidates for the profession should spend extensive time in school settings—beginning early in their teacher preparation program sequence—guided by university faculty and appropriately prepared Pre K-12 mentor teachers. Teacher preparation programs must be able to demonstrate how they use evidence about program graduates and evidence about the Pre K-12 students of their graduates to make continuous program improvements.

INTRODUCTION

Pre K- 4 Principles

- Whenever the word "children" is used, it means all children, including children with special needs. All children can learn and educational practice must be adjusted to meet the needs of individual children and families.
- Curriculum for young children (Pre K- 4) should be based on age appropriate understanding and both individual child and group needs. Young children learn best when a variety of activities are planned throughout the day in large group, small group, and individual formats. Research-based and developmentally appropriate practices, as well as the Pennsylvania Early Learning Standards and Academic Standards for grade 3 and 4, form the basis for these recommendations.
- All aspects of a Pre K- 4 teacher preparation program need to be guided by a child development frame of reference. Solid grounding in child development should be the beginning point for all course development and learning opportunities.
- Family-centered practice is an essential element and should be woven through all course work and learning opportunities. An understanding of the central role that parents play in the development of children with and without disabilities is critical.
- Pre K- 4 candidates need a strong foundation in the diverse populations of Pennsylvania and how individual and family needs can impact student learning. Appreciation and respect for individual differences and unique needs must always be considered.

Today's Pre K- 4 teachers must be prepared to serve and to value a diverse group of young children and families in a variety of educational settings. This document describes knowledge, skills, and competencies that Pre K- 4 teachers will learn by completing a prescribed sequence of courses (including field placements). In addition to specific requirements and content material, several overarching principles inform the development and implementation of the Pre K- 4 teacher certification program.

These principles are designed to focus on the learning needs of children through age nine. In a broader national context, these principles are consistent with leading national organizations, including the National Association for Education of Young Children (NAEYC) and the Association for Childhood Education International (AECI). The NAEYC's position statements represent a comprehensive vision of what professionals should know and be able to do. The NAEYC principles indicate a respect for diversity and inclusion, responsibility for ethical behavior on behalf of children, respect for family, community, and cultural contexts, respect for evidence as a guide to professional decisions, and reliance on guiding principles of child development and learning. In developing the Pennsylvania's guidelines, the principles that have been articulated by both NAEYC and ACEI, and their standards, are incorporated throughout the Pennsylvania Guidelines for Pre K- 4 teacher preparation.

These guidelines discuss the Pre K-4 Program design, professional core rationale, candidate competencies, Pennsylvania standards, assessments in a standards aligned system, faculty, field experiences and student teaching, new teacher support, and appendices with design examples and course content information.

PROGRAM DESIGN

The professional core courses, competencies and experiences for the Pre K- 4 teacher preparation program should be designed to address the broad set of issues, knowledge and competencies that are relevant for early childhood and elementary teaching and learning. The program must prepare teachers who will be able to ensure students' mastery of academic anchors and standards. The professional core component of the program design must be maintained regardless of the configuration or options that the training program selects, either from samples in this document or others it develops. The professional core in the Pre K - 12 programs consists of coursework, field experiences and student teaching. Programs have flexibility in how they address adaptations, accommodations, and cognitive development of diverse students in an inclusive setting (9 credits or 270 hours and 3 credits or 90 hours or equivalent combination are required).

Pre-K to 4 Professional Core

Development, Cognition and Learning (child development, typical and atypical, birth through age 9; cognition and learning-applied in the classroom)

Subject Matter Content and Pedagogy (language development in early childhood**,** language development, academic success and learning to read**,** math foundations for the preschool years**,** early literacy foundations or the preschool years (Pre K-1)**,** literacy foundations for the primary grades (2-4), differentiated reading instruction for the primary grades: focus on interventions**,** math foundations for the primary grades**,** social studies methods**,** science methods, motor development and health, social development and arts methods)

Assessment (assessment methods I: observation and informal**,** assessment methods II: summative, formative, diagnostic, benchmark)

Family and Community Collaboration Partnerships (family and community relationships**,** family collaboration and diversity)

Professionalism (evidenced based practices in Pre K- 4 care and education**,** advocacy, collaboration and cooperative learning, and issues and trends)

Adaptations and Accommodations for Diverse Students in an Inclusive Setting and Meeting the Needs of English Language Learners

Institutions are charged with producing evidence to demonstrate that their graduates understand and apply the knowledge, concepts and skills essential for successful Pre K-4 instruction. The program application must describe clearly how the relevant set of knowledge and skills inform the program design, and it must also describe how the institution will assess whether candidates have acquired the required knowledge and skills.

Faculty who teach in the professional core must have demonstrated expertise in Pre K-4 education appropriate to the content they are teaching, as well as advanced degrees in disciplines appropriate to teaching in the program. For candidates preparing to be Pre K- 4 level teachers, all courses should be grounded in child development and enable

them to gain the knowledge and experience to work successfully with family members and the broader community.

PROGRAM DELIVERY

The Department of Education believes that Pre K-4 Certificate Preparation Programs should be comprehensive and delivered through a combination of university classroom and school settings. While some online courses may be a component of the program, programs that are delivered completely online will not be approved.

PROFESSIONAL CORE RATIONALE

For Pennsylvania teachers, Title 22 of the Pennsylvania Code, §354.25(3), as well as §354.32 (a)(1) and §354.33(1)(i)(A)-(H) enumerate aspects of the knowledge and skills that candidates for teaching in the Commonwealth are expected to learn and demonstrate. While this set of knowledge and skills is developed in university academic classroom settings and clinical practice, the program curriculum should reflect this centrality to the process of educator preparation.

The purpose of this section is to describe the rationale of the five key areas of the Professional Core which are:

1. Development, Cognition and Learning
2. Subject Matter Pedagogy Content
3. Assessment
4. Family and Community Collaboration Partnerships
5. Professionalism

Course content information on each of these five key areas can be found in Appendices B-M.

Early Development and Learning Theory

Through the content and experiences in this program, candidates must learn and be able to apply the major concepts and theories related to the development of young children. They must become familiar with the research on human development, motivation, and learning. The courses should be designed and taught in such a way that faculty and candidates are able to integrate their knowledge of child development theory and make explicit connections with content areas, cognitive development, literacy, special education, and English Language Learning. Course content, competencies and assessed outcomes should be aligned with the PDE 430, as well as major domain areas contained in the Pre-K- 4 guidelines.

The Pre-K-4 professionals must know the essential concepts, inquiry tools, and structure of content areas including academic subjects. Essential knowledge and skills are needed to provide appropriate environments that support learning in each content area for all children. Basic knowledge of the research base underlying each content area is needed as well as an understanding of the core concepts and standards of professional organization in each content area. Content areas include language and literacy, the arts, mathematics, physical activity and physical education, social studies, and science. Students must be able to design, implement, and evaluate meaningful, challenging curricula that promotes comprehensive developmental learning outcomes for all children and must be adept at using assessment and incorporating results into ongoing classroom instruction and practice.

Subject Matter Content and Pedagogy Overview

This section contains the subject matter competencies and instructional practices that candidates need to know in order to promote academic achievement and school success. The content is based on the "Key Learning Areas" of the Pennsylvania Early Childhood Learning Standards and Academic Standards.

Candidates must demonstrate their understanding of learning as a process that integrates all areas of development – emotional, social, language, cognitive, physical and creative – and utilize a variety of instructional strategies so that all children can become interested and engaged in learning. In addition, candidates must be able to demonstrate their understanding of how they combine relationships with children and families, developmentally effective approaches to teaching and learning, and knowledge of academic disciplines to design, implement, and evaluate experiences that promote positive development and learning.

This section also describes the age-appropriate content candidates must know for classroom instruction. It includes the competencies teachers must demonstrate in developing positive and stimulating classroom environments as well as the content knowledge needed to construct effective curriculum and assessments for ages/grades Pre K- 4.

Candidates must know, understand, and use positive relationships and supportive interactions as the foundation for their work with young children as well as a wide array of effective approaches, strategies and tools to positively influence children's development and learning. Candidates should demonstrate their understanding of:

1. the importance of each content area in young children's learning;
2. the essential concepts, inquiry, tools and structure of content areas including academic subjects and resources to deepen young children's understanding;
3. the ability to use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for all young children.

Candidates must demonstrate that they can draw upon a variety of tools to design, implement, and evaluate curriculum for children. The complexity of this process requires candidates to go beyond their own basic knowledge to identify and use high-quality resources, including books, standards documents, Web resources, and individuals who have specialized content expertise, to develop Pre K- 4th grade curriculum. Curriculum planning starts with clear, appropriate goals and desired outcomes for children.

Candidates must use their content knowledge that is rooted in child development, including age (chronological and developmental), individual and cultural appropriateness and Pennsylvania's Early Learning Standards to design effective classroom and curriculum content in the following areas:

Language Development

Language development skills are central to successful learning in the academic areas. Students who are language impaired are at a high risk for learning difficulties because language content, form, and function are basic prerequisites to academic learning.

An emphasis on language development prior to formal instruction in academic subjects such as reading is essential to successful teaching and learning. Children who begin reading instruction with inadequate language skills are at high-risk for encountering reading problems. Many researchers have identified that deficient readers are deficient in language skills such as syntactical errors, reduced vocabulary, articulation, inability to interpret spoken words completely, poor memory for sequence of words, and inability to tell the difference between objects unless they are visible. Primarily, these deficiencies involve basic language production errors. Consequently, they adversely affect both reading development and academic achievement.

Sequentially, therefore, language development precedes reading development. A student will encounter difficulty in successfully learning to read and write if his language development is inadequate. The basis of the Pre K-4 experience is language development. Language development provides a fundamental base and retrieval system that allows for both the encoding and decoding of information.

Literacy Foundations – Reading

The core curriculum for reading education should equip graduating teachers to produce readers who are successful in the classroom and on standardized tests and use reading effectively to negotiate the world.

Courses must be designed to enable new teachers to understand and use effective instructional strategies. Coursework, field experiences, skills in assessment, and skills in developing intervention strategies need to be organized coherently to address the development of strong reading skills and habits. The sequence of courses and related experiences also must include direct and specific linkages to content in mathematics, the sciences, and social science so that candidates acquire and demonstrate knowledge and skills for non-fiction literacy instruction, assessment, and interventions.

Mathematical Foundations

Pre K- 4 candidates must apply the principles that guide all mathematics instruction as well as the specific National Council for Teachers of Mathematics (NCTM) standards for early childhood that are based on the belief that “students learn important mathematical skills and processes with understanding. Understanding develops through interaction with materials, peers, and supportive adults in settings where students have opportunities to construct their own relationships when they first meet a new topic.” Candidates must know and effectively deliver core academic content and must have the skills to stay current with the research on best practices for content instruction for students, Pre-K - 4.

Science

The program design in the Pre K - 4 area of science is intended to prepare prospective teachers for a wide range of students, those beginning school with previous exposure to high quality science experiences, those with learning challenges in numeracy and literacy, and students whose innate curiosity about the world around them that has yet to be tapped by effective science instruction. In all these cases, science learning in the classroom requires curricula based on factual knowledge and conceptual development, helping children build on their natural curiosity to develop skills and knowledge in the

sciences. The college or university must create a structure that allows collaboration among education, science, and mathematics departments to ensure that prospective teachers have a solid foundation in the relevant science knowledge and skills each will need to be successful classroom teachers. For children to learn the sciences successfully, their teachers must know science content, know how students learn science, and understand how to plan effective instruction (National Research Council, *Taking Science to School: Learning and Teaching Science in Grades K-8*, chapter 11, page 10).

Social Studies

The public school curriculum in Pennsylvania includes content in four academic standards that are related to social studies disciplines:

1. *Geography.*—defined as "the science of space and place on Earth's surface" including attention given to basic geography understanding, physical characteristics of places and regions, human characteristics associated with places and regions, and interaction between people and places.
2. *History.*—including
    a. *Pennsylvania history*—Identify and explain the political and cultural contributions of individuals and groups to Pennsylvania history from Beginnings to 1824; identify and explain primary documents, material artifacts and historic sites important in Pennsylvania history from Beginnings to 1824; identify and explain how continuity and change have influenced Pennsylvania history from the Beginnings to 1824;
    b. *History*-- of the United States, and world history; as well as equipping students with tools to comprehend, interpret, and conduct historical research.
3. *Economics.*—which includes basic understanding of economic systems, markets, economic interdependence, and economic aspects of work and earnings.
4. *Civics and government.*—covering principles, structures, and operation of government in a democratic society, citizenship rights and responsibilities, and international components of government and policy.

These are interdisciplinary subjects across the social sciences, but successful teaching also requires explicit, detailed knowledge of the sciences, mathematics, and literacy. Pre K- 4 early and elementary preparation programs approved in Pennsylvania will build candidate knowledge, teaching skills, and assessment skills in and across these subject areas.

Arts and Humanities

Candidates must apply the national standards developed by the Consortium of National Arts Education Associations (under the guidance of the National Committee for Standards in the Arts) to articulate priorities for high quality, meaningful arts experiences in Pre K - 4 across a developmental continuum.

Motor Development and Health

Candidates must demonstrate knowledge and understanding of the national standards and principles developed by the National Association for Sport and Physical Education and incorporate them into curriculum development and implementation.

Social Development

Candidates consider students' potential in the broader sense of their self concept and peer relationships when making decisions about what and how to teach. Candidates must use their knowledge of self-concept, motivation, peer relationships, development of character, aspiration and civic virtues to develop instruction that develops students' intellect.

ASSESSMENT OVERVIEW

Assessment skills, extensive practice, and the application of assessment results to design effective individualized interventions are essential Pre-K -4 teaching skills. Successful demonstration of these abilities is an expected outcome through the PDE 430, *Pennsylvania Statewide Evaluation Form for Student Professional Knowledge and Practice.* Assessment knowledge has an important role in the standards and rubrics adopted by the national associations of different content and professional areas. The "Assessment in a Standards Aligned System" section of this document has an overview of the types of assessments used in Pre K-12 settings and competencies for all professional education candidates.

