Competency 001  UNDERSTAND HUMAN GROWTH AND DEVELOPMENT AND HOW TO USE THIS UNDERSTANDING TO PROMOTE LEARNING AND DEVELOPMENT IN ALL DOMAINS

Skill 1.1  Identifying characteristics, processes, and progressions of typical and atypical cognitive, physical, motor, social, emotional, and language/communicative development

The teacher of students in early childhood should have a broad knowledge and understanding of the phases of development that typically occur during this stage of life. The teacher must also be aware of how receptive children are to specific methods of instruction and learning during each period of development. A significant premise in the study of child development holds that all domains of development (physical, social, and academic) are integrated. Development in each dimension is influenced by and influences the others. Equally important to the teacher's understanding of the process is the knowledge that developmental advances within the domains occur neither simultaneously nor parallel to one another, necessarily.
**Physical Development**

It is important for the teacher to be aware of the physical stages of development and how changes to the child’s physical attributes (which include internal developments, increased muscle capacity, improved coordination and other attributes as well as obvious growth) affect the child’s ability to learn. Factors determined by the physical stage of development include: the ability to sit and attend, the need for activity, the relationship between physical coordination and self-esteem, and the degree to which physical involvement in an activity (as opposed to being able to understand an abstract concept) affects learning and the child's sense of achievement.

By the time children reach school age there are certain physical activities they should be able to do. Careful observation of children when they first start school with regard to these activities should alert the teacher that there may be a problem with the child’s physical development. These include:

- Being able to ride a tricycle
- Throwing, catching and holding a ball
- Being able to dress oneself, but still needing help with zippers and buttons
- Being able to walk on tiptoe
- Being able to use scissors to cut paper
- Being active at play outdoors and in the classroom

In addition, children with physical disabilities are not able to move as quickly as other children of the same age.

**Cognitive (Academic) Development**

Children go through patterns of learning beginning with pre-operational thought processes and move to concrete operational thoughts. Eventually, they begin to acquire the intellectual ability to contemplate and solve problems independently, when they mature enough to manipulate objects symbolically. Students in early childhood can use symbols such as words and numbers to represent objects and relations, but they need concrete reference points. Successful acquisition of the skills taught in early childhood, through the fourth grade, will progressively prepare the student for more advanced problem solving and abstract thinking in the later grades. The content of curriculum for younger students must be relevant for their stage of development (accessible and comprised of acquirable skills), engaging, and meaningful to the students.
It is important for teachers of the early childhood grades to be aware of the warning signs of cognitive delay in children, although most of these are apparent before the children come to school. In order for a child to be diagnosed as having an impairment in cognitive development, there must be a deficiency in at least two of the following:

- Speech and communication
- Self-care
- Social and Interpersonal skills
- Functional academic skills for the grade level

**Social Development**

Children progress through a variety of social stages beginning with an awareness of self and self-concern. They soon develop an awareness of peers, but demonstrate a lack of concern for their presence. For a time, young children engage in “parallel” activities, playing alongside their peers without directly interacting with one another.

During the primary years, children develop an intense interest in peers. They establish productive, positive, social and working relationships with one another. This area of social growth will continue to increase in significance throughout the child’s academic career. The foundation for the students’ successful development in this area is established through the efforts of the classroom teacher to plan and develop positive peer group relationships and to provide opportunities and support for cooperative small group projects that not only develop cognitive ability, but promote peer interaction. The ability to work and relate effectively with peers contributes greatly to the child’s sense of competence. In order to develop this sense of competence, children need to be successful in acquiring the information base and social skill sets which promote cooperative effort to achieve academic and social objectives.
High expectations for student achievement, which are age-appropriate and focused, provide the foundation for a teacher's positive relationship with young students and are consistent with effective instructional strategies. It is equally important to determine what is appropriate for specific individuals in the classroom, and approach classroom groups and individual students with an understanding and respect for their emerging capabilities. Those who study childhood development recognize that young students grow and mature in common, recognizable patterns, but at different rates, which cannot be effectively accelerated. This can result in variance in the academic performance of different children in the same classroom. With the establishment of inclusion as a standard in the classroom, it is necessary for all teachers to understand that variation in development among the student population is another aspect of diversity within the classroom. This has implications for the ways in which instruction is planned and delivered and the ways in which students learn and are evaluated.

