

Table of Contents

DOMAIN I

LANGUAGE AND LITERACY 1

COMPETENCY 1

LANGUAGE DEVELOPMENT 5

Skill 1.1: Knowledge of oral language development and its role in literacy development.....5

Skill 1.2: Phonetics, including phonological awareness, phonemic awareness, and phonics 8

Skill 1.3: The development of knowledge of pragmatic uses of language, syntax, and prose structure 12

Skill 1.4: The processes of oral language development, including production and comprehension of language and the relationship between oral language development, reading and writing skills, and children's thinking and learning 13

Skill 1.5: The ways in which English language learners, bilingual children, and children with English-language dialectal differences develop and use language..... 14

Skill 1.6: The major indicators of common speech and language delays and disorders, such as articulation problems 17

COMPETENCY 2

READING AND LITERATURE 18

Skill 2.1: The process of learning to read, reading strategies and skills, and the features of children's literature 18

Skill 2.2: The alphabetic principle, including how children begin to develop and build on the alphabetic principle, and the differences in this principle for children learning English, children learning other languages, and bilingual children..... 25

Skill 2.3: The steps and processes of learning to read (e.g., print awareness, concepts of print and book reading, making predictions, word recognition skills, fluency)..... 26

Skill 2.4: Major skills and strategies of reading comprehension (e.g., identifying main ideas, predicting, paraphrasing, questioning, making connections in a text) 31

Skill 2.5: Strategies for reading new and difficult words (e.g., phonics, context, language structure, pictures) 35

Skill 2.6: Children's literature, including the features of children's literature that facilitate early reading development, principles for selecting literature, and knowledge of various genres and types of literature 36

Skill 2.7: Strategies for responding to themes, patterns, and forms of literature 39

Skill 2.8: The major indicators of common reading difficulties (e.g., delays in learning to read, dyslexia, comprehension difficulties) 40

COMPETENCY 3

SPELLING	43
Skill 3.1: The process of learning to spell	43
Skill 3.2: Spelling development, from invented to conventional spelling	44
Skill 3.3: Relationships between sounds of speech and the spelling of words and between sight words and reading and writing development	46

COMPETENCY 4

WRITING	47
Skill 4.1: The process of learning to write, writing forms and modes, and conventions of written English	47
Skill 4.2: Writing stages (<i>e.g., scribbling, letter-like shapes, script, print</i>)	48
Skill 4.3: Writing forms and modes (<i>e.g., various purposes, audiences</i>)	50
Skill 4.4: Steps in the writing process (<i>e.g., brainstorming, writing, editing, revising, rewriting</i>)	53
Skill 4.5: Conventions of written English (<i>e.g., sentence construction, punctuation, grammar</i>)	56
Skill 4.6: The role of writing in the development of reading skills	64
Skill 4.7: The motivation to write and the factors influencing motivation	65

DOMAIN II

MATHEMATICS 67

COMPETENCY 5

MATHEMATICAL THINKING SKILLS	69
Skill 5.1: Fundamental mathematical thinking skills, how they are interrelated, and how they are used in completing various mathematical exercises	69
Skill 5.2: Problem-solving skills (<i>e.g., using investigation and experimentation to find answers to everyday mathematical problems</i>)	70
Skill 5.3: Reasoning skills (<i>e.g., making conjectures, drawing logical conclusions, using models</i>)	72
Skill 5.4: Communication skills (<i>e.g., connecting everyday language to mathematical language and symbols; presenting, discussing, reading, writing, and listening related to mathematics</i>)	73
Skill 5.5: Connection-making skills (<i>e.g., applying mathematics to other subject areas; using mathematics in daily life</i>)	74
Skill 5.6: Representation skills (<i>e.g., creating and using representations to organize, record, and communicate mathematical ideas</i>)	75

COMPETENCY 6

NUMBERS AND OPERATIONS	76
Skill 6.1: Number sense and the meaning of operations	76
Skill 6.2: Numbers, ways of representing numbers, relationships between numbers, and number systems	78
Skill 6.3: Meaning of operations and how they relate to one another	82