The preparation program coursework content should be organized to provide candidates with the knowledge and skills to recognize students having difficulty, identify student challenges, design interventions (with collaborative assistance from colleagues when needed) and test the effectiveness of appropriate interventions. Course content must enable candidates to learn how to understand and use data about student learning (standardized tests and other assessment practices), adapt and modify instruction, use technology appropriately, and adapt curriculum successfully. Translating diagnostic information about student learning into successful teaching strategies that will improve student learning requires formal preparation, proficiency with assessment tools, and extensive practice under careful supervision and mentoring. The content must also include explicit attention to Pennsylvania's Academic Standards and Assessment Anchor Content Standards for grades Pre K -4 (& Pennsylvania Early Learning Standards), as well as be consistent with authentic, screening, diagnostic, formative, benchmark, and summative diagnostic assessments.

Definitions of Assessments

The following definitions describe different types of assessments used in classroom settings. The definitions for diagnostic, benchmark, formative, and summative can be found on the "Standards Aligned System" web pages on the PDE Education Hub. This web portal contains resources helpful to teacher candidates as well as classroom teachers for designing standards based curriculum and assessments. Candidates are expected to understand the differences between screening, authentic, diagnostic, formative and summative assessments. The program design of a program must include

instruction and assessments of candidates demonstrating the appropriate use of each type of assessment.

Authentic. A form of assessment in which, students are asked to perform real world tasks that demonstrate meaningful application of essential knowledge and skills. The assessment usually includes a task for students to perform and a rubric is used to evaluate their performance.

Screening. Screening assessments are used to determine which students may be at risk. Poor performance on the screening assessment identifies those students needing additional, in-depth assessment of strengths and weaknesses. The primary purpose of screening assessments is to identify children early who need additional instructional (or behavioral) intervention. An essential element of using a screening assessment is implementing additional identified intervention(s) (instructional, behavioral, or medical).

Diagnostic. The purpose of diagnostic assessments is to ascertain, prior to instruction, each student's strengths, weaknesses, knowledge, and skills. Using diagnostic assessments enable the instructor to remediate students and adjust the curriculum to meet each pupil's unique needs. (Examples of diagnostic assessments are: DRA's, Running Records, GRADE, and GMADE)

Formative. Pennsylvania defines formative assessment as classroom based assessment that allows teachers to monitor and adjust their instructional practice in order to meet the individual needs of their students. Formative assessment can consist of formal instruments or informal observations. The key is how the results are used. Results should be used to shape teaching and learning. Black and Wiliam (1998) define formative assessment broadly to include instructional formats that teachers utilize in order to get information that when used diagnostically alter instructional practices and have a direct impact on student learning and achievement. Under this definition, formative assessment encompasses questioning strategies, active engagement check-ins, (such as response cards, white boards, random selection, think-pair-share, popsicle sticks for open-ended questions, and numbered heads) and analysis of student work based on set rubrics and standards including homework and tests. Assessments are formative when the information is used to adapt instructional practices to meet individual student needs as well as providing individual students corrective feedback that allows them to "reach" set goals and targets. Ongoing formative assessment is an integral part of effective instructional routines that provide teachers with the information they need to differentiate and make adjustments to instructional practice in order to meet the needs of individual students.

When teachers know how students are progressing and where they are having trouble, they can use this information to make necessary instructional adjustments, such as re-teaching, trying alternative instructional approaches, or offering more opportunities for practice. The use of ongoing formative classroom assessment data is an imperative. Effective teachers seamlessly integrate formative assessment strategies into their daily instructional routines.

Benchmark. Assessments that are designed to provide feedback to both the teacher and the student about how the student is progressing toward demonstrating

proficiency on grade level standards. Well-designed benchmark, standards-based assessments:

- measure the degree to which students have mastered a given concept
- measure concepts, skills, and/or applications
- are reported by referencing the standards, not other students' performance
- serve as a test to which teachers want to teach
- measure performance regularly, not only at a single moment in time

(Examples of benchmark assessments are: 4Sight, DIBELS, Work Sampling System)

Summative. Summative assessments seek to make an overall judgment of progress at the end of a defined period of instruction. Often these assessments occur at the end of a school level, grade, or course, or are administered at certain grades for purposes of state or local accountability. These are considered high-stakes assessments and the results are often used in conjunction with the No Child Left Behind Act (NCLB) and Adequate Yearly Progress (AYP). They are designed to produce clear data on the student's accomplishments at key points in his or her academic career. Performance on these assessments are often part of the student's permanent record and serve as an indication of overall performance on a set of standards. Results from summative assessments are of interest to parents, faculty, administration, the press, and the public. The data from summative assessments are the basis of accountability systems. (Examples of summative assessments: PSSA, Terra Nova)

Family and Community Collaboration Partnerships Overview

This section describes the way candidates must use their understanding and knowledge about the complex characteristics of children's families and communities to create and sustain respectful, reciprocal relationships that support and empower families, and to involve all families in their children's development and learning.

Professionalism Overview

This section describes the information Pre K -4 candidates will need to know in order to develop professional attitudes and behaviors. Candidates will demonstrate knowledge of and competence in fostering professionalism in school and community settings.

CANDIDATE COMPETENCIES

This section outlines the competencies required for certification by Chapter 354: "The preparing institution shall ensure that candidates complete a well planned sequence of professional educator courses and field experiences to develop an understanding of the structure, skills, core concepts, facts, methods of inquiry and application of technology related to each academic discipline the candidates plan to teach or in the academic disciplines related to the non-instructional certificate categories in which they plan to serve." (22 Pa. Code §354.25(b) (3)).

I. Development, Cognition, and Learning

A. Curriculum – Develop, implement, assess and modify curriculum and lessons as evidenced by the ability to:

1. Delineate how individuals acquire and process information;

2. Demonstrate proficiency with Pennsylvania's Learning Standards for Early Childhood, PA Academic Standards, and PA Alternative Content Standards, and how these approaches influence curriculum in positive ways;

3. Develop effective and appropriate curriculum that creates a secure base from which young children can explore and tackle challenging problems;
4. Develop curriculum that includes both planned and spontaneous experiences that are meaningful and challenging for all children that lead to positive learning outcomes and develop positive dispositions towards learning within each content area;
5. Implement multiple approaches to learning.

B. Social
1. Demonstrate knowledge of and competence in understanding the social characteristics of PreK-4 students;
2. Identify the multiple interacting influences on children's development and learning.

C. PreK-4 Education Foundation, Theory, and Policy
1. Create environments that are educationally-focused, respectful, supportive and challenging for all children;
2. Observe children and record behavior in a variety of settings in order to understand the meaning and degree of variation and exceptionality among individuals;
3. Know and understand young children's' characteristics and needs;
4. Know the range of development, normative and non-normative, inter-and intra-variability for all children, including special learning and developmental needs form PreK through nine years of age in the following areas of language:
   a. Receptive vocabulary,
   b. Expressive vocabulary,
   c. Auditory comprehension, and
   d. Pragmatic language.
5. Implement lessons based on students' stages of cognitive development, use of senses for exploration and understanding of the world, and development of age appropriate problem solving and critical thinking skills;
6. Demonstrate an understanding of Physical and Motor Development (stages of physical growth, gross and fine motor skills);
7. Demonstrate an understanding of Social Emotional Development (self-regulation, self-concept, self-awareness, resilience and stress);
8. Identify the role and value of play, games and sports in child development and learning;
9. Identify the current identification criteria related to diverse learners;
10. Know and understand the multiple influences on development and learning including:
    a. Pre and postnatal biological, psychological, sociological,
    b. Cultural, familial, and environmental,
    c. Media, technology, and popular culture,
    d. Gender,
    e. Family and community,
    f. Linguistics, language differences,

g. Brain development,
h. Health, nutrition and safety.

D. Child Development Theory – Effectively apply the principles and theories of child development including:
1. Developmentally appropriate practices;
2. Constructivism;
3. Socio-cultural theory;
4. Attachment theory;
5. Play.

E. Early Childhood Theory – Implement lessons based on early childhood education foundations, theory and policy, including:
1. Current issues with historical and philosophical background including inclusionary practices;
2. Theory, research, analysis and practice;
3. Social, economic and cultural diversity, and implications for learning;
4. General and professional ethics.
5. Integration of a play-based, experience-based, and project-based teaching as an integral part of children's emotional, social, language, cognitive, physical and creative development;
6. Implementation of pertinent School Code Regulations such as Chapters 4, 11, and 12 and any other pertinent statutory or regulatory provisions.

F. Classroom Environment – Demonstrate understanding of the way in which classroom environments influence children's learning including:
1. Design of classrooms, PreK-4, that demonstrate appropriate use of indoor and outdoor physical space and materials;
2. Design of classrooms, PreK-4, that are inclusive for diverse learners, including differences in age, development, culture and linguistics;
3. The connection between classroom arrangement and positive learning outcomes for students;
4. The way in which a positive climate for learning involves the establishment and maintenance of partnerships with families;
5. The use of classroom assessment tools to inform teaching strategies;
6. The connection between classroom materials, learning standards, and instruction.
7. Creation of learning environments that encourage emotional, social, language, cognitive, physical and creative development.

G. Behavior – Demonstrate knowledge of how to observe children and record behavior in a variety of settings in order to understand the meaning and degree of variation and exceptionality among individuals.

H. Diversity – Plan, implement and adapt, for all children, developmentally, culturally and linguistically appropriate instructional practices and strategies including:
1. Use of variety of effective instructional strategies (e.g. inquiry, cooperative learning, Power Teaching, Direct Instruction, inductive and deductive teaching, self-reflection, team teaching, interdisciplinary projects, and child initiated activities);

2. Implementation of an integrated program that includes all content areas across the learning standards PreK-4;
3. Implementation of curriculum to meet individual and group needs;
4. Selection, provision, and evaluation of appropriate materials and creating new materials consistent with learning standards;
5. Use of methods that encourage children's physical, cognitive, language, social/emotional and aesthetic development;
6. Implementation of accommodations and modifications for diverse learners, including the use of assistive technology, materials adaptations, prompting strategies, environmental arrangements, and visual supports;
7. Assurance of the vertical and horizontal alignment of curriculum, instruction, and assessment;
8. Collaboration with appropriate educational specialists;
9. Incorporation of ongoing observations and assessment to guide and support teaching and learning through differentiated instruction;
10. Convergent and divergent questioning and discussion strategies that encourage many students to participate.

II. Subject Matter Pedagogy Content
Candidates will be able to:

A. Language development
Develop, implement, assess and modify curriculum and lessons as evidenced by the ability to:

1. Assess, develop and deliver explicit lessons for language comprehension and expression skills to correlate to early childhood development in areas such as:
   a. Object identification;
   b. Naming and description of pictures, directions, and concepts of order, location, and quantity;
   c. Major and sequential parts of events situations or stories;
   d. Words, phrases, sentences using common objects, including naming, description, and function;
   e. Word association – opposites, categories, completion;
   f. Content, including main idea, inferences, outcomes, and sequence;
   g. Phrase production, sentence production, and descriptions.
2. Develop and deliver lessons for language comprehension and expression skills directly related to early literacy in the following areas:
   a. Listen responsively to directions, stories and conversations;
   b. Follow simple and multiple-step directions;
   c. Demonstrate increasing understanding of new vocabulary, introduced in conversations, activities, stories or books;
   d. Recognize expressions, gestures and body language cues;
   e. Understand that communication occurs in different ways including various languages, devices, and gestures.
3. Develop spoken language skills in the following areas:
   a. Speak clearly enough to be understood by most listeners;
   b. Recite rhymes, songs, and familiar text;
   c. Use an increasingly complex and varied spoken vocabulary;
   d. Ask and answer relevant questions;

   e. Share experiences individually, and in groups;
   f. Initiate and respond appropriately, in conversation and discussions, with adults and children;
   g. Use verbal and nonverbal language to communicate for a variety of purposes;
   h. Use a variety of sentence length and structures with increasing competence;
   i. Modulate voice, volume and intonation.
4. Develop lessons on language comprehension and expression skills as a basis for learning to read by focusing on emergent literacy in the following areas:
   a. Retell a simple story in sequence using illustrations in a book or literary props;
   b. Identify beginning, middle and end of a story;
   c. Make connections between story, events, personal experiences and other books;
   d. Recognize different tones of stories (e.g., happy, sad, excitement);
   e. Identify facts in a selection;
   f. Differentiate between real and make-believe;
   g. Make predictions from what is read, heard or seen in illustrations;
   h. Use illustration clues to infer and predict what happens next in a story.
5. Develop, deliver and evaluate phonological development lessons in the following areas:
   a. Recognize similarities and differences in environmental and speech sounds;
   b. Develop understanding of word awareness;
   c. Progress from matching sounds and rhymes in familiar words, games, and songs to finger plays, stories, and poems;
   d. Recognize that two or more words begin with the same sound. (Alliteration);
   e. Recognize segments and blends;
   f. Break words into syllables then phonemes;
   g. Segment onset and rime (rime = the part of a syllable which consists of its vowel and any consonant sounds that come after it);
   h. Identify initial sounds in words;
   i. Demonstrate understanding that speech sounds are represented in print by letter sounds;
   j. Achieve accuracy with matching, producing, counting, blending, segmenting, and manipulating phonemes in one-syllable words;
   k. Respond to a range of phonological tasks.
6. Address difficulties involving phonological awareness, memory, and retrieval.
7. Build and reinforce relationships between early spoken language and early pre-literacy abilities and consider influences of parent-child interactions in early shared storybook interactions.
8. Teach children to use tactile-kinesthetic and auditory cues in reading and writing.
9. Analyze how the language demands of textbooks, academic talk, and curriculum may stress a student's capabilities at different age and grade levels.