Children may exhibit behaviors that alert the teacher to a problem involving a delay in social development. Before children enter school, they may not be in the presence of children their own age for long periods of time and so these behaviors may not be noticed. Children who fight with the other children or hit them for no reason show signs of not having the proper social skills for the age or grade level. This may be the result of being the only child or one that is pampered at home. It can also be a warning sign that the child is emulating the behavior of the parents.

For more information on the identification of typical and atypical development in early childhood and intervention strategies:

www.Idao.ca/documents/LearningDisabilitiesandYoungChildren.pdf
Language Development

Learning approach
Early theories of language development were formulated from learning theory research. The assumption was that language development evolved from learning the rules of language structures and applying them through imitation and reinforcement. This approach also assumed that language, cognitive, and social developments were independent of each other. Thus, children were expected to learn language from patterning after adults who spoke and wrote Standard English. No allowance was made for communication through child jargon, idiomatic expressions, or grammatical and mechanical errors resulting from too strict adherence to the rules of inflection (childs instead of children) or conjugation (runned instead of ran). No association was made between physical and operational development and language mastery.

Linguistic approach
Studies spearheaded by Noam Chomsky in the 1950s formulated the theory that language ability is innate and develops through natural human maturation as environmental stimuli trigger acquisition of syntactical structures appropriate to each exposure level. The assumption of a hierarchy of syntax downplayed the significance of semantics. Because of the complexity of syntax and the relative speed with which children acquire language, linguists attributed language development to biological rather than cognitive or social influences.

Cognitive approach
Researchers in the 1970s proposed that language knowledge derives from both syntactic and semantic structures. Drawing on the studies of Piaget and other cognitive learning theorists, supporters of the cognitive approach maintained that children acquire knowledge of linguistic structures after they have acquired the cognitive structures necessary to process language. For example, joining words for specific meaning necessitates sensory motor intelligence. The child must be able to coordinate movement and recognize objects before being able to identify words that name the objects or word groups to describe the actions performed with those objects. Children must have developed the mental abilities for organizing concepts as well as concrete operations, predicting outcomes, and theorizing before they can assimilate and verbalize complex sentence structures, choose vocabulary for particular nuances of meaning, and examine semantic structures for tone and manipulative effect.

Socio-cognitive approach
Other theorists in the 1970s proposed that language development results from sociolinguistic competence. Language, cognitive, and social knowledge are interactive elements of total human development. Emphasis on verbal communication as the medium for language expression resulted in the inclusion of speech activities in most language arts curricula.
Unlike previous approaches, the socio-cognitive allowed that determining the appropriateness of language in given situations for specific listeners is as important as understanding semantic and syntactic structures. By engaging in conversation, children at all stages of development have opportunities to test their language skills, receive feedback, and make modifications. As a social activity, conversation is as structured by social order as grammar is structured by the rules of syntax. Conversation satisfies the learner’s need to be heard and understood and to influence others. Thus, his choices of vocabulary, tone, and content are dictated by his ability to assess the language knowledge of his listeners. He is constantly applying his cognitive skills to using language in a social interaction. If the capacity to acquire language is inborn, without an environment in which to practice language, a child would not pass beyond grunts and gestures as did primitive man.

Of course, the varying degrees of environmental stimuli to which children are exposed at all age levels create a slower or faster development of language. Some children are prepared to articulate concepts and recognize symbolism by the time they enter fifth grade because they have been exposed to challenging reading and conversations with well-spoken adults at home or in their social groups. Others are still trying to master the sight recognition skills and are not yet ready to combine words in complex patterns.

**Skill 1.2 Recognizing ways in which development in any domain (e.g., cognitive, social, language/communicative) may affect development and performance in other domains**

Child development does not occur in a vacuum. Each element of child development impacts the other elements. For example, as cognitive development progresses, social development often follows. The reason for this is that all areas of development are fairly inter-related. People laugh about how adolescents often develop slower in the physical domain than they do in the social or cognitive domain (e.g., they may think like teenagers, but they still look like children). However, the truth is that even in such cases, physical development is under progress—just not as evident on the surface. As children develop physically, they develop the dexterity to demonstrate cognitive development, such as writing something on a piece of paper (in this case, this is cognitive development that only can be demonstrated by physical development). Or, as they develop emotionally, they learn to be more sensitive to others and therefore enhance social development.
What does this mean for teachers? The concept of latent development is particularly important. While teachers may not see some aspects of development present in their students, other areas of development may give clues as to a child’s current or near-future capabilities. For example, as students’ linguistic development increases, observable ability may not be present (i.e., a student may know a word, but cannot quite use it yet). As the student develops emotionally and socially, the ability to use more advanced words and sentence structures develops because the student will have a greater need to communicate in an expressive way.

