UNIT 2 THE DYNAMICS OF LEARNING

Structure

2.1 Introduction
2.2 Objectives
2.3 The Developmental Processes
   2.3.1 Cognitive Development
   2.3.2 Moral Development
   2.3.3 Psychosocial Development
2.4 Enculturation and Acculturation
2.5 Curriculum Based Learning
2.6 Let Us Sum Up
2.7 Unit End Exercises
2.8 References and Suggested Readings

2.1 INTRODUCTION

If you reflect on your life you would find that over the years you have acquired mastery of different types of skills more or less in a continuous manner and improved in quality and quantity. This is in essence the dynamics of learning. Learning is always on the move from rudimentary to higher and from simple to complex. This is true for children as well. It is an ongoing experience for them as they go through different processes of growth and development. In this unit, you are going to learn about the different developmental processes central to the dynamics of child learning. To this effect, we examine Piaget’s cognitive theory of development and the four underlying processes of schema, assimilation, accommodation and equilibration. Also we discuss Piaget’s four stages of cognitive development; the sensorimotor stage, the preoperational stage, the concrete operations stage and the formal operations stage. We then discuss Lev Vygotsky’s sociocultural perspective in learning. Kohlberg’s theory of moral development is discussed to explain the value learning processes in the child. Erikson’s theory of psychosocial development is included to describe the psychological and social development of the child. You know that in children some learning takes place at the individual level and some at group level. We thus make use of the processes of enculturation, acculturation and curriculum based learning as these impact the child’s learning.

2.2 OBJECTIVES

After studying this unit, you should be able to:

- identify Piaget’s four cognitive concepts in your classroom practice;
- describe the features of Piaget’s four stages of cognitive development;
- discuss the shortcomings of Piaget’s stage theory;
- discuss the educational implications of Piaget’s cognitive theory in classroom practices;
- discuss Vygotsky’s sociocultural perspective in learning;
- identify the point of difference between Vygotsky’s and Piaget’s theory of cognitive development;
2.3 THE DEVELOPMENTAL PROCESSES

You know that development is a continuous process ensuing multiple changes. Development means growth, adaptation and change over lifetime. Physical growth happens to be the most visible indices in the beginning, but gradually children demonstrate the acquired language skills, social skills and cognitive abilities. In this section we will discuss various developmental processes.

2.3.1 Cognitive Development

Jean Piaget, a prominent Swiss psychologist has immensely contributed to the understanding of children's cognitive development. He observed children over a period of years, and noted that human behaviour is an act of adaptation to the physical environment.

Piaget's Cognitive Theory

Piaget used four processes of schema, assimilation, accommodation and equilibration to explain the how and why of cognitive development.

Schema

Piaget used the term schema (plural is schemata) to refer to the mental structures which help individuals to adapt to and organize their environment. He believed that the mental structures construct meaning of the new experience and facilitate one's cognitive adaptation to the new experience or environment. For example, if a child cuts his/her finger with a sharp object, a cognitive structure will be created to adapt to this new experience. This schema would be used to adapt to the environment, when the child is faced with a similar situation in future. At birth very few schemata exist but as the child grows older and encounters more experiences, more schemata are formed to organize the experience. Piaget suggested that the organization of the new experience into schemata occurs through the processes of assimilation and accommodation.

Assimilation

Assimilation is the process through which a child makes sense of experiences and perceptions by fitting them into the existing cognitive structures (schemata). A child who is familiar with cow on seeing a buffalo will adapt to the new experience by adding more information to the existing schemata of the four legged animal (cow). In the classroom, when the teachers introduce new concepts they try to facilitate the process of assimilation by linking these concepts with already existing knowledge (schemata). Gradually children learn to differentiate between experiences and the process of assimilation may not be operating any more.
Accommodation

When the process of assimilation is not working because the new experiences do not fit into any of the existing schemata, a new schema will have to be developed to adapt to the new experience. This process of creating a new schema is called accommodation. For example, if you are teaching about four seasons of the year to a class of students in Chennai, they may not have the schemata about winter season as they do not experience winter in Chennai. Therefore, the children will have to create a new schema to organize the new information. As the children go through varied experiences and encounter new stimuli they develop the ability to create numerous schemata that are more complex and increasingly different from each other.

Equilibration

The fourth process identified by Piaget is of equilibration. To Piaget assimilation and accommodation are the two critical processes in cognitive development, and equilibration does the balancing act between them. Think what will happen if a child continued to assimilate new information. The child would have schema containing many bits of information that will be difficult to discriminate. Similarly, if a child continued to accommodate, all new experiences and information would be seen as different and therefore no generalizability. Equilibration is the process of learning that occurs when the processes of assimilation and accommodation interact.