B. Early Literacy Foundations

1. Research: Candidates must possess extensive research-based knowledge and skill in language and literacy development regardless of the age group or setting in which they intend to practice.
2. Word Level Instruction
    a. Become familiar with a four-processor model of reading (context, meaning, phonological and orthographic) and understand that reading depends on language proficiency;
    b. Explain the relationship between phoneme awareness, phonological processing, and phonics;
    c. Define, identify, and segment important linguistic units including vowels, consonants, syllables, and onset-rime;
    d. Review the characteristics of dyslexia.
3. Text Level Comprehension
    a. Emphasize the role of vocabulary knowledge in reading comprehension;
    b. Identify the ways in which word meanings are learned, in oral and written language;
    c. Generate multiple meanings for words and understand why instruction of multiple meanings and multiple uses is important;
    d. Demonstrate why fluency is necessary for comprehension;
    e. Apply concepts of automaticity and reading fluency;
    f. Identify several common causes for dysfluency and explain the consequences for dysfluency;
    g. Implement fluency-based measurement and identify those students who may benefit from fluency building instruction;
    h. Practice several strategies for fluency building;
    i. Demonstrate the relationship between vocabulary knowledge and reading comprehension;
    j. Identify the ways in which word meanings are learned, in oral and written language;
    k. Practice semantic feature analysis to appreciate how words are related in meaning;
    l. Elaborate how the text itself, the context in which reading occurs, the reader's characteristics, and the specific task can determine how well a student comprehends;
    m. Explore the challenges of academic language at the phrase, sentence and discourse level and become familiar with techniques for teaching sentences and text structure directly.
4. Reading-Writing Connections
    a. Make overt connections between and across the curriculum, students' lives, literature, and literacy;
    b. Plan lessons that connect with each other, with test demands, and with students' growing knowledge and skills;
    c. Provide strategies for spelling:
        i. Develop concepts of print;
        ii. Recognize phonological influences on children's inventive spelling;
        iii. Identify grapheme units including consonant digraphs, silent letter consonant combinations, and combinations with silent e, vowel teams, and vowel-r combinations;

iv. Explore the most common consonant correspondences and versatile uses of some letters;
v. Sort words to find spelling patterns that are determined by the sequence and position of sounds in a word;
vi. Locate the major spellings for each vowel sound on the vowel spelling chart;
vii. Differentiate between the concepts of “high frequency” and “irregular” word;
viii. Recognize and classify six syllable types and combine those syllables to make words;
ix. Apply the three major rules for adding endings: the “y” rule, the silent e rule, and the doubling rule;
x. Recognize the difference between a syllable and a morpheme; find syllable and morpheme divisions in words.

d. Develop writing strategies:
i. Write with a sharp, distinct focus identifying topic, task, and audience;
ii. Write using well-developed content appropriate for the topic;
iii. Gather and organize information;
iv. Write a series of related sentences or paragraphs with one central idea;
v. Incorporate details relevant and appropriate to the topic;
vi. Write with controlled and/or subtle organization;
vii. Sustain a logical order;
viii. Include a recognizable beginning, middle, and end;
ix. Write with an awareness of the stylistic aspects of composition;
x. Use sentences of differing lengths and complexities;
xi. Use complete sentences (simple, compound, declarative, interrogative, exclamatory, and imperative);
xii. Use descriptive words and action verbs;
xiii. Use nouns, pronouns, verbs, adjectives, adverbs, and conjunctions properly;
xiv. Revise writing to improve detail and order by identifying missing information and determining whether ideas follow logically;
xv. Spell common, frequently used words correctly;
xvi. Use capital letters correctly (first word in sentences, proper nouns, pronoun “I”);
xvii. Punctuate correctly (period, exclamation point, question mark, commas in a series);
xviii. Edit writing using the conventions of language;
xix. Present and/or defend written work for publication when appropriate.

e. Conduct fine-grain analyses of written language, including spelling, to generate intervention that matches the needs of individual students;
f. Extend experiences with a variety of written texts;
g. Provide models for a variety of writing styles.

5. Instructional Approaches and Materials
a. Implement strategies for infusing literacy across content areas in a balanced literacy format;
b. Implement theories and best practices of early and emergent literacy and reading;

c. Prepare to teach a text by reading it, segmenting it into major sections, summarizing the meanings to be taught, generating questions to ask during reading, and planning specific activities that enhance comprehension of the text such as:
    i. Provide adult models of fluent reading;
    ii. Develop sense of story/text;
    iii. Develop vocabulary;
    iv. Encourage prediction;
    v. Build a community of readers;
    vi. Demonstrate awareness of text;
    vii. Develop sense of story or content;
    viii. Promote reading strategies;
    ix. Develop fluency and phrasing;
    x. Increase comprehension;
    xi. Encourage independent reading;
    xii. Encourage strategic reading;
    xiii. Utilize appropriate remedial instructional strategies.
d. Develop multiple ways to utilize information acquisition and research skills throughout instruction strategies that include:
    i. Print rich environments;
    ii. Various resources such as dictionaries, internet, magazines, etc.;
    iii. Evaluating and using multiple forms of data such as graphs and maps;
    iv. Demonstrating ability to select and refine topics;
    v. Organizing and presenting main ideas from research, crediting sources using a structured format.
e. Demonstrate knowledge of Pennsylvania's learning standards Pre K – 4 for language arts including:
    i. Learning to read independently;
    ii. Reading critically in all content areas;
    iii. Reading, analyzing and interpreting literature'
    iv. Types of writing;
    v. Quality of writing;
    vi. Speaking and listening;
    vii. Characteristics and functions of the English language;
    viii. Research.

6. Assessment of Literacy
    a. Utilize assessment tools with appropriate instructional accommodations in the area of literacy to identify effectiveness of the standards based curriculum (core literacy program for all students);
    b. Establish and maintain progress monitoring practices within the content area aligned with the identified needs of each student to adjust instruction and provide rigor in the area of literacy for all students.

C. Early Math Foundations

1. Number and Operations – develop, implement, assess and modify curriculum and lessons as evidenced by the ability to teach students how to:
    a. Count with understanding and recognize "how many" in sets of objects;
    b. Develop understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers and their connections;

c. Connect number words and numerals to the quantities they represent, using various physical models and representations;
d. Develop a sense of whole numbers and represent and use them in flexible ways, including relating, composing, and decomposing numbers;
e. Understand various meanings of addition and subtraction of whole numbers and the relationship between the two operations;
f. Understand the effects of adding and subtracting whole numbers;
g. Use multiple models to develop initial understandings of place value and the base-ten number system;
h. Understand situations that entail multiplication and division, such as equal groupings of objects and sharing equally;
i. Develop and use strategies for whole-number computations, with a focus on addition and subtraction;
j. Use a variety of methods and tools to compute, including objects, mental computation, estimation, paper and pencil, and calculators;
k. Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals;
l. Recognize equivalent representations for the same number and generate them by decomposing and composing numbers;
m. Develop understanding of fractions as parts of unit wholes, as parts of a collection, as locations on number lines, and as divisions of whole numbers;
n. Use models, benchmarks, and equivalent forms to judge the size of fractions;
o. Recognize and generate equivalent forms of commonly used fractions, decimals;
p. Understand various meanings of multiplication and division;
q. Understand the effects of multiplying and dividing whole numbers;
r. Identify and use relationships between operations, such as division as the inverse of multiplication, to solve problems;
s. Develop fluency in adding, subtracting, multiplying, and dividing whole numbers;
t. Develop and use strategies to estimate the results of whole-number computations and to judge the reasonableness of such results;
u. Select appropriate methods and tools for computing with whole numbers from among mental computation, estimation, calculators, and paper and pencil according to the context and nature of the computation and use the selected method or tool;
v. Develop fluency with basic number combinations for multiplication and division and use these combinations to mentally compute related problems, such as 30×50.

2. Algebraic Foundations—develop, implement, assess and modify curriculum and lessons as evidenced by the ability to teach students how to:
   a. Sort, classify, and order objects by size, number, and other properties;
   b. Recognize, describe, and extend patterns such as sequences of sounds and shapes or simple numeric patterns and translate from one representation to another;
   c. Analyze how both repeating and growing patterns are generated;
   d. Use concrete, pictorial, and verbal representations to develop an understanding of invented and conventional symbolic notations;
   e. Describe qualitative change, such as a student growing taller;

f. Describe quantitative change, such as a student growing two inches in one year;
g. Illustrate general principles and properties of operations, such as commutative, using specific numbers;
h. Model situations that involve the addition and subtraction of whole numbers, using objects, pictures, and symbols;
i. Describe, extend, and make generalizations about geometric and numeric patterns;
j. Represent and analyze patterns and functions, using words, tables, and graphs;
k. Identify such properties as commutative, associative, and distributive and use them to compute with whole numbers;
l. Model problem situations with objects and use representations such as graphs, tables, and equations to draw conclusions;
m. Express mathematical relationships using equations.

A. Geometry – develop, implement, assess and modify curriculum and lessons as evidenced by the ability to teach students how to:

a. Recognize, name, build, draw, compare, and sort two- dimensional shapes;
b. Describe attributes and parts of two-dimensional shapes;
c. Identify, compare, and analyze attributes of two- and three-dimensional shapes and develop vocabulary to describe the attributes;
d. Classify two- and three-dimensional shapes according to their properties and develop definitions of classes of shapes such as triangles and pyramids;
e. Recognize geometric shapes and structures in the environment;
f. Create mental images of geometric shapes using spatial memory and spatial visualization;
g. Recognize and create shapes that have symmetry;
h. Explore congruence and similarity;
i. Make and test conjectures about geometric properties and relationships and develop logical arguments to justify conclusions;
j. Investigate and predict the results of putting together and taking apart two and three dimensional shapes;
k. Build and draw geometric objects;
l. Create and describe mental images of objects, patterns, and paths;
m. Recognize and represent shapes from different perspectives;
n. Describe, name, and interpret relative positions in space and apply ideas about relative position;
o. Describe, name, and interpret direction and distance in navigating space and apply ideas about direction and distance;
p. Find and name locations with simple relationships such as “near to” and in coordinate systems such as maps (this use of coordinate systems is not identified as a focal point or connection);
q. Make and use coordinate systems to specify locations and to describe paths;
r. Investigate, describe, and reason about the results of subdividing, combining, and transforming shapes;
s. Use geometric models to solve problems in other areas of mathematics, such as number and measurement;

t. Identify, compare, and analyze attributes of two- and three-dimensional shapes and develop vocabulary to describe the attributes;
u. Describe location and movement using common language and geometric vocabulary;
v. Predict and describe the results of sliding, flipping, and turning two-dimensional shapes;
w. Describe a motion or a series of motions that will show that two shapes are congruent;
x. Identify and describe line and rotational symmetry in two- and three-dimensional shapes and designs.

B. Measurement – develop, implement, assess and modify curriculum and lessons as evidenced by the ability to teach students how to:

a. Recognize the attributes of length, volume, weight, area, and time and temperature (time and temperature are not identified as a focal point or connection);
b. Compare and order objects according to these attributes;
c. Understand how to measure using nonstandard and standard units;
d. Select an appropriate unit and tool for the attribute being measured;
e. Measure with multiple copies of units of the same size, such as paper clips laid end to end;
f. Use repetition of a single unit to measure something larger than the unit, for instance, measuring the length of a room with a single meter stick;
g. Use tools to measure;
h. Develop common referents for measures to make comparisons and estimates;
i. Explore what happens to measurements of a two-dimensional shape such as its perimeter and area when the shape is changed in some way;
j. Develop strategies for estimating the perimeters, areas, and volumes of irregular shapes;
k. Select and use benchmarks to estimate measurements;
l. Understand the need for measuring with standard units and become familiar with standard units in the customary and metric systems;
m. Carry out simple unit conversions, such as from centimeters to meters, within a system of measurement;
n. Develop, understand, and use formulas to find the area of rectangles and related triangles and parallelograms.

C. Data Analysis and Probability – develop, implement, assess and modify curriculum and lessons as evidenced by the ability to teach students how to:

a. Pose questions and gather data about themselves and their surroundings;
b. Describe parts of the data and the set of data as a whole to determine what the data show;
c. Sort and classify objects according to their attributes and organize data about the objects;
d. Design investigations to address a question and consider how data-collection methods affect the nature of the data set;
e. Collect data using observations, surveys, and experiments;
f. Represent data using tables and graphs such as line plots, bar graphs, and line graphs;
g. Compare different representations of the same data and evaluate how well each representation shows important aspects of the overall data set;

h. Propose and justify conclusions and predictions that are based on data and design studies to further investigate the conclusions or predictions;
i. Describe the shape and important features of a set of data and compare related data sets, with an emphasis on how the data are distributed.

D. Science

1. Develop, implement, assess and modify curriculum and lessons as evidenced by the ability to:
   a. Understand the nature of scientific inquiry, its central role in science, and how to use the skills and processes of scientific inquiry;
   b. Articulate the fundamental facts and concepts in major science disciplines;
   c. Make conceptual connections within and across science disciplines, as well as to mathematics, technology, and other school subjects;
   d. Use scientific understanding and ability when dealing with personal and societal issues;
   e. Assist students to build on their natural curiosity to develop skills and knowledge in the sciences;
   f. Demonstrate various ways to explore phenomena using skills of scientific inquiry to cultivate scientific dispositions and build a foundation for understanding core scientific concepts;
   g. Articulate ways that inquiry science must be a basic in the daily curriculum of every elementary school student at every grade level;
   h. Demonstrate how to develop problem-solving skills that empower students to participate in an increasingly scientific and technological world;
   i. Demonstrate proficiency with science learning that requires curricula based on factual knowledge and conceptual development;
   j. Effectively assess each child's knowledge and conceptual skill development I multiple ways;
   k. Adapt instructional goals to the existing knowledge and skills of the learners, as well as choose instructional techniques that will be the most effective;
   l. Use and interpret scientific explanations of the natural world;
   m. Generate and evaluate scientific evidence and explanations;
   n. Understand the nature and development of scientific knowledge and participate productively in scientific practices and discourse;
   o. Implement pedagogy for the concepts that students find most difficult, as well as ways to support their understanding of those concepts;
   p. Use curriculum materials that are particularly effective for teaching specific topics;
   q. Provide unifying themes incorporated into science content and methods to include concepts such as systems, models, patterns, scale, change, and the importance of evidence and measurement;
   r. Demonstrate proficiency with sufficient laboratory, computer technology, curriculum, and other resources to support the most effective teaching of science at the designated level;
   s. Develop descriptions, explanations, predictions, and models using evidence, recognizing and analyzing alternative explanations and predictions;