In general, by understanding that developmental domains are not exclusive, teachers can identify current needs of students better, and they can plan for future instructional activities meant to assist students as they develop into adults.

**Skill 1.3** Demonstrating knowledge of how specific factors may affect development and understanding that developmental variations among children may affect learning in given situations

Beginning teachers must be cognizant of the profound effect that they will have as an authority figure, instructor and behavior model for students in the early formative years. At this stage of life, children are not only continually developing physically, emotionally and intellectually, acquiring new skills in all of these areas. They are also beginning to retain basic concepts, modes of thinking and behavioral models, which will continue to develop and will serve them—for better or for worse—throughout life.

The influences on all aspects of a child’s development come from the home and family and the community, as well as the school. However, the most directed, purposeful and productive time in the average child’s day is the time spent in the classroom and the school environment, generally. This is why teachers plan, schedule, monitor and measure to such high standards. The adult into whom the child will develop is (to a considerable extent) the product of what the educational system provides. That is why—at various stages of the process—we incorporate instruction on life skills, independent thinking, social values and social interaction, at-risk behaviors, and many other non-traditional topics intended to equip our students to make appropriate choices and improve their lives, now and in the future.
For the beginning teacher, this process will often start with affirming the teacher's high expectations for the success of each student and the teacher's confidence in each student's ability to perform up to this expectation. Unfortunately, in some school systems, there are very high expectations placed on certain students and little expectation placed on others. Often, the result is predictable: you get exactly what you expect to get and you seldom get more out of a situation or person than you are willing to put in. A teacher is expected to provide the same standards of excellence in education for all students. This standard cannot be upheld or met unless the teacher has (and conveys) high expectations for all students.

Considerable research has been done, over several decades, regarding student performance. Time and again, a direct correlation has been demonstrated between the teacher's expectations for a particular student and that student's academic performance. This may be unintended and subtle, but the effects are manifest and measurable.

Another early issue for the beginning teacher to address is discipline. Appropriate discipline from authority will become acceptable to the child and certain values may be instilled which will promote the eventual development of self-discipline within the individual. While early childhood and elementary students are generally more easily controlled—often appearing better behaved and more responsive to authority—than older students, they still have a tendency to socialize and play just for the sake of play. This can quickly allow the classroom situation to deteriorate, replacing the learning environment with chaos. When the teacher is implementing a well-structured plan, with measurable milestones and specific objectives, it may be necessary to quickly identify and redirect conversation and activity that is not relevant or supportive of the instructional objectives. A teacher may allow younger students a greater degree of latitude, but their longitude needs to be restricted.

Allowing for the differing needs of younger students does not mean abandoning classroom discipline and organized instruction. At this level, students need the reassurance of structure, organization and discipline. If the appropriate attitudes and responses to structure and discipline are internalized at an early age, they will serve the students throughout their educational experience and provide a solid foundation upon which the individual can develop the self-discipline necessary in later life. The teacher who can instill these values in a young student will have earned the gratitude and respect of all the teachers who instruct this student in the future.
The time to implement organization and classroom discipline is not at a moment of crisis or chaos. This is an issue that will significantly affect the teacher's ability to teach and the student's ability to learn, day after day. A good deal of thought and preparation, on the part of the classroom teacher, should be devoted to this aspect of the educational experience. There are volumes of text available to the novice teacher, providing criteria and examples for structuring an organized, disciplined, classroom environment. Specific recommendations for discipline and organization in normal and in unusual classroom situations are available from experienced teachers in journals and on the Internet. Guidelines and structure may be made flexible to allow for certain contingencies, but they must be put into practice with specific limits provided. In addition, the students must be made fully aware of the structure, the guidelines, their responsibilities and the consequences of their actions should they fail to observe these guidelines.