COMPETENCY 7	
PATTERNS AND RELATIONSHIPS	89
Skill 7.1: The foundations of algebraic reasoning, including the study of patterns and relationships among quantities and the mathematical study of change	89
Skill 7.2: Patterns and Relationships	90
Skill 7.3: The concept of change in mathematics	91
COMPETENCY 8	
GEOMETRY AND SPATIAL SENSE	92
Skill 8.1: The relationships among shapes and their properties and how they provide opportunities to reflect upon and interpret the physical environment	92
Skill 8.2: Characteristics and properties of two- and three-dimensional geometric shapes and the development of mathematical arguments about geometric relationships	93
Skill 8.3: The use of transformation and symmetry to analyze mathematical situations that children encounter in their daily lives	95
COMPETENCY 9	
MEASUREMENT	99
Skill 9.1: Measurement and how it is used to interpret the real world	99
Skill 9.2: The measurable attributes of objects and the units, systems, and processes of measurement	101
Skill 9.3: The use of appropriate techniques, tools, and formulas to determine measurements	102
COMPETENCY 10	
DATA	105
Skill 10.1: The purpose of and methods for the collection and analysis of data	105
Skill 10.2: The selection and use of simple statistical methods to analyze data	106
Skill 10.3: The collection, organization, and display of relevant data to answer questions	107
Skill 10.4: The development and evaluation of inferences and predictions that are based on data	107
DOMAIN III	
SOCIAL STUDIES	109
COMPETENCY 11	
IDENTITY AND INDIVIDUAL DEVELOPMENT	111
Skill 11.1: Self-awareness and how it develops	111
Skill 11.2: Interpersonal relationships (i.e., norms of social behavior)	112
Skill 11.3: Group social skills (e.g., conflict resolution)	113

Skill 11.4: Family and social influences (*e.g., the ways in which social systems influence daily life and personal choices*)..... 115
Skill 11.5: Institutions and how they influence individual identity, relationships, beliefs, and behaviors 115

COMPETENCY 12

CULTURE AND CULTURAL IDENTITY 117

Skill 12.1: Ways in which families, groups, societies, and cultures address similar human wants, needs, and concerns 117
Skill 12.2: Ways in which cultural perspectives shape experiences and perceptions 119
Skill 12.3: Language, stories, folktales, music, and artistic creations as expressions of culture and influences on the behavior of people living in a particular culture 121
Skill 12.4: Ways in which people from different cultures think about and deal with their physical environment and social conditions..... 122
Skill 12.5: Unity and diversity within and across groups 123

COMPETENCY 13

PEOPLE, PLACES, AND ENVIRONMENTS 124

Skill 13.1: Spatial thinking, geographic perspectives, and the relationships between human beings and their environment..... 124
Skill 13.2: Geographic concepts (*e.g., region, measurement, directional terms, landmarks, distance, location*) 124
Skill 13.3: Geographic literacy skills (*e.g., the construction and use of maps, graphs, and charts*) 127
Skill 13.4: Physical and human characteristics of different places and how they impact human behavior and experience (*e.g., rain forest, desert, urban and rural communities*)..... 128
Skill 13.5: The interdependence of living things, the environment, and the economy 130

COMPETENCY 14

TIME, CONTINUITY, AND CHANGE 135

Skill 14.1: The ways in which human beings seek to understand their historical roots and to locate themselves in time 135
Skill 14.2: Chronological thinking skills using an analysis of historical data (*e.g., time lines, maps, graphs, and tables*) 136

COMPETENCY 15

CIVICS AND GOVERNMENT 138

Skill 15.1: Civic participation and how people create and change structures of power, authority, and governance 138
Skill 15.2: Key civics concepts (*e.g., human dignity, justice, equality, tolerance, rule of law, citizenship*) 139
Skill 15.3: Civic participation in the context of classroom, community, nation, and world (*e.g., raising an issue, making an informed decision, considering other perspectives, balancing individual and group needs*)..... 143

DOMAIN IV

SCIENCE 147

COMPETENCY 16

FUNDAMENTAL CONCEPTS AND PROCESSES FOR SCIENTIFIC INQUIRY 149

Skill 16.1: Unifying science concepts (e.g., systems, cycles, constancy, and change)..... 149

Skill 16.2: The scientific process (i.e., formulating questions, testing hypotheses, and communicating information to help explain the world)..... 150