   t. Use prior knowledge to pose problems and generate data rather than thinking about science as truths to be memorized;
   u. Explicitly teach data collection, interpreting data, testing inferences, and the search for patterns in data;
2. Directly have students test ideas through experimentation;
   a. Use patterns in observations to develop explanations and predictions;
   b. Categorize conceptions and preconceptions of science and scientific knowledge;
   c. Clarify misunderstandings of science and scientific inquiry processes;
   d. Recognize student preconceptions, student reasoning patterns, problematic explanations for observed phenomena;
   e. Promote conceptual change in student understanding of scientific knowledge and processes;
   f. Communicate scientific procedures and explanations by using the range of scientific investigations appropriate to a discipline and to a problem;
   g. Demonstrate scientific reasoning through showing how scientists develop, analyze, and test different explanations for their findings;
   h. Construct scientific arguments and present and defend results of a scientific investigation.
3. Standards – apply knowledge of established local, Pennsylvania, and national standards (e.g., those published by the National Science Education Teachers Association, the PA Academic Standards, etc.) and incorporate those standards in teaching:
   a. Biological science;
   b. Chemistry and physics;
   c. Earth and space science;
   d. Science and technology;
   e. Science as inquiry;
   f. Science in personal and social perspectives;
   g. Unifying themes and processes in science.
4. Understand and know Pennsylvania's standards for environment and ecology including:
   a. Ecology
   b. Watersheds and wetlands;
   c. Renewable and non-renewable resources;
   d. Agriculture and society;
   e. Humans and environment;
   f. Threatened, endangered and extinct species.
5. Physical sciences – demonstrate an understanding of the nature of science by specific applications to the physical sciences regarding:
   a. Forces and motion;
   b. Physical properties of matter;
   c. Chemical properties of matter;
   d. Energy and interactions between matter and energy (light, heat, electricity, magnetism, sound).
6. Life sciences – demonstrate an understanding of the nature of science by specific applications to the life sciences regarding:
   a. Structure and function of living things (characteristics of organisms);
   b. Reproduction and heredity;
   c. Adaptation and evolution (organisms and their environments);
   d. Ecological behavior and systems (regulation and behavior);

   e. Relationships between organisms and the environment.
7. Earth and space sciences investigations – demonstrate an understanding of the nature of science, applied to earth and space sciences regarding:
   a. Structure and function of earth systems;
   b. Earth features and processes;
   c. Cycles in earth systems;
   d. Energy, weather, and climate; and
   e. Solar system and the universe (objects in the sky, changes in the earth and sky).
8. Science and Inquiry:
   a. Build science instruction that is based on strategies that involve first-hand exploration and investigation and inquiry/process skills:
   b. Provide experiences that enable children to:
      i. Raise questions about objects and events around them;
      ii. Explore materials, objects, and events by acting upon them and noticing what happens;
      iii. Make careful observations of objects, organisms, and events using all their senses;
      iv. Describe, compare, sort, classify and order in terms of observable characteristics and properties;
      v. Use a variety of simple tools to extend their observations (e.g., hand lens, measuring tools, and eye dropper);
      vi. Engage in simple investigations including making predictions, gathering and interpreting data, recognizing simple patterns, and drawing conclusions;
      vii. Record observations, explanations, and ideas through multiple forms of representation;
      viii. Work collaboratively with others, share and discuss ideas and listen to new perspectives.

E. Social Studies
1. Develop, implement, assess and modify curriculum and lessons as evidenced by the ability to apply the standards and thematic strands of social studies as identified by the National Council for Social Studies including:
   a. The study of culture;
   b. Time, continuity, and change—helping students to know how to understand and reconstruct the past;
   c. People, places, and environment—which gives students the perspective of a world beyond “their personal locations”;
   d. Individual development and identity—affected by culture, groups, and by institutions;
   e. Individuals, groups, and institutions—a theme that covers development of knowledge about how institutions (social, economic, religious, governmental) are formed and operate;
   f. Power, authority, and governance—the historical development and functions of governmental institutions, the exercise of power, individual rights, and related concepts;
   g. Production, distribution, and consumption—the theme that focuses most clearly on the economy, production of goods and services, resource allocation, and labor, capital, and management;

   h. Science, technology, and society—which deals with the development and use of technology, the pace of change and its impact on society, and promoting broader access to technology within and across societies;
   i. Global connections—on the theme of interdependence;
   j. Civic ideals and practices—described as topics, values, and issues related to citizenship, rights and responsibilities.
2. Principles – demonstrate implementation of the five overarching principles for social studies instruction:
   a. Social studies teaching and learning are powerful when they are meaningful;
   b. Social studies teaching and learning are powerful when they are integrated;
   c. Social studies teaching and learning are powerful when they are values-based;
   d. Social studies teaching and learning are powerful when they are challenging by expecting students to strive to accomplish the instructional goals, both as individuals and as group members;
   e. Social studies teaching and learning are powerful when the learning is active.
3. Citizenship – use social studies curriculum to advance the centralized theme of the promotion of civic competence including the knowledge, skills, and attitudes required of students to be able to assume “the office of citizen” in our democratic republic:
   a. Educate students who are committed to the ideas and values of our democratic republic;
   b. Educate students who are able to use knowledge about their community, nation, and world;
   c. Develop curriculum that enables students to use the skills of data collection, analysis, collaboration, decision-making, and problem-solving.
4. Geography – demonstrate implementation of the principles for geography instruction including attention given to basic geography understanding, physical characteristics of places and regions, human characteristics associated with places and regions, and interaction between people and places, including:
   a. Basic geographic literacy, including the ability to use geographic tools and knowledge of places and regions;
   b. Physical characteristics of places and regions, with attention to understanding the physical system and its properties;
   c. Human characteristics of places and regions—including knowledge and understanding of population, culture, exploration and settlement, economic activity, and political activity;
   d. Interactions between people and places, i.e., how physical environments affect people, and how humans affect the places where they live and work.
5. History – including Pennsylvania history, history of the United States, and world history:
   a. Outline and delineate historical developments;
   b. Differentiating the contributions of individuals and groups;
   c. Using and understanding documents, artifacts, and the significance of historical places;
   d. Describe historical implications of continuity and change;

e. Distinguish between conflict and cooperation among groups;
f. Categorize the discipline of history with key concepts such as time, change, cause and causation, evidence;
g. Make effective use of inquiry and analysis tools (documents, web resources, analyses, as well as relevant subject matter in other disciplines such as the natural sciences) with teacher guidance;
h. Interpret historical accounts.

6. Economics – candidates will be able to demonstrate proficiency in representing, clarifying and communicating the basic understanding of:
   a. Economic systems;
   b. Markets;
   c. Economic interdependence; and
   d. Economic aspects of work and earnings.
7. Civics and Government – candidates will be able to:
   a. Represent, clarify and communicate the principles, structures, documents, and operation of government in a democratic society:
      i. United States of America
      ii. Commonwealth of Pennsylvania
   b. Represent, clarify and communicate personal citizenship rights and responsibilities;
   c. Analyze relationships among nations and peoples;
   d. Clarify and analyze how government works, including the branches of government at the state and federal levels;
   e. Acquire knowledge and understanding of international relations.

F. Arts and Humanities

Develop, implement, assess and modify curriculum and lessons as evidenced by the ability to:

1. Apply the PA standards for Arts and Humanities;
2. Know and use elements (e.g., Visual Arts: color, form/shape, line, space, texture, and value) and principles (e.g., Visual Arts: balance, contrast, emphasis/focal point, movement/rhythm, proportion/scale, repetition, and unity/harmony) in all art forms;
3. Create and perform in all art forms;
4. Recognize and use fundamental vocabulary within each of the arts forms;
5. Handle materials, equipment and tools safely at work and performance spaces;
6. Demonstrate the functions of rehearsals and practice in all art forms;
7. Identify community performances and exhibitions in all art forms;
8. Know and use traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others, and for furthering knowledge and understanding in the humanities;
9. Analyze a work of art from its historical and cultural perspective;
10. Identify and explain common themes in the arts, such as pattern, rhythm and color;
11. Recognize critical processes used in the examination of works in the arts and humanities;
12. Know that works in the arts can be described by using the art's elements, principles, and concepts;
13. Know classification skills with materials and processes used to create works in the arts;

14. Know how to respond to a philosophical statement about works in the arts and humanities;
15. Know how to communicate an informed individual opinion about the meaning of works in the arts;
16. Recognize that artists communicate ideas and themes through works in the arts and humanities.

G. Motor Development and Health

1. Develop, implement, assess and modify curriculum and lessons as evidenced by the ability to apply the PA standards for Health, Safety, and Physical Education:
   a. Identify and know the location and function of the major body organs and systems;
   b. Explain the role of the food guide pyramid in helping people eat a healthy diet;
   c. Know age appropriate drug information;
   d. Recognize safe/unsafe practices in the home, school and community.
2. Articulate priorities for high quality, meaningful physical activity and physical education experiences that help children:
   a. Have varied, repeated experiences with functional movement and manipulation;
   b. Demonstrate progress toward mature forms of selected physical skills;
   c. Try new movement activities and skills;
   d. Use feedback to improve performance;
   e. Experience and express pleasure from participation in physical activity;
   f. Apply rules, procedures, and safe practices;
   g. Gain competence to provide increased enjoyment in movement;
   h. Make healthy choices and prevent hazardous practices and environments that are likely to result in adverse consequences.

III. Assessment

Candidates will be able to:

*Same competencies required in the Accommodations & Adaptations for Diverse Learner Guidelines, for students with disabilities.

A. Demonstrate an understanding of the types of assessments used (e.g., screening, diagnostic, formative, summative) and the purpose of each assessment in a data-based decision making process;*

B. Establish, develop and sustain the assessment partnerships with families and other professionals;

C. Identify, define and interpret the types of valid and reliable education assessments and their uses;

D. Implement approaches to child assessment including:

1. Ways to use informal and formal assessment tools, including work and play samples, portfolios including electronic portfolios (digital cameras, digital videos), documentation panels, teacher-made tests/tasks, checklists, observational schemes, and nontraditional means (e.g. composing a poem about each child, drawing a picture of each child), activities to gauge child well-being and learning and the relationship between teacher and each child;
2. Ways to use assessment data to implement instructional and/or programmatic revisions for quality improvement;
3. Articulating the impact of instruction on child well-being and learning;

4. Describing the impact of state-wide student performance testing and the influence on the program and the child;
5. Identifying dynamic assessment techniques and the role of adult mediation and teacher scaffolding in the teaching-learning assessment process;
6. Identifying group assessment techniques (e.g. video, etc).

E. Demonstrate the use of formal and informal assessment data for instructional, behavioral and possible eligibility decisions based on the type of assessment, level of the students being assessed, and the purpose and quality of instruction;*

F. Demonstrate an understanding of the multi-disciplinary evaluation process and an ability to articulate the findings presented in an evaluation report including grade-level equivalents, percentile rank, standard scores, and stanines;*

G. Demonstrate an understanding of the components of the Individual Education Plan (IEP) process, with emphasis on understanding measurable goals based on present levels, specially designed instruction, adaptations, accommodations, supplementary aids and services, and supports for school personnel;*

H. Articulate differences between achievement tests, aptitude tests, and observational data used in special education placement decisions;*

I. Create an instructional plan using assessment information related to individual student achievement;*

J. Analyze and interpret formative assessment (e.g., curriculum based assessment, CBA);*

K. Demonstrate an understanding of the purpose and intent of standardized assessments and progress monitoring as one of multiple indicators used in overall student evaluation;*

L. Systematically monitor student performance to best identify areas of need;*

M. Use evaluative data on an individual, class and district level to implement instructional and/or programmatic revisions for quality improvement;*

N. Demonstrate an understanding of legally acceptable modifications and accommodations for assessment for students with disabilities;*

O. Demonstrate an understanding of ethical practice for assessment;*

P. Recognize the need to consult with multi-disciplinary team when cultural, economic, or linguistic differences are present in order to avoid biased assessment.*

IV. Family and Community Collaboration Partnerships

Candidates must apply their understanding of children and families diversity to:

A. Early childhood education candidates must know family systems and the role of families in children's development

1. The central role that families play in the development of children with and without disabilities;
2. The impact of children with disabilities on family systems;
3. The concerns of families of individuals with exceptional learning needs and strategies to help address these concerns;
4. The legal rights of families within the general role and special education process;
5. Knowledge of laws relating to family and student confidentiality;
6. Knowledge of the roles of individuals with exceptional learning needs, families, schools, agency and community personnel.

B. Early childhood candidates must know strategies for becoming cross-culturally competent including:

1. Knowledge of variations in beliefs, traditions, and values related to children and learning across and within cultures including child rearing practices, parent-child interaction styles and discipline;
2. Describing the impact of poverty on family systems and children's development;
3. Articulating the potential impact of differences in values, languages, socioeconomics and customs that can exist between the home and school;
4. Identifying the impact of culture on one's own beliefs, values and behaviors.

C. Candidates must know and understand strategies to partner with families including:

1. Maintaining respectful, ongoing, meaningful communication with family members that develops and sustains partnerships with families;
2. Identifying and addressing family information, communication and collaboration needs;
3. Conferencing with families;
4. Involving families in the policy decisions of a program;
5. Providing families with meaningful opportunities to be involved throughout their child's education;
6. Gathering evaluation information from families of children with and without disabilities;
7. Strategies for keeping families informed of children's progress;
8. Culturally responsive factors that promote effective communication and collaboration with individuals with exceptional learning needs, families, school and agency personnel, and community members.

D. Candidates will articulate strategies that link families to community resources including:

1. Determining family strengths, concerns, needs and priorities;
2. Providing information about community resources, parenting education, and child development to families;
3. Gaining knowledge of community resources useful to families of children with and without disabilities and strategies for linking families to these resources;
4. Working with linguistic and cultural interpreters for culturally and linguistically diverse families.

V. Professionalism

A. Candidates must identify and become involved with the Pre K- 4 field and develop their leadership capacity by:

1. Articulating the historical Articulating the historical and philosophical underpinnings of early childhood education;
2. Using Pennsylvania's regulations and standards that serve programs from birth through fourth grade, including but not limited to, child care and Keystone STARS, Head Start, learning standards and school code;
3. Identifying with the professional organizations, professional literature, technical resources and student organizations to enhance content knowledge and pedagogical skill;
4. Identifying community services and resources and ways to connect families;
5. Describing various types of state and federal early childhood program (e.g., Head Start, Even Start, Child Care, PA Pre K Counts, Full Day Kindergarten, Reading First, Science, It's Elementary), including regulatory processes and program guidelines;

6. Differentiating a range of developmentally appropriate PreK-4 curriculum models and programs, including their assets and limitations;
7. Describing pre-primary and primary education instructional strategies.