For example, in a math class after teaching the concept of area, the teacher shows a model of rectangle to the students and then changes it into the shape of a parallelogram. She then asks the students to identify which of the figures, rectangle or parallelogram, is larger in area. You will find that students may silently think about or discuss with each other and work out the answer. Piaget calls this a state of cognitive disequilibrium. When students come up with the answer that both the figures have similar dimensions and thus same area irrespective of the shape, they have equilibrated the concept of area. Piaget believed that when children are thrown into a state of cognitive disequilibrium they will attempt to remove the discrepancy between what is perceived and what is understood by assimilating new experiences into existing schemata or by creating new schemata to incorporate the new experience.

You may find it easy to understand if we sum up this phase of developmental learning in a seven step process that includes the thoughts and feelings the learner experiences.

![Table 2.1: Phase of Developmental Learning](image)

| 1) | Awareness of a moderate discrepancy arises in understanding the meaning of an event or idea. |
| 2) | A feeling of puzzlement ensues: curiosity, uneasiness, affective arousal. |
| 3) | More new information accumulates that doesn’t fit the prior understanding. |
| 4) | During periods of relaxed reflection, one tries to fit the new pieces of information into the old scheme; talking to oneself. |
| 5) | A new balance is reached. The new information moves from accommodation to assimilation. |
| 6) | After sufficient time the new information becomes “old” information and can be generalized to similar situations. |
| 7) | A new moderate discrepancy arises and the process continues. |

*Source: Sprinthall, A. (1990). p. 120.*
We have so far discussed Piaget’s theory of cognitive development. He used four cognitive processes of schema, assimilation, accommodation and equilibration to explain how an organism adapts to the environment. In the following section you will learn about the stages of cognitive development.

**Piaget’s Stages of Cognitive Development**

As discussed earlier Piaget observed children from birth to adolescence and maintained meticulous records of their thinking patterns. During his longitudinal research he found that children showed consistency in their thinking patterns within broad age ranges, characterized as stages. He observed that the stages were distinct and qualitatively different from each other. Based on his findings, he proposed four main stages of cognitive development.

<table>
<thead>
<tr>
<th>Table 2.2: Stages of Cognitive Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage</strong></td>
</tr>
<tr>
<td>1) Sensorimotor</td>
</tr>
<tr>
<td>2) Preoperational</td>
</tr>
<tr>
<td>3) Concrete operations</td>
</tr>
<tr>
<td>4) Formal operations</td>
</tr>
</tbody>
</table>

**The Sensorimotor Stage (0-2 Years)**

This is the earliest stage of cognitive development, in which the major cognitive activity of the infant is of interaction between her senses and the environment. At this stage the infant has only a few motor abilities like sucking, grasping etc. In the initial days the child may appear helpless to solve any of his/her problems, but a few months later with more development may start engaging himself/herself in purposeful activity. For example, in the initial days the child may have been unresponsive to a toy hanging above the crib, but a few months later may begin to kick and move with the purpose of moving the toy to enjoy the resulting visual scene created by the action. Gradually the child learns to relate the sensory experiences to the external objects and events. Piaget called this developmental process as object permanence as the infant’s understanding of objects and events expands beyond the immediate. In a way the infant begins to understand that objects continue to exist even after they disappeared from his/her view. You must have observed that while a seven or eight-month-old infant can search for his/her toy that is out of sight (often for a brief period), a five month old can not do. It is close to twelve months an infant is able to locate familiar objects that are hidden under a sofa or another child hiding behind a cupboard and is happy when the object is found. Unlike the seven month old infant who may look for an object for a brief period and give up on it soon, a twelve month old infant would persistently search for the object out of sight as he/she has developed object permanence. With the development of object permanence, the infant starts using symbols to represent objects without experiencing them through the senses. By the end of the sensorimotor period, children have fully evolved object permanence in place and are able to imagine where a hidden object could be located even if he/she has not seen where the object was placed. At the end of this period children develop simple problem-solving abilities. Earlier if the child could not reach for an object on the table he/she would give up on it after a few attempts. By two years, the child would try to use another object (a chair) to reach the object on the table.