Skill 16.3: Basic science skills (e.g., observing, describing, and classifying; making inferences; communicating and representing findings; using simple tools; collecting and using data) 152

COMPETENCY 17

PHYSICAL SCIENCE: THE BASIC PHENOMENA OF THE PHYSICAL WORLD 154

Skill 17.1: Properties of objects and materials (e.g., states of matter) 154

Skill 17.2: Light, heat, electricity, and magnetism (e.g., reflection, refraction, and absorption of light; conduction and production of heat)..... 156

Skill 17.3: Position and motion of objects (e.g., the position and motion of an object can be changed by exerting force; vibrating objects can produce sound) 158

COMPETENCY 18

EARTH AND SPACE SCIENCE: THE BASIC PHENOMENA OF EARTH AND SPACE 159

Skill 18.1: Objects in the sky, natural and human-made, and their properties, movements, and locations (e.g., Sun, Moon, stars, airplanes) 159

Skill 18.2: Changes in Earth and the sky (e.g., seasonal and daily weather patterns, erosion)..... 164

Skill 18.3: Properties of Earth materials (e.g., different physical and chemical properties of Earth materials, including solid rocks and soils, fossils, water, and gases)..... 167

COMPETENCY 19

LIFE SCIENCE: LIVING ORGANISMS AND LIFE SYSTEMS 170

Skill 19.1: Basic characteristics of organisms (e.g., their basic needs and behaviors; the structures that support growth, survival, and reproduction)..... 170

Skill 19.2: The life cycles of organism 177

Skill 19.3: The relationship between organisms and their environment..... 177

DOMAIN V

HEALTH AND PHYSICAL EDUCATION 181

COMPETENCY 20

HEALTH 183

Skill 20.1: Fundamental health concepts and skills 183

Skill 20.2: Health promotion, wellness, and disease prevention 183

Skill 20.3: Major risks to children’s health and safety and the prevention of those risks 187

Skill 20.4: The basic structure and function of human body systems 188

Skill 20.5: The influence of physical, emotional, and social factors on personal health (*e.g., family influences; pollution*) 195

Skill 20.6: The impact of health on learning and development in the content areas 195

COMPETENCY 21

PHYSICAL EDUCATION 196

Skill 21.1: Fundamental physical education concepts and skills 196

Skill 21.2: Motor skills and movement patterns, including knowledge of their typical developmental progression and activities that promote their development 200

Skill 21.3: Movement and body awareness concepts and principles (*e.g., flexibility, muscular strength*) 200

Skill 21.4: How to achieve and maintain an appropriate level of physical fitness 206

Skill 21.5: The ways in which physical activity provides opportunities for learning, enjoyment, challenge, self expression, and social interaction 206

Skill 21.6: The influence of physical, emotional, and social factors on physical fitness and activity level 207

Skill 21.7: The impact of physical activity and fitness on learning and development in the content areas 207

DOMAIN VI

CREATIVE AND PERFORMING ARTS 209

COMPETENCY 22

PURPOSES AND FUNCTIONS OF THE ARTS 211

Skill 22.1: How and why artworks are created, processes for responding to artworks, and the purposes of artworks 211

Skill 22.2: The artistic processes of creating, performing, and responding and their interrelationships 211

COMPETENCY 23

STRUCTURE AND PROCESSES OF ART	212
Skill 23.1: The basic elements, principles, and processes in visual art, music, dance, and theater	212
Skill 23.2: The components and elements of art (<i>e.g., color, line, texture, pitch, tempo, rhythm</i>)	216
Skill 23.3: Organizing principles of art (<i>e.g., repetition, contrast, balance, unity, movement, pattern</i>)	216

DOMAIN VII

UNDERSTANDING THE NATURE OF THE GROWTH, DEVELOPMENT, AND LEARNING OF YOUNG CHILDREN	217
--	-----

COMPETENCY 24

COGNITIVE DEVELOPMENT	219
Skill 24.1: Concepts of the physical world and of causal relationships and signing in all communication systems, such as art, music, and mathematics	219
Skill 24.2: Skill development in areas such as manipulative skills, symbol recognition, and logical reasoning	220