B. Candidates must know about and uphold ethical standards (e.g., NAEYC) and other professional guidelines including:

1. Describing the implications for learning and educational programming as it relates to culture, language, religion, gender, disability, social-economic status, and sexual orientation of individuals;
2. Developing professional dispositions with respect to students, parents and families including but not limited to communication, appearance and demeanor;
3. Demonstrating integrity, ethical behavior and professional conduct as stated in Pennsylvania's Code of Conduct and NAEYC's Code of Ethical Conduct, identifying both the procedures and legal requirements for safeguarding student health and welfare.

C. Candidates must engage in continuous collaborative learning to inform practice by:

1. Collaborating with families, other educators, related service provides and personnel from community agencies in culturally responsive ways;
2. Communicating respectfully, effectively and in a culturally appropriate manner with families, other agencies and the community at large to support learning and early childhood education;
3. Making a commitment to lifelong professional development;
4. Engaging in service learning to increase knowledge base and develop dispositions related to justice and appreciation for diversity;
5. Developing collegial collaboration and team building within schools and with community programs including, but not limited to, consultation, coaching and co-teaching;
6. Knowing ways to establish, develop, and sustain partnerships and community involvement to enhance the school program.

D. Candidates must integrate knowledgeable, reflective and critical perspective on early education by:

1. Implementing methods to remain current regarding research validated practice;
2. Demonstrating the ability to access and evaluate research to inform practice and evaluate policy;
3. Utilizing action research including self-reflection skills and data review for examining and improving their own practice.

E. Candidates must engage in informed advocacy for children and the profession by:

1. Identifying state and federal public policy and the effect on children and families;
2. Demonstrating advocacy skills including verbal and written communication in collaboration with others around common issues;
3. Advocating for sound educational practices and policies.

F. Candidates will implement ethical practices by:

1. Using ethical guidelines and other professional standards related to pre-K through 4th grade practice;

2. Becoming continuous, collaborative learners who demonstrate knowledgeable, reflective, and critical perspectives on their work, making informed decisions that integrate knowledge from a variety of sources;
3. Being informed advocates for sound educational practices and policies.

G. Candidates demonstrate ethical behavior by:
1. Practicing within the NAEYC Code of Ethical Conduct and other standards of the profession;
2. Upholding high standards of competence and integrity and exercise sound judgment in the practice of the professional;
3. Acting ethically in advocating for appropriate services;
4. Conducting professional activities in compliance with applicable laws and policies;
5. Recognizing signs of child abuse and neglect in young children and following reporting procedures.

H. Candidates must use their knowledge and understanding about diversity to:
1. Commit to developing the highest education and quality-of-life potential of individuals with exceptional learning needs;
2. Demonstrate sensitivity for the culture, language, religion, gender, disability, socio-economic status, and sexual orientation of individuals;
3. Access information on specific exceptionalities that child demonstrate in classroom settings.

I. Candidates must demonstrate a commitment to life-long learning by:
1. Conducting self-evaluation of instruction;
2. Reflecting on one's practice to improve instruction and guide professional growth;
3. Practicing within one's skill limit and obtain assistance as needed;
4. Participating in activities of professional organizations relevant to the field of Pre K-4 education;
5. Developing, implementing, and evaluating a professional development plan relevant to one's work with young children;
6. Engaging in professional activities that benefit individuals with exceptional learning needs, their families and one's colleagues.

J. Candidates will be effective communicators and collaborators. They must:
1. Use verbal, nonverbal and written language effectively;
2. Respect family choices and goals;
3. Apply models of team process in Pre K-4.

K. Candidates will stay current on research and apply new strategies and techniques. They must:
1. Use child, family theories and principles to guide professional practice;
2. Apply research and effective practices critically in Pre K-4 settings.

ALIGNMENT WITH PENNSYLVANIA'S ACADEMIC STANDARDS AND ASSESSMENT ANCHOR CONTENT STANDARDS

The Pre K-4 teachers must have deep understanding and mastery of the academic standards and assessment anchor content standards for those grade levels (including Alternate Academic Content Standards--see below). Section 49.14 (iii) of the Pennsylvania School Code identifies how the Academic Standards are included in certification programs: "Institutions are able to demonstrate that educator candidates have participated in instructional activities that enable the candidates to provide

instruction to students to meet the provision of Chapter 4 (relating to academic standards and assessment)." Furthermore, preparation programs must be designed to enable candidates to integrate general, core, and professional coursework so the candidate can teach and assist public school students in achieving the academic standards under Chapter 4 (22 Pa. Code §354.25(b)).

Pennsylvania Academic Standards (22 Pa. Code § 4.12)

(1) Science & Technology*[a]
(2) Environment & Ecology*[a]
(3) Social Studies
  (i)History
  (ii)Geography
  (iii)Civics & Government
  (iv) Economics
(4) Arts & Humanities
(5) Career Education & Work
(6) Health, Safety & Physical Education
(7) Family & Consumer Science
(8) Reading
  (i) Reading*[a]
  (ii) Writing
  (iii) Speaking & Listening
(9) Mathematics*[a]

*Grade *level* Assessment Anchor Content Standards exist for these standards.
[a]Grade *span* Alternate Academic Content Standards exist for these standards.

The preparing institution's program should enable candidates to identify the difference between the Academic Standards and the Assessment Anchor Content Standards. Candidates must also be able to demonstrate their awareness of standards for the earlier and later grades to ensure that there is a continuum of Pre K-12 student academic growth. For the Pre K – 4 teacher candidate, this awareness would include the Pennsylvania Early Learning Standards. This knowledge will enable the candidate to address the needs of students who have not met the standards including students with disabilities or English language learners in inclusive settings.

Candidates must demonstrate mastery beyond superficial levels in order to be able to prepare students to be successful on state and local assessments. This mastery will allow the candidate to guide and assist the public school student in achieving proficiency on all state assessments. The annual Pennsylvania System of School Assessment (PSSA) is a standards based criterion-referenced state assessment used to measure a student's attainment of the academic standards while also determining the degree to which school programs enable students to attain proficiency of the standards. Every Pennsylvania student in grades 3 through 8 and grade 11 is assessed in reading and math. Every Pennsylvania student in grades 5, 8 and 11 is assessed in writing. Every Pennsylvania student in grades 4, 8, and 11 is assessed in science.

The preparation program requirements must function together so that candidates understand and make effective use of the academic standards, have the skills to develop and implement appropriate interventions to improve student learning, have the

content and pedagogical knowledge to teach the curriculum effectively, understand and make regular use of standardized and curriculum-based assessment data, and use the instructional materials and resources necessary to support standards-based instructional practices. Preparing institutions must provide evidence that there is an alignment of the candidates' course work, clinical experiences, and assessments with the standards adopted by the Commonwealth. Collaboration among "professional educator faculty and faculty from liberal arts and other academic disciplines in program planning and evaluation of all facets of the curriculum" is essential to facilitating deep understanding of the standards by candidates (as regulated by 22 Pa. Code §354.26(a) (1)).

Electronic Access to Standards

This link provides access to the State Board of Education Academic Standards website. It contains the Pennsylvania Academic Standards, the Assessment Anchor Content Standards, the Alternate Academic Content Standards, the Early Learning Standards, and the Language Proficiency Standards for English Language Learners

FACULTY

Certification programs submitted for review to the Department will include the qualifications of faculty assigned to teach each course within the professional core of the program. Faculty who teach in the professional core must have demonstrated expertise in Pre K-4 education, as well as advanced degrees in disciplines appropriate to the content they are teaching in the program. (22 Pa. Code §351.41)

Programs are expected to participate in and document evidence of successful alignment and collaboration between arts and sciences faculty and education faculty; public and nonpublic schools; and with current practicing teachers and administrators in all content areas to design, deliver and facilitate effective programs for the preparation of professional educators (refer to Chapter 354.25 and 354.26).

FIELD EXPERIENCES AND STUDENT TEACHING

All professional educator programs must include the components of field experiences and student teaching into the program design. As regulated by Chapter 354 of the Pennsylvania Code (Title 22), the planned sequential field experiences may begin as early as the initial semester of college enrollment, prior to the required minimum 12 week full-time student teaching experience (§354.25(d)&(f). These experiences are to benefit the candidates preparation by providing opportunities to apply principles and theories from the program to actual practice in the classroom; provide practice with diverse populations, ages, and school settings (§354.25(d)(1-2).

Field Experience and Student Teaching Requirements

The professional education program is required to provide evidence of the candidate's participation in developmental field experiences and student teaching, under the supervision of college personnel and cooperating teachers who are well trained, highly qualified, and who demonstrate competence in teaching and mentoring in the field of Pre K – 4 education. The Pre K – 4 certification programs must also provide evidence that the criteria and competencies required for exit from the program are assessed through

coursework, field experiences and student teaching. In addition to incorporating a self-reflective emphasis, the program is expected to require candidates to demonstrate their knowledge and competence in fostering student learning and child well-being. To the extent possible, candidates should be assigned to field experiences and student teaching sites in which staff have Early Childhood or Elementary certification or are able to provide supervision from an external certified teacher.

Definitions of Field Experience and Student Teaching

There are four stages of field experiences that include student teaching. Each one is progressively more intensive and requires the candidate to assume gradually more responsibility. The experiences should take place in collaborative settings to give candidates a flavor for the values, culture, and working styles of learning environments. This includes learning about the socio-emotional and academic traits of students, and gaining experience with the teaming approach to teaching through direct observation and participation in teamwork and collaboration at the early childhood level.

Field experiences are defined as a range of formal, required school and community activities participated in by students who are enrolled in teacher preparation programs. These activities generally do not include student teaching under the supervision and mentorship of a classroom teacher. Effective field experiences provide candidates with increasing exposure to schools, under the guidance of program faculty and trained teacher mentors, throughout the preparation program. Institutions should explain:

1. How they implement field experiences to allow candidates to progress from observing, to working with small groups of students, to teaching small groups of students under the direction of a certified teacher, to the culminating student teaching experience;
2. The duration of candidate field experiences;
3. How these experiences are closely integrated with coursework, assessment practices, and program goals.

Student teaching is defined as a set of organized and carefully planned classroom teaching experiences required of all student teachers in a preparation program. Student teachers are assigned to one or more classrooms, closely supervised and mentored by a certified teacher, the cooperating teacher, who provides regular feedback to the student on his or her classroom teaching performance. General supervision of student teachers is provided by a university or college professional educator.

Field Experience Guiding Principles:

- Field experiences are designed and delivered for candidates to make explicit connections with content areas, cognitive development, motivation and learning styles.
- Field experiences allow teacher candidates to observe, practice, and demonstrate coursework competencies, under the supervision of education program faculty and under the mentorship of certified teachers.
- Field experiences must allow teacher candidates to progress from observation to teaching small groups of students under the mentorship of a certified educator at the pre-student teaching level, to the culminating student teaching experience.
- Field experiences are on-going throughout the program, aligned with coursework, and include varied experiences in diverse environments.
- Candidates need time to learn and demonstrate the complex competencies and responsibilities required by teachers.

Types of Field Experiences and Student Teaching

Each candidate must participate in experiences prior to student teaching, including one Pre K placement (includes birth through Pre K), one K-1 placement, and one placement in grades 2-4. At least one placement during Stage 3 or Stage 4 (student teaching) must include students in inclusive settings. An inclusive setting is defined as an educational setting which includes children with and without special needs. An inclusive setting includes at least one child with an IFSP/IEP. At least one placement during Stage 3 or Stage 4 must be in a public school setting or a Pre K program sponsored by a school district.

The student teaching component of approved programs in the Commonwealth is expected to involve institution faculty with knowledge and expertise in the certification area being pursued by a teacher candidate. Classroom mentor teachers (sometimes called cooperating teachers), under whose direct supervision the student teachers work, are expected to be trained by the institution, preferably in Pre K – 4 best practices, and to have appropriate certification.

Candidates must learn to identify and conduct themselves as members of the profession. They need to know and use ethical guidelines and other professional standards related to Pre K – 4 best practices. Candidates must also have opportunities to collaborate with other professionals and become informed advocates for sound educational practice and policies.

Professional Behaviors to be demonstrated throughout the Field Experiences

- Understand and adhere to Codes of Conduct
- Appreciate the need for, and maintain, student, family, and staff confidentiality
- Acquire and maintain appropriate clearances
- Understand and adhere to policies and procedures of the specific institution
- Advocate for high-quality, child-centered teaching practices utilizing the appropriate supervisory channels, including requirements related to mandated report status

Field Experience Stages

The following section describes the four stages of Field experience required for all certificate areas. The descriptions include minimum time requirements. A complete summary is shown on the next page in Table 2.

Stage 1: Observation

Students are observers in a variety of education and education-related settings including community-based child care, Head Start, early intervention, and school districts. Observations should occur in a range of school and early learning settings (e.g., urban, suburban, rural; high and low-performing schools) so that students have a broad experience and learn as much as possible about pre-K through 4th grade education learners and pre-K through 4th grade education philosophy.

Stage 2: Exploration

This is an experience in which the candidate works under the teacher's supervision during individual tutorials or with a small group of students. Activities can include reading, math, and other subject matter experiences, tutoring children, small group conversations, outdoor play, and monitoring classroom routines and procedures.

Stage 3: Pre-student teaching

This is the beginning of student teaching in which candidates teach small groups of students, in schools and early learning settings. This field experience is a combination of individual tutorials, small group, and whole class instruction at the selected grade level over the course of the semester. Students work with materials that they have prepared and created for classroom instruction.

Stage 4: Student Teaching

There is a minimum of 12 weeks full-time student teaching required in §354.25(f). The student teacher must be supervised by faculty with knowledge and experience in the area of certification and a cooperating teacher with appropriate professional educator certification (3 years certified teaching experience and 1 year experience in the placement school) who is trained by the preparation program faculty (22 Pa. Code, §354.25(f)).