We have discussed the sequence of cognitive development in children from birth to two years as proposed by Piaget. The recent research indicates that he underestimated the beginning of object permanence thought now to develop at about four months of age (Meltzoff, 1988). However, Piaget’s sequence of cognitive development in the first two years seem to be accurate.
The Preoperational Stage (2-7 Years)

Children's ability to form mental images to represent earlier experiences during the sensorimotor stage expands further in the preoperational stage. The child cannot yet fully manipulate these mental images. Piaget thus termed this stage, the preoperational stage.

Children make vast advances in language development during this period. Their vocabulary expands dramatically and they develop the ability to use grammatical structures although not concerned about language rules. At this stage language development is mostly through imitation. Children who have adults around to interact show significant difference in their language development. With advanced language development and imagination children engage in symbolic or pretend play during this period.

In the preoperational stage, the child's thinking is egocentric. Piaget said that children at this stage cannot see someone else's perspective. They think everyone views the world as they do. The child is central in everything he/she does or thinks. To Piaget child's egocentrism was due to the qualitative limitation in thinking during this period and not because of selfishness. By the end of this period the child becomes less egocentric. The preoperational child shows a tendency to concentrate on one aspect of an event, activity or object to the exclusion of others. Another characteristic of the preoperational child is his/her inability to reverse operations. For example a preoperational child would insist on having fruit juice/milk in a tall container as he/she thinks it contains more quantity even if you demonstrate that the short and broad container have the same quantity. This is because the preoperational child has not developed the concept of conservation. Another feature of preoperational thought, Piaget termed animism. Children during this period show tendency to attribute life to inanimate objects. You often see the preoperational child talking to a doll or feeding the doll. Such tendencies, Piaget believed, decreased by the end of this period as the child became more aware about his/her own self. Children in the preoperational stage are unable to generalize from what is happening around them. Preoperational characteristics decrease from age five to seven and they begin to show concrete operational thought.

The Concrete Operational Stage (7-11 Years)

This stage is characterized by the child's ability to think logically. They are now able to solve concrete problems. They don't have any difficulty in understanding that the liquid poured from a short fat glass into a tall glass can have the same amount. The child is able to distinguish reality from fantasy. The concrete operational child develops the understanding of reversibility. Their ability to reverse operations facilitates the ability to develop conservation skills. Children are now able to classify objects into categories other than shape and colour as they did in the preoperational stage. Another characteristic of this period is the child's ability to organize objects in ascending or descending order by size, volume or area, known as seriation. Table 2.3 shows some of the major developmental milestones of the concrete operational stage.

Table 2.3: Concrete Operational Milestones

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Becomes proficient in the art of persuasion</td>
<td>11 or 12 years</td>
</tr>
<tr>
<td>Understands play on words</td>
<td>8 years</td>
</tr>
<tr>
<td>Comprehends a metaphor</td>
<td>10 or 11 years</td>
</tr>
<tr>
<td>Begins to estimate accurately how much time is needed to study</td>
<td>8 or 9 years</td>
</tr>
<tr>
<td>Classifies according to categories and subcategories</td>
<td>8 years</td>
</tr>
<tr>
<td>Successfully plays board games that require turn-taking</td>
<td>8 years</td>
</tr>
</tbody>
</table>

The Formal Operational Stage (11-16 Years)

In the fourth stage of cognitive development, formal operations, the child is able to employ logical thoughts to solve abstract problems. This stage is characterized by the increased ability in reasoning. The formal operational child is able to formulate hypotheses and test them to solve a problem. When presented with a problem, the formal operational child will think of a combination of possibilities unlike the concrete operational child. During this period the child develops the ability to think about what he/she knows. They are able to retrieve information, use retrieved knowledge in combinations in new situations, exercise control over thought processes and monitor the thoughts. They also develop the ability to understand the thoughts of others.

Flavell (1985) termed it as metacognition. As adolescents develop understanding of the thoughts of others they realize that others point of view may differ from theirs. They now realize that reality is not always objective and there is subjective reality too. With the advent of metathoughts, adolescents develop the ability to place their thoughts in perspective in relation to the thoughts of others.