COMPETENCY 25

LANGUAGE DEVELOPMENT	222
Skill 25.1: Oral language development, including listening comprehension, speaking (<i>storytelling, bilingual skills</i>), developing vocabulary, and understanding the systems of language	222
Skill 25.2: Written language development, such as expressing ideas in writing, print awareness, and invented spelling	223

COMPETENCY 26

PHYSICAL DEVELOPMENT	224
Skill 26.1: Understanding typical and atypical growth and development	224
Skill 26.2: Fine and gross motor development	226
Skill 26.3: Symptoms of illness	229
Skill 26.4: Safety	233

COMPETENCY 27

PERSONAL/SOCIAL DEVELOPMENT	234
Skill 27.1: Understands concepts of social development (<i>e.g., self-concept, learning style, locus of control, temperament, stages of social behavior, gender role, sex, physical attractiveness, effects of discrimination, stereotypes, and aggression</i>)	234

DOMAIN VIII

RECOGNIZING FACTORS THAT INFLUENCE INDIVIDUAL GROWTH AND DEVELOPMENT 239

COMPETENCY 28

FACTORS AFFECTING GROWTH AND DEVELOPMENT 241

Skill 28.1: Physiological factors: effects of genetic and congenital maturational factors 241

Skill 28.2: Familial factors (*e.g. family relationships, parental attitudes, siblings, and birth order*) 244

Skill 28.3: Nutritional/hygienic factors: diet, exercise, sleep, and environmental conditions 244

Skill 28.4: Cultural factors: effects of the interaction of cultural values; roles of the primary transmitters of the culture (*family, schools, community, mass media*); **and effects of economic, political, and cultural influences, including regional, ethnic, and religious influences** 244

DOMAIN IX

RECOGNIZING APPLICATIONS OF DEVELOPMENTAL AND CURRICULUM THEORY 249

COMPETENCY 29

UNDERSTANDING DEVELOPMENTAL AND CURRICULUM THEORY 251

Skill 29.1: Understanding the contributions of major streams of developmental and learning theory to early childhood education practices, such as psychoanalytic, cognitive, social-learning, and behaviorist theories 251

Skill 29.2: Understanding major early childhood curriculum models and approaches, such as Bank Street, Bereiter/Engelmann, Froebel, Montessori, Kamii, Weikert, Head Start, Emergent Literacy, developmentally appropriate practice, play-based and integrated curriculums 255

DOMAIN X

PLANNING AND IMPLEMENTING CURRICULUM 259

COMPETENCY 30

PLANNING AND IMPLEMENTING CURRICULUM 261

Skill 30.1: Planning, selecting, and implementing appropriate curriculum experiences and instructional strategies (*e.g., whole language, language experience, and basal approaches; mathematics manipulatives; inquiry and discovery in science; physical/motor experiences; aesthetic and affective experiences; social experiences*) 261

Skill 30.2: Organizing and managing the physical learning environment: use of materials, equipment, indoor space, and outdoor space 266

Skill 30.3: Utilizing outside resources in curriculum planning and implementation: community and family 267

Skill 30.4: Managing interpersonal interactions in the classroom: helping children learn to manage their behavior, recognizing how teacher’s behavior and attitudes affect children’s learning and development 268

DOMAIN XI

EVALUATING AND REPORTING STUDENT PROGRESS AND THE EFFECTIVENESS OF INSTRUCTION 273

COMPETENCY 31

EVALUATING AND REPORTING STUDENT PROGRESS AND THE EFFECTIVENESS OF INSTRUCTION 275

Skill 31.1: Selection and use of formal and informal assessment instruments for evaluating developmental progress and effectiveness of curriculum experiences 275

Skill 31.2: Maintaining useful records of a child’s development and progress in learning 280

Skill 31.3: Using formal and informal assessment results in planning for a class and for individuals 281

Skill 31.4: Communicating effectively with parents about a child’s total developmental progress 281

DOMAIN XII

UNDERSTANDING PROFESSIONAL AND LEGAL RESPONSIBILITIES 283

COMPETENCY 32

UNDERSTANDING PROFESSIONAL AND LEGAL RESPONSIBILITIES 285

Skill 32.1: Maintaining effective interactions with other adults who function within the learning setting 285

Skill 32.2: Being cognizant of legal responsibilities and regulations that affect teaching in the early childhood setting 286

SAMPLE TEST

Sample Test 289

Answer Key 329