Table 2

Field Experiences and Student Teaching Required for Pre K- 4 Grade Education

Stage #	**1 & 2**	**3**	**4**
Stage Title	**Observation (1) & Exploration (2)**	**Pre-Student Teaching**	**Student Teaching**
Description	Linked to Pre K- 4 education competencies and Pre K- 4 education courses that require a minimum number of hours across various grade levels and content areas.	Linked to Pre K- 4 education competencies and Pre K- 4 education courses that require a minimum number of supervised hours across various grade levels and content areas. Pre-student teaching experiences include teaching small to large groups of students under the supervision of Pre K- 4 higher education faculty and the mentorship of a certified Pre K- 4 education teacher. Pre-student teaching experiences are closely integrated with coursework, assessment practices, and program goals.	Student Teaching includes a minimum of 12 weeks full time in the classroom with increasing teaching responsibility to completely simulate the role of the Pre K - 4 educators. For greater than half of the student teaching experience, the teacher candidate will assume full responsibility as demonstrated by effective methods for the planning and delivery of instruction in the classroom. When the candidate in a post-baccalaureate program already has an instructional certificate for a different subject or gradeband, PreK-4 student teaching is still required, but the duration may be modified by the program to suit the needs of the candidate and/or the program.
Required Elements	1. Observation log signed by cooperating teacher. 2. Observation write-up by teacher candidate with feedback provided by university instructor. 3. Assessment of PDE Field Experience Competencies for Stages 1 & 2 4. Group meeting once a week with university instructor so that field experience is linked to current courses and practices. This can include the class meeting time.	1. Course assignments (e.g., journal, time log, reflective teaching) with feedback provided by university instructor. 2. Observation and feedback provided by university instructor 3. Assessment of PDE Field Experience Competencies for Stage 3 4. Group meeting once a week with university instructor so that pre-student teaching experience is linked to current courses and practices.	1. Observation log signed by cooperating teacher. 2. Observation write-up by teacher candidate. 3. Observation feedback provided by university instructor. 4. Onsite visitation by university instructor. 5. Group meeting once a week with university instructor so that field experience is linked to current courses and practices. 6. Assessment of PDE Student Teaching Competencies 7. PDE Form 430.

* At least one experience during field experience 3 or student teaching must include students with special needs in inclusive settings. An inclusive setting is defined as an educational setting which includes children with and without special needs. An inclusive setting includes at least one child with an IFSP/IEP.

NEW TEACHER SUPPORT

According to §49.16 (22 Pa. Code), all school entities (LEAs) must submit a plan for the induction experience for first-year teachers. This plan is submitted as part of the LEA's strategic plan written every 6 years as required by Chapter 4. Preparing institutions have a role in a new teacher's induction experience. The preparing institution shall provide, "…ongoing support for novice educators in partnership with local education agencies during their induction period, including observation, consultation and assessment." (22 Pa. Code §49.14(4) (ix))

APPENDICES

Appendix A

Development, Cognition and Learning
(Child development, typical and atypical, birth through 9, cognition and learning, applied in the classroom)

This section describes the ways in which candidates must use their understanding of young children's characteristics and needs and their knowledge of multiple interacting influences on children's development and learning to create environments that are healthy, respectful, supportive and challenging for all children.

Pre K- 4 professionals need appropriate, effective approaches, strategies, and tools to positively influence young children's development and learning. Candidates must ground their practices in a set of core approaches to teaching that are supported by research and are closely linked to the processes of early development and learning. Decisions about approaches to early teaching and learning are based on the understanding of children as individuals and a part of a group, as well as the alignment with important educational and developmental goals. The following approaches, strategies, and tools are used to promote children's development and learning:

- Fostering language comprehension, expression, oral language and communication;
- Drawing from a continuum of teaching strategies;
- Making the most of environment and routines;
- Capitalizing on incidental teaching;
- Linking children's language and culture to the Pre K- 4th grade program;
- Teaching through social interactions;
- Creating support for play;
- Addressing the challenging behaviors of children;
- Supporting learning through technology;
- Using integrative approaches to curriculum;
- Data driven instruction to support children's learning outcomes

Candidates must know and understand how to apply their knowledge of young children's characteristics and needs. They must demonstrate the ability to use their knowledge about the range of development (typical and atypical, and inter-and intra-variability for all children, including special learning and developmental needs from birth through nine years) to apply developmentally appropriate classroom curriculum and assessment methods in the following areas:

- Language (receptive vocabulary, expressive vocabulary, auditory comprehension, pragmatic language);
- Cognitive (stages of cognitive development, use of senses for exploration and understanding of the world, and developing age appropriate problem solving and critical thinking skills);
- Physical and Motor Development (stages of physical growth, gross and fine motor skills);
- Social Emotional (self-regulation, self concept, self awareness, resilience and ability to effectively deal with stress);
- Role and value of play, games and sports in child development and learning;
- Current identification criteria related to diverse learners.

Candidates must apply their knowledge about the multiple influences on development and learning to develop appropriate classroom instruction, which include:

- Pre and postnatal biological, psychological, sociological;
- Cultural, familial, and environmental;
- Media, technology, and popular culture;
- Gender;
- Family and community;
- Linguistics, language differences;
- Brain development;
- Health, nutrition and safety;
- Public policy.

Candidates must apply the principles and theories of child development, including:

- Developmentally appropriate practice;
- Constructivism;
- Socio-cultural theory;
- Attachment theory;
- Activity theory;
- Play.

Candidates must apply understanding of pre-K through grade 4 education foundations, theory and policy in their work with children and families, including:

- Current issues with historical and philosophical background including inclusionary practices;
- Theory, research, analysis and practice;
- Social, economic and cultural diversity, and implications for learning;
- Public policy;
- General and professional ethics.

The candidate must use Pennsylvania's early childhood learning standards for approaches to learning to influence curriculum development. Candidates will:

- Identify effective and appropriate curriculum that creates a secure base from which young children can explore and tackle challenging problems;
- Develop and implement meaningful, challenging curriculum that support's young children's ability and motivation to solve problems and think critically;
- Design curriculum that includes both planned and spontaneous experiences that are meaningful and challenging for all children that lead to positive learning outcomes and develop positive dispositions towards learning within each content area.

Appendix B

Language Development and its Connection to Reading Instruction
(Language Development in early childhood, Language development, Early literacy foundations for the pre-school years (PreK-1), Literacy foundations for the primary grades I (2-4))

If reading instruction is to maximally benefit the child, it must be language-based, according to the structure of the English language. It must allow the child opportunities to both use and produce language. When the child has basic command of his language production, he is able not only to receive, but also to offer information to others. During the reading process, this same type of transfer of information must occur if material is to be comprehended. If a student lacks the prerequisite language skills, however, the child will not receive the correct meaning during reading.

An emphasis on language, literacy (e.g., receptive vocabulary, expressive vocabulary, syntax, morphology, auditory comprehension, symbolic representation, pragmatic language) and emergence of a second language indicates that candidates must be competent in the following areas in order to develop students' mastery:

Candidates must use the relevant national standards for grades K-4 (i.e., National Council for Teacher of English (NCTE)/IRA standards) to create opportunities and resources for students to develop the literacy and language skills they need to pursue life's goals and to participate as informed, productive members of society. The areas of focus are:

- Reading for perspective;
- Reading for understanding;
- Evaluation strategies;
- Communication skills;
- Communication strategies;
- Applying knowledge;
- Evaluating data;
- Developing research skills;
- Multicultural understanding;
- Applying non-English perspectives;
- Participating in society.

Candidates must develop high-quality, meaningful language and literacy experiences that help children, including:

- Explore their environments and develop the conceptual, experiential, and language foundations for learning to read and write;
- Develop their ability to converse at length and in depth on a topic in various settings;
- Develop vocabulary that reflects their growing knowledge of the world around them;
- Use language, reading and writing to strengthen their own cultural identity as well as to participate in the shared identity of the school environment;
- Associate reading and writing with pleasure and enjoyment, as well as with skill development;
- Use a range of strategies to derive meaning from stories and texts;
- Use language, reading and writing for various purposes;
- Use a variety of print and non-print resources;
- Develop basic concepts of print and understanding of sounds, letters, and letter-sound relationships.

Appendix C

Literacy Foundations – Reading
(Academic success and learning to read, Differentiated reading instruction for the primary grades: focus on interventions)

According to *Teaching Reading Well* (International Reading Association, 2007), effective teacher educators design the reading components of their preparation programs around findings from research on how students become successful readers and how teachers support their learning. The core curriculum for reading education should equip graduating teachers to produce readers who are successful in the classroom and on standardized tests and use reading effectively to negotiate the world. There is growing consensus around a set of six foundational elements that teachers must use to produce proficient readers that should be included in any systematic program of study:

- Foundation in research and theory—Teachers must develop a thorough understanding of language and reading development as well as an understanding of learning theory and motivation in order to ground their instructional decision making effectively.
- Word-level instructional strategies—Teachers must be prepared to use multiple strategies for developing students' knowledge of word meanings and strategies for word identification. This includes the study of the phonemic basis for oral language, phonics instruction, and attention to syntax and semantics as support for word recognition and self-monitoring.
- Text-level comprehension strategies—Teachers must be prepared to teach multiple strategies that readers can use to construct meaning from text and to monitor their comprehension. They must understand the ways in which vocabulary (word meaning) and fluency instruction can support comprehension and develop the capacity for critical analysis of texts that consider multiple perspectives.
- Reading – writing connections—Teachers must be prepared to teach strategies that connect writing to the reading of literary and information texts as a support for comprehension. This includes attention to teaching conventions of writing.
- Instructional approaches and materials—Teachers must be prepared to use a variety of instructional strategies and materials selectively, appropriately, and flexibly.
- Assessment—Teachers must be prepared to use appropriate assessment techniques to support responsive instructional decision making and reflection.

Appendix D

Mathematical Foundations
(Math foundations for the preschool years, Math foundations for the primary grades,)

According to *Early Childhood Mathematics: Promoting Good Beginnings*, a joint position statement of the National Association for the Education of Young Children (NAEYC) and the NCTM, for high-quality mathematics education for 3- to 6-year-old children, teachers and other key professionals should:

- Enhance children's natural interest in mathematics and their disposition to use it to make sense of their physical and social worlds.
- Build on children's experience and knowledge, including their family, linguistic, cultural, and community backgrounds; their individual approaches to learning; and their informal knowledge.
- Base mathematics curriculum and teaching practices on knowledge of young children's cognitive, linguistic, physical, and social-emotional development.
- Use curriculum and teaching practices that strengthen children's problem-solving and reasoning processes as well as representing, communicating, and connecting mathematical ideas ensure that the curriculum is coherent and compatible with known relationships and sequences of important mathematical ideas.
- Provide for children's deep and sustained interaction with key mathematical ideas.
- Integrate mathematics with other activities and other activities with mathematics.
- Provide ample time, materials, and teacher support for children to engage in play, a context in which they explore and manipulate mathematical ideas with keen interest.
- Actively introduce mathematical concepts, methods, and language through a range of appropriate experiences and teaching strategies.
- Support children's learning by thoughtfully and continually assessing all children's mathematical knowledge, skills, and strategies.

Appendix E

Science
(Science methods)

The whole point of teacher preparation for science instruction is so that teachers can "evaluate each child's knowledge and conceptual and skill development, as well as the child's level of meta-cognition about his or her own knowledge, skills, and concepts. A key question for instruction is thus how to adapt the instructional goals to the existing knowledge and skills of the learners, as well as how to choose instructional techniques that will be the most effective" (National Research Council, *Taking Science to School*, chapter 2, page 8).

In general, teachers will be effective instructors in the schools of Pennsylvania when they complete the science component in the Pre K - 4 program curriculum with the knowledge and skills to: "know, use, and interpret scientific explanations of the natural world; generate and evaluate scientific evidence and explanations; understand the nature and development of scientific knowledge; [and] participate productively in scientific practices and discourse" (NRC, *Taking Science to School*, page 11-2). Only when their teachers have this capacity will pupils develop the same set of age appropriate knowledge and skills.

Appendix F

Social Studies
(Social Studies methods)

Students are expected to learn a variety of social science content knowledge at different grade levels, including the focus on Pennsylvania History in the fourth grade across the Commonwealth. At the very least, this means teachers should have the appropriate depth and breadth of content knowledge to support successful classroom teaching and student academic achievement. In fact—as teacher educators understand—teachers need much more than this. Effective instruction in the social sciences depends on teachers with knowledge in the social science disciplines; knowledge about the ways in which students learn these disciplines; the ability to plan and deliver effective instruction; and skills in assessing student learning in order to modify instruction and deliver successful interventions.
Candidates will demonstrate proficiency in representing, clarifying, and communicating the following main themes of social studies at the Pre K – 4 level, such as:
The study of culture, a theme that usually is found in courses and units from geography, history, sociology, anthropology, and multicultural topics across the curriculum;
Time, continuity and change—helping students to know how to understand and reconstruct the past—and building from courses or units in history;
People, places, and environments, which gives students the perspective of a world beyond "their personal locations," and requires knowledge from geography, history, and the sciences;
Individual development and identity, affected by culture, groups, and by institutions; psychology and anthropology are the academic subject areas most relevant to this theme;
Individuals, groups, and institutions—a theme that covers development of knowledge about how institutions (social, economic, religious, governmental) are formed and operate; courses and course units connected to this theme are sociology, anthropology, psychology, political science, and history;
Power, authority, and governance, developed through courses and units in government, history, and other social sciences, so that students grasp the historical development and functions of governmental institutions, the exercise of power, individual rights, and related concepts;
Production, distribution, and consumption—the theme that focuses most clearly on the basic understanding of economy, production of goods and services, and resource allocation;
Science, technology, and society, which deals with the development and use of technology, the pace of change and its impact on society, and promoting broader access to technology within and across societies, and is taught through courses and course units in the sciences, the humanities, and the social sciences—particularly geography, history, and civics;
Global connections, on the theme of interdependence and learned through course material in the sciences, geography, economics, and several of the social sciences;
Civic ideals and practices, described as topics, values, and issues related to citizenship, rights and responsibilities—generally addressed in history and humanities, but increasingly also a concern of the sciences as scientific exploration and discovery related to human beliefs and values.

Candidates will demonstrate the ability to incorporate into instructional planning the local, Pennsylvania, and national learning standards, Pre K - 4, for social studies, specifically:
Geography
Basic geographic literacy
Physical characteristics of places and regions

Human characteristics of places and regions
The interactions between places and people
History
Historical analysis and skills development
Pennsylvania history
United States history
Civics and government
Principles and documents of governments
Rights and responsibilities of citizenship
How governments work

Appendix G

Arts and Humanities
(Social Development and Arts methods)

Candidates must understand and know Pennsylvania's Pre K-4 learning standards for arts and humanities including:

- Production, performance and exhibition of dance, music, theatre, visual arts;
- Historical and cultural contexts;
- Critical response;
- Aesthetic response.