Shortcomings of Piaget’s Theory

- Piaget believed that object permanence behaviour started developing about seven months of age. But later research shows object permanence behaviour begins about four months of age (Melzoff, 1988).
- Piaget probably underestimated what children can do during the preoperational period. Children in the preoperational stage can be trained to decenter (think of objects and events independent of their immediate experience) and to be less egocentric (Bee, 1992).
- Piaget overlooked the influence of sociocultural factors in cognitive development.
- Later research shows that the upper age limit suggested by Piaget for concrete operational stage extends beyond eleven years. More than 75% of children remain concrete thinkers at ages twelve, thirteen and fourteen. About 40% of twelfth graders are primarily concrete thinkers (Shayer, 1978).
- Another criticism is that the end point of cognitive development is too limited. Arline (1986) has explored the possibility of a fifth stage of cognitive development. Piaget’s description of formal operational stage is limited to problem solving. Arline suggested a stage beyond formal operational characterized by the ability to discover new problems, new solutions and new knowledge. Piagetian theory does not address the cognitive development of exceptionally talented individuals (Sternberg, 1985).

Check Your Progress 1

Note: Write your answers in the space given below.

1) Briefly explain the four cognitive processes in Piaget’s cognitive theory of development.

..................................................................................................................
..................................................................................................................
..................................................................................................................
..................................................................................................................

2) Describe the features of Piaget’s four stages of cognitive development.

..................................................................................................................
..................................................................................................................
..................................................................................................................
..................................................................................................................
Vygotsky’s Theory of Cognitive Development

Piaget described cognitive development through different stages based on the internal development of the child. Infact one of the criticisms of Piaget’s theory is that he overlooked the importance of sociocultural factors in cognitive development. Vygotsky provided a sociocultural perspective to cognitive development. He attempted to establish the relationship between the child’s development and the sociocultural context in which the child was situated. His theory of child development focussed on the relationship between “the line of natural development which is closely bound up with the processes of general organic growth and the maturation of the child[and]... the line of cultural improvement of the psychological functions, the working out of new methods of reasoning, the mastering of the cultural methods of behaviour” (Vygotsky, 1994, p. 57).

While Piaget described child’s cognitive development in stages, Vygotsky centred his theory of child development on times of crisis in a child’s life which he termed critical periods. He identified the following developmental junctures of rapid, profound transformation in mental and social functioning of the child.

- When the child begins to walk
- When the child begins to talk
- When the child starts school
- When the child begins to use conceptual thinking
- When the child gains self-awareness during adolescence

He examined the critical periods from the point of view of children’s meaning making processes and the development of their social relations. He believed that the changes that happen during the critical periods are so profound that they often lead to crises for the child. The critical times characterized by “abrupt and major shifts and displacements, changes, and discontinuities in the child’s personality are concentrated in a relatively short time” in which period “the child changes completely in the basic traits of his personality” (Vygotsky, 1998, p. 191).

The onset, duration and impact of critical periods may vary in different children but all children are affected by them. During each critical period new mental structures like language, verbal thinking and conceptual thinking are formed that result in the transition from one age level to the other and determine the character of the next level of development. These mental formations change “in the transition from one stage to another, and the whole structure of the age is reconstructed. Each age has a unique and singular structure specific to it” (1998, p. 197). The new structures formed during the critical periods “basically determine the consciousness of the child, his relation to the environment, his internal and external life, the whole course of his development during the given period” (1998, p. 190). The new mental formations propel “the reconstruction of the whole personality on a new base” (1998, p. 197).

A core aspect of Vygotsky’s theoretical framework is his analysis of meaning and the ways it develops in human social interaction. Vygotsky (1997) said, “Meaning is not the sum of all the psychological operations which stand behind the word. Meaning is something more specific. It is the internal structure of the sign operation. It is what is lying between the thought and the word. Meaning is not equal to the word, nor equal to the thought. This disparity, is revealed by the fact that their lines of development do not coincide” (p. 133). He studied infants to analyze meaning-making. Children develop a new formation – autonomous speech- near the end of their first year. He believed that the new formation of autonomous speech is the beginning of a new relationship between speech and thinking which is central to the understanding of all other changes. Vygotsky sought unity of speech and thinking to describe his approach to verbal thinking.
He emphasized, "Since all meaning of a word is a generalization, it is a product of the intellectual activity of the child. The meaning of the word is a unity of speech and thinking that cannot be broken down further" (1998, p. 294). When children begin to make meaning through social interaction it is explanatory of the sociocultural situations of development.

The interdependence of the individual's internal processes and the external social processes in learning and development is the main focus of Vygotsky's theoretical framework. Child's social situations of development influence qualitatively their perception, experience, appropriation, internalization understanding and memory of interaction in and with their environment. Vygotsky considered this interdependence "as a process that is characterized by a unity of material and mental aspects, a unity of the social and the personal" (1998, p. 190). He emphasized the relation between the social and the personal "a completely original, exclusive, single, and unique relation, specific to the