Candidates must provide experiences that help children:

- Interact musically with others;
- Express and interpret understanding of the world through structures and informal musical play;
- Sing, play and create music;
- Respond to expressive characteristics of music – rhythm, melody, form- through speaking, singing, moving, and playing simple instruments;
- Use music to express emotions, conflicts, and needs;
- Move expressively to music of various tempos, meters, modes, genres, and cultures to express what they feel and hear;
- Understand and apply artistic media, techniques and processes;
- Make connections between visual arts and other disciplines.

Appendix H

Motor Development and Health
(Motor Development and Health)

Candidates must demonstrate knowledge and understanding of Pennsylvania's learning standards Pre K-4 for health, safety and physical education, including:

- Concepts of health including substance abuse and dependency and universal precautions;
- Healthful living;
- Safety and injury precautions;
- Physical activity;
- Concepts, principles and strategies of movement.

Candidates must apply the content standards from the National Association for Sport and Physical Education that assure students:

- Have learned skills necessary to perform a variety of physical activities including adaptations for diverse learners;
- Are physically fit;
- Participate regularly in physical activity;
- Know the implications of and the benefits from involvement in physical activities;
- Value physical activity and its contribution to a healthful lifestyle.

Candidates must support students' learning and development by:

- Demonstrating competency in motor skills and movement patterns needed to perform a variety of physical activities;
- Demonstrating understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities;
- Participating regularly in physical activity;
- Achieving and maintaining a health-enhancing level of physical fitness;
- Exhibiting responsible personal and social behavior that respects self and others in physical activity settings;
- Valuing physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

Candidates must apply the National Health Education Standards to the development of Pre K-4 curriculum including:

- Health promotion and disease prevention;
- Health information, products and services;
- Reducing health risks;
- Health influences;
- Using communication to promote health;
- Setting goals for good health;
- Health advocacy.

Candidates must provide experiences for children that:

- Promote and protect children's health;
- Ensure children's nutritional well-being;
- Maintain a healthful environment.

Appendix I

Social Development
(Social Development and Arts methods)

Candidates must know and understand pre-requisite skills for learning that promote academic achievement and school success and will incorporate the foundational concepts listed below into their work:

- Academic achievement in the first few years of schooling appears to be built on a foundation of children's emotional and social skills;
- Learning is a social process that requires strong developmental abilities in following directions, getting along with others and controlling negative emotions;
- There is a link between social competence and positive intellectual outcomes as well as a link between antisocial conduct and poor academic performance;
- Cognitive, emotional, and social capabilities are inextricably intertwined throughout the life course;
- When students are self aware and more confident about their abilities, they try harder;
- When students can self-manage their stress and motivations, and set goals and organize themselves, they do better;
- Students who are aware of the tasks being assigned, make responsible decisions about completing them, and use problem-solving and relationship-management skills to overcome barriers, perform better and learn more.

Candidates must know and understand Pennsylvania's learning standards Pre K-4 for personal and social development including:

- Self concept
- Self regulation
- Social interactions
- Care and self reliance

Candidates must integrate the development of social and personal skills throughout instruction including:

- Getting along with others (parents, teachers, and peers);
- Following directions;
- Identifying and regulating one's emotions and behavior;
- Thinking of appropriate solutions to conflict;
- Persisting on task;
- Engaging in social conversation and cooperative play;
- Correctly interpreting other's behavior and emotions;
- Feeling good about self and others.

Appendix J

Assessment
*(Assessment Methods I Observation and Informal**,** Assessment Methods II Summative, Formative, Diagnostic, Benchmark)*

This section describes ways candidates apply their knowledge about observation, documentation and assessment for young children to develop instructional practices that support individualized and classroom instruction.

a. Candidates will:
    - observe and assess young children in the context of ongoing classroom life;
    - collect and interpret a variety of evidence to evaluate where each child is in a sequence or continuum of learning and development;
    - move from assessment to decisions about curriculum, social support, and teaching strategies to increase the prospects for successful learning and development.

b. Candidates must utilize several types of assessments to inform classroom practice, including:
    - screening
    - diagnostic
    - normative
    - summative
    - authentic

c. Candidates must use informal and formal assessment strategies to evaluate and document child performance that includes:
    - participating in soliciting family input into children's developmental abilities, strengths, interests and challenges as well as the setting of goals based on child assessment;
    - participating in effective communication with families and professionals about a child's progress across all dimensions of development and in all areas of learning;
    - evaluating the developmental progress of students in all areas using a variety of developmentally appropriate methods and instruments;
    - recording and interpreting a child's development, progress and learning;
    - selecting and using formal and informal assessment in modifying instructional practices for individual children and the class as a whole;
    - analyzing and applying assessment data to evaluate the effectiveness of the curriculum experience for individual children and the class as a whole;
    - following legal provisions, regulations, and guidelines regarding biases of students from culturally and/or linguistically diverse backgrounds;
    - using state (e.g., PSSA) and national standardized tests to inform instructional practices;

d. Candidates must select and use appropriate electronic and print media and technology to support instruction, assessment and management including computers and handhelds.

e. Candidates are expected to understand the differences between summative, formative, diagnostic and benchmark assessments. Additionally, they need to know when to use which assessments.

Appendix K

Family and Community Collaboration Partnerships
(Family and Community Relationships, Family collaboration and Diversity)

Candidates must apply their understanding of children and families diversity to:

- Implement classroom practices that protect the legal rights of children and families in the general and special education processes.
- Partner with families.
- Participate in a school-wide event that is focused on families (e.g., potluck dinner, workshop).
- Participate in a family-teacher conference.
- Participate with family in an event that supports the agency/school (e.g. PTO, Parent Advisory Board).

Candidates must utilize their knowledge of the community and its resources to:

- Participate in an event in the community in which the school/agency is located.
- Provide information to families about child development as available community resources.
- Understand and value the importance and complex characteristics of children's families and communities.
- Create, enhance and sustain respectful, reciprocal relationships that support and empower families.
- Involve all families in their children's development and learning.

Candidates must know family systems and the role of families in children's development, such as:

- The central role that families play in the development of children with and without disabilities.
- The impact of children with disabilities on family systems.
- The concerns of families of individuals with exceptional learning needs and strategies to help address these concerns.
- The legal rights of families within the general role and special education process.
- Knowledge of laws relating to family and student confidentiality.
- Knowledge of the roles of individuals with exceptional learning needs within families, schools, agencies and community personnel.

Candidates must know strategies for becoming cross-culturally competent including:

- Knowledge of variations in beliefs, traditions, and values related to children and learning across and within cultures including child rearing practices, parent-child interaction styles and discipline.
- Describing the impact of poverty on family systems and children's development.
- Articulating the potential impact of differences in values, languages, socio-economics and costumes that can exist between the home and school.
- Identifying the impact of culture on one's own beliefs, values and behaviors.

Candidates must know and understand strategies to partner with families including:

- Maintaining respectful, ongoing, meaningful communication with family members that develops and sustains partnerships with families.
- Identifying and addressing family information, communication and collaboration needs.

- Conferencing with families, keeping them informed of children's progress.
- Involving families in the policy decisions of a program.
- Providing families with meaningful opportunities to be involved throughout their child's education.
- Gathering evaluation information from families of children with and without disabilities.
- Culturally responsive factors that promote effective communication and collaboration with individuals with exceptional learning needs, families, school and agency personnel, and community members.

Candidates will articulate strategies that link families to community resources including:

- Determining family strengths, concerns, needs, and priorities.
- Providing information about community resources, parenting education, and child development to families.
- Gaining knowledge of community resources useful to families of children with and without disabilities and strategies for linking families to these resources.
- Working with linguistic and cultural interpreters for culturally and linguistically diverse families.

Appendix L

Professionalism
(Evidenced based practices in Pre K-4 care and education, Advocacy, Collaboration and Cooperative Learning, and Issues and Trends)

Candidates must identify and become involved with the Pre K- 4 field and develop their leadership capacity by:

- Articulating the historical and philosophical underpinnings of early childhood education.
- Using Pennsylvania's regulations and standards that serve programs from birth through fourth grade, including but not limited to, child care and Keystone STARS, Head Start, learning standards and school code.
- Identifying with professional organizations, professional literature, technical resources and student organizations to enhance content knowledge and pedagogical skill.
- Identifying community services and resources and ways to connect families;
- Describing various types of state and federal early childhood program (e.g., Head Start, Even Start, Child Care, PA Pre K Counts, Full Day Kindergarten, Reading First, Science, It's Elementary), including regulatory processes and program guidelines;
- Differentiating a range of developmentally appropriate Pre K - 4 curriculum models and programs, including their assets and limitations;
- Describing pre-primary and primary education instructional strategies.

Candidates must know about and uphold ethical standards (e.g., NAEYC) and other professional guidelines including:

- Describing the implications for learning and educational programming as it relates to culture, language, religion, gender, disability, social-economic status, and sexual orientation of individuals.
- Developing professional dispositions with respect to students, parents and families including but not limited to communication, appearance and demeanor.
- Demonstrating integrity, ethical behavior and professional conduct as stated in Pennsylvania's Code of Professional Conduct and NAEYC's Code of Ethical Conduct, identifying both the procedures and legal requirements for safeguarding student health and welfare.

Candidates must engage in continuous collaborative learning to inform practice by:

- Collaborating with families, other educators, related service providers and personnel from community agencies in culturally responsive ways;
- Communicating respectfully, effectively and in a culturally appropriate manner with families, other agencies and the community at large to support learning and early childhood education.
- Making a commitment to lifelong professional development;
- Engaging in service learning to increase knowledge base and develop dispositions related to justice and appreciation for diversity.
- Developing collegial collaboration and team building within schools and with community programs including, but not limited to consultation, coaching and co-teaching.
- Knowing ways to establish, develop, and sustain partnerships and community involvement to enhance the school program.

Candidates must integrate knowledgeable, reflective and critical perspective on early education by:

- Implementing methods to remain current regarding research validated practice.
- Demonstrating the ability to access and evaluate research to inform practice and evaluate policy.
- Utilizing action research including self-reflection skills and data review for examining and improving their own practice.

Candidates must engage in informed advocacy for children and the profession by:

- Identifying state and federal public policy and the effect on children and families.
- Demonstrating advocacy skills including verbal and written communication in collaboration with others around common issues.
- Advocating for sound educational practices and policies.

Candidates will implement ethical practices by:

- Using ethical guidelines and other professional standards related to pre-K through 4th grade practice.
- Becoming continuous, collaborative learners who demonstrate knowledgeable, reflective, and critical perspectives on their work, making informed decisions that integrate knowledge from a variety of sources.
- Being informed advocates for sound educational practices and policies.

Candidates demonstrate ethical behavior by:

- Practicing within the NAEYC Code of Ethical Conduct and other standards of the profession;
- Upholding high standards of competence and integrity and exercise sound judgment in the practice of the professional.
- Acting ethically in advocating for appropriate services.
- Conducting professional activities in compliance with applicable laws and policies.
- Recognizing signs of child abuse and neglect in young children and
- Following reporting procedures.

Candidates must use their knowledge and understanding about diversity to:

- Commit to developing the highest education and quality-of-life potential of individuals with exceptional learning needs.
- Demonstrate sensitivity for the culture, language, religion, gender, disability, socio-economic status, and sexual orientation of individuals.
- Access information on specific exceptionalities that child demonstrate in classroom settings.

Candidates must demonstrate a commitment to life-long learning by:

- Conducting self-evaluation of instruction.
- Reflecting on one's practice to improve instruction and guide professional growth.
- Practicing within one's skill limit and obtain assistance as needed.
- Participating in activities of professional organizations relevant to the field of Pre K -4 education.
- Developing, implementing, and evaluating a professional development plan relevant to one's work with young children.
- Engaging in professional activities that benefit individuals with exceptional learning needs, their families and one's colleagues.

Candidates will be effective communicators and collaborators. They must:

- Use verbal, nonverbal and written language effectively.
- Respect family choices and goals.
- Apply models of team process in Pre K -4.

Candidates will stay current on research and apply new strategies and techniques. They must:

- Use child, family theories and principles to guide professional practice.
- Apply research and effective practices critically in Pre K - 4 settings.

Appendix M

ACCOMMODATIONS AND ADAPTATIONS FOR STUDENTS WITH DISABILITIES IN AN INCLUSIVE SETTING AND MEETING THE NEEDS OF ENGLISH LANGUAGE LEARNERS PROGRAM GUIDELINES

INTRODUCTION

Pennsylvania's teacher preparation programs must include the competencies and skills needed to equip teachers to accommodate and adapt instruction for students with disabilities in an inclusive setting and to assist English language learners.

Final rulemaking of the State Board of Education published in the *The Pennsylvania Bulletin* on September 22, 2007 requires **all instructional and educational specialist preparation programs to include the following by January 1, 2011:**

1. At least 9 credits or 270 hours regarding accommodations and adaptations for students with disabilities in an inclusive setting (instruction in literacy skills development and cognitive skill development for students with disabilities must be included); and
2. At least 3 credits or 90 hours regarding the instructional needs of English language learners. (22 PA Code, Chapter 49, §49.13(b) (relating to policies)).[1]

Competencies and skills to accommodate and adapt instruction for students with disabilities in an inclusive setting and to assist English language learners must be identifiable during the program review process. Candidates who apply for a Pennsylvania instructional and/or educational specialist certificate on or after **January 1, 2013** must have completed the credits/hours described above

DESIGN

Applicable hours are limited to a combination of seat hours of classroom instruction, field observation experiences, major research assignments and development and implementation of lesson plans with accommodations and adaptations for diverse learners in an inclusive setting. In order to help all teachers better understand ways to accommodate and adapt learning for students with disabilities in an inclusive setting, it is essential that courses and course content be developed and taught by faculty who have thorough knowledge and expertise in using evidence-based practices to teach individuals with disabilities. The preferred approach is the use of faculty with post-graduate training and certification in special education. While preparation programs may infuse the candidate competencies related to accommodations and adaptations for students with disabilities into existing courses or add additional courses as appropriate, it is the explicit application and relationship to students with disabilities that require faculty who deliver the content to have thorough knowledge and expertise in Special Education. Training for higher education

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[1] (4) Evaluation and approval of teacher education programs leading to the certification and permitting of professional personnel.

(i) The evaluation by the Department will provide assurance that, on or before January 1, 2011, teacher education programs will require at least 9 credits or 270 hours, or an equivalent combination thereof, regarding accommodations and adaptations for students with disabilities in an inclusive setting.

Within the content of these 9 credits or 270 hours, instruction in literacy skills development and cognitive skill development for students with disabilities must be included, as determined by the institution. At least 3 credits or 90 additional hours, or an equivalent combination thereof, must address the instructional needs of English language learners. For purposes of this requirement, 1 credit equals 30 hours of coursework. Applicable hours are limited to a combination of seat hours of classroom instruction, field observation experiences, major research assignments, and development and implementation of lesson plans with accommodations and adaptations for diverse learners in an inclusive setting. (22 Pa. Code §49.13(4)(i)).

faculty may include the use of modules and other educational activities prepared by special education faculty.

COMPETENCIES: ACCOMMODATIONS AND ADAPTATIONS FOR STUDENTS WITH DISABILITIES IN AN INCLUSIVE SETTING (9 CREDITS OR 270 HOURS)

The following outline includes the competencies for the 9 credits or 270 course hours addressing the academic needs and adaptations for students with disabilities.

I. Types of Disabilities and Implications for Learning
Candidates will be able to:

A. Demonstrate an understanding of and ability to plan for: type, identification and characteristics of different types of disabilities, as well as effective, evidence-based instructional practices and adaptations.

B. Demonstrate an understanding of the legal rights and responsibilities of the teacher related to special education referral and evaluation and the rights and procedural safeguards that students are guaranteed.

C. Demonstrate an understanding of possible causes and implications of over-representation of minorities in special education to avoid misinterpretation of behaviors that represent cultural, linguistic differences as indicative of learning problems.

II. Cognitive Skill Development to Ensure Achievement of Students with Disabilities in Standards Aligned System to include All School Environments

A. **Cognitive** – Delineate how individuals acquire and process information.

1. Design learning environments to facilitate encoding, storage and retrieval of knowledge and information for memory, attention, perception, action, and problem solving.
2. Describe the developmental patterns of change, physical, cognitive, and psychosocial areas that have been identified for each stage of development.
3. Apply concepts of human development to education and learning regarding attention, memory, conceptual knowledge and its formation, reasoning, decision-making, problem-solving, executive functioning, principles and mechanisms of development, intelligence, action, and motor control.
4. Specify the experiences children need from birth to age eight to prepare them to learn, read, and succeed in school.
5. Identify early interactions with adults and peers, the early childhood education teaching methods and curricula, and comprehensive early childhood interventions that support learning and development, specifically in domains that prepare children from diverse backgrounds for kindergarten and the early grades.

B. **Physical** – Recognize patterns of typical physical developmental milestones and how patterns of students with disabilities may be different, and plan effectively for possible accommodations and/or modifications which may be necessary to implement effective instructional practices.

C. **Social** – Initiate, maintain and manage positive social relationships with a range of people in a range of contexts.

1. Recognize areas of development for students with disabilities and plan effectively for: interpersonal processes, forming and maintaining relationships (including parent-child, caregiver, peer, friend, sibling), and attachment models and their effects on learning.

2. Apply principles in social competence, social withdrawal, social role formation and maintenance, and prosocial behaviors, and aggression as they affect learning.

D. Behavioral – Recognize patterns of typical behavioral milestones and how patterns of students with disabilities may be different, and plan effectively for positive teaching of appropriate behaviors that facilitate learning.

E. Language – Apply reading predictors, analyzing the effect of individual differences in specific perceptual, linguistic, and cognitive skills and how they affect a child's ability to read.

1. Apply principles of early learning to language development in the following areas: language comprehension, language expression, language form and syntax, morphology and semantics.
2. Apply and teach skills of spoken language as a precursor of reading and academic development.

F. Positive Environments for Learning for Students with Disabilities

1. Define the scientific principles influencing academic and social behavior.
2. Implement positive behavioral interventions based on a functional analysis of behavior.
3. Create an optimal learning environment by utilizing, evaluating, modifying and adapting the classroom setting, curricula, teaching strategies, materials, and equipment.

G. Collaboration and Communication

1. Identify effective co-planning and co-teaching strategies.
2. Identify collaborative consultative skills and models (i.e., understanding role on the IEP team; teaming; parallel teaching).
3. Identify instructional levels of students through collaboration with members of the IEP team.
4. Understand the role of the general educator as part of the team for transition planning across transition points (i.e., preschool to school entry, grade level to grade level, school to school, to post school outcomes).
5. Demonstrate an understanding of the meaningful roles that parents and students play in the development of the student's education program.
6. Demonstrate sensitivity for multicultural and economic perspectives in order to encourage parent participation.
7. Demonstrate an understanding of how to support student and family communication and meaningful participation into the student's educational program.
8. Work collaboratively with all members of the student's instructional team including parents and non-educational agency personnel.

III. Assessments

Candidates will be able to:

A. Identify, administer, interpret, and plan instruction based on each of the following assessment components in a standards aligned system.

1. Authentic – A form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills. The assessment usually includes a task for students to perform, and a rubric is used to evaluate their performance.
2. Screening- Screening assessments are used to determine which students may be at risk. Poor performance on the screening assessment identifies those students needing additional, in-depth assessment of strengths and weaknesses. The primary purpose of screening assessments is the early identification of children who need additional

instructional intervention. Screening is useful only when followed with additional instructional intervention.

3. Diagnostic – The purpose of diagnostic assessments is to ascertain, prior to instruction, each student's strengths, weaknesses, knowledge, and skills. Using diagnostic Assessments enable the instructor to remediate students and adjust the curriculum to meet each pupil's unique needs. (Examples of diagnostic assessments are: DRA's; Running Records; GRADE; GMADE)
4. Formative- Formative assessments are classroom based assessments that allow teachers to monitor and adjust their instructional practice in order to meet the individual needs of their students. Formative assessments can consist of formal instruments or informal observations. The key is how the results are used. Results should be used to shape teaching and learning. Black and Wiliam (1998) define formative assessments broadly to include instructional formats that teachers utilize in order to get information that are used diagnostically to alter instructional practices and have a direct impact on student learning and achievement. Under this definition, formative assessment encompasses questioning strategies, active engagement check-ins (such as response cards, white boards, random selection, think-pair-share, popsicle sticks for open-ended questions, and numbered heads), and analysis of student work based on set rubrics and standards including homework and tests. Assessments are formative when the information is used to adapt instructional practices to meet individual student needs as well as to provide individual students corrective feedback that allows them to "reach" set goals and targets. Ongoing formative assessment is an integral part of effective instructional routines that provide teachers with the information they need to differentiate and make adjustments to instructional practice in order to meet the needs of individual students. When teachers know how students are progressing and where they are having trouble, they can use this information to make necessary instructional adjustments, such as re-teaching, trying alternative instructional approaches, or offering more opportunities for practice. The use of ongoing formative classroom assessment data is an imperative. Effective teachers seamlessly integrate formative assessment strategies into their daily instructional routines.
5. Benchmark – Assessments that are designed to provide feedback to both the teacher and the student about how the student is progressing towards demonstrating proficiency on grade level standards. Well-designed benchmark assessments and standards-based assessments: measure the degree to which students have mastered a given concept; measure concepts, skills, and/or applications; are reported by referencing the standards, not other students' performance; serve as a test to which teachers want to teach; measure performance regularly, not only at a single moment in time. (Examples of benchmark assessments are: 4Sight, Riverside 9-12, DIBELS)
6. Summative –Summative Assessments seek to make an overall judgment of progress at the end of a defined period of instruction. Often the summative assessment occurs at the end of a school level, grade, or course, or is administered at certain grades for purposes of state or local accountability. Summative assessments are considered high-stakes assessments and the results are often used in conjunction with No Child Left Behind (NCLB) and Adequate Yearly Progress (AYP). They are designed to produce clear data on the student's accomplishments at key points in his or her academic career. (Examples of summative assessment: PSSA; Terra Nova)

B. Demonstrate an understanding of the types of assessments used (e.g., screening, diagnostic, formative, summative) and the purpose of each assessment in a data-based decision making process.

C. Demonstrate the use of formal and informal assessment data for instructional, behavioral, and possible eligibility for special education based on the type of assessment, level of the students being assessed, and the purpose of and the quality of instruction.

D. Demonstrate an understanding of the multi-disciplinary evaluation process and an ability to articulate the findings presented in an evaluation report including grade-level equivalents, percentile rank, standard scores, and stanines.

E. Demonstrate an understanding of the components of the Individualized Education Plan (IEP) process, with emphasis on understanding measurable goals based on

present levels, specially designed instruction, adaptations, accommodations, supplementary aids and services, and supports for school personnel.

F. Articulate differences between achievement tests, aptitude tests, and observational data used in special education placement decisions.

G. Create an instructional plan using assessment information related to individual student achievement.

H. Analyze and interpret formative assessment (e.g., curriculum based assessment, CBA).

I. Demonstrate an understanding of the purpose and intent of standardized assessments and progress monitoring as one of the multiple indicators used in overall student evaluation.

J. Systematically monitor student performance to identify areas of need.

K. Use evaluative data on an individual, class and district level to identify and implement instructional and/or programmatic revisions for quality improvement.

L. Demonstrate an understanding of legally acceptable modifications and accommodations for assessment for students with disabilities.

M. Demonstrate an understanding of ethical practice for assessment.

N. Recognized the need to consult with multi-disciplinary team when cultural, economic, or linguistic differences are present in order to avoid biased assessment.

IV. Literacy Development and Instruction in Core and Intervention Areas

Candidates will be able to:

A. Demonstrate an ability to match instructional research-validated literacy interventions to identified student needs.

B. Demonstrate a conceptual understanding of the components of reading and describe how these areas pose challenges for students with disabilities:

Phonological Awareness & Phonics
Fluency
Vocabulary
Comprehension
Language
Word Study (investigate & understand the patterns in words)

C. Demonstrate an ability to review and evaluate literacy programs for purpose, quality, effectiveness, and research-base and show knowledge of commonly available programs.

D. Identify evidence-based instructional practices to be used with students with disabilities in the area of literacy.

E. Demonstrate an understanding of the evidence-based connection between literacy and behavior.

F. Demonstrate a conceptual understanding of the components of writing and describe how these areas pose challenges for students with disabilities:

Text production
Spelling
Composition for different types of writing

G. Clearly articulate and model the use of explicit and systematic instruction in the teaching of literacy (reading and writing) for students with disabilities across all reading levels.

H. Clearly articulate and model the use of explicit and systematic instruction in the teaching of content area literacy for all students with disabilities across all reading levels.

I. Demonstrate instructional strategies to enhance comprehension of material.

J. Demonstrate an understanding of the challenges that students with specific disabilities face in content area literacy.

K. Assess the readability of content area reading materials.

L. Demonstrate the ability to adapt content area material to the student's instructional level.
M. Utilize assessment tools with appropriate accommodations in the area of literacy to identify effectiveness of the standards based curriculum (core literacy program for students with disabilities).
N. Establish and maintain progress monitoring practices aligned with the identified needs of each student to adjust instruction and provide rigor in the area of literacy for students with disabilities.
O. Establish and maintain progress monitoring practices within the content area aligned with the identified needs of each student to adjust instruction and provide rigor in the area of literacy for all students with disabilities.

V. Effective Instructional Strategies for Students with Disabilities in Inclusive Settings

Candidates will be able to:

A. Identify effective instructional strategies to address areas of need.
B. Scaffold instruction to maximize instructional access to all students.
C. Monitor student progress to provide mediated scaffolding and increase academic rigor when appropriate.
D. Provide feedback to students at all levels to increase awareness in areas of strength, as well as areas of concern.
E. Strategically align standard based curriculum with effective instructional practices.
F. Identify and implement instructional adaptations based on evidence-based practices (demonstrated to be effective with students with disabilities) to provide curriculum content using a variety of methods without compromising curriculum intent.
G. Analyze performance of all learners and make appropriate modifications.
H. Design and implement programs that reflect knowledge, awareness and responsiveness to diverse needs of students with disabilities.
I. Use research supported methods for academic and non-academic instruction for students with disabilities.
J. Develop and implement universally designed instruction.
K. Demonstrate an understanding of the range and the appropriate use of assistive technology (i.e., no tech, low tech, high tech).
L. Demonstrate efficient differentiated instruction and an understanding of efficient planning, coordination and delivery for effective instruction required for inclusive settings.

MEETING THE INSTRUCTIONAL NEEDS OF ENGLISH LANGUAGE LEARNERS (ELL) (3 CREDITS OR 90 HOURS)

The following outline includes the competencies for the 3 credits or 90 course hours addressing the academic needs and adaptations for ELL students.

I. Foundations for Preservice Candidates

Candidates will be able to:

A. Language

1. Demonstrate knowledge of language systems, structures, functions, and variation.
2. Identify the process of acquiring multiple languages and literacy skills, including the general stages of language development.
3. Identify the differences between academic language and social language.

B. Culture

1. Identify sociocultural characteristics of ELLs including educational background and demographics.
2. Describe how ELLs' cultural communication styles and learning styles affect the learning process.
3. Describe how ELLs' cultural values affect their academic achievement and language development.
4. Identify bias in instruction, materials and assessments.
5. Demonstrate cross-cultural competence in interactions with colleagues, administrators, school and community specialists, students and their families.
6. Observe culturally and/or linguistically diverse instructional settings.

II. Applications for Pre-service Candidates

Candidates will be able to:

A. Standards-based Instruction

1. Apply research, concepts and theories of language acquisition to instruction.
2. Implement appropriate research-based instructional strategies to make content comprehensible for all ELLs.
3. Demonstrate effective instructional planning and assessment integrating the PA Language Proficiency Standards for English Language Learners PreK-12 (ELPS) and PA academic standards.

B. Assessment specific to ELL

1. Use PA ELPS to design content assessment.
2. Identify issues related to standards-based formative and summative assessment for *all* ELLs.
3. Use assessment data to differentiate and modify instruction for optimal student learning.

C. Professionalism

1. Describe the legal responsibilities related to serving ELLs.
2. Demonstrate collaborative, co-teaching models for serving ELLs.
3. Define common terms associated with English Language Learners.
4. Identify professional resources and organizations related to serving ELLs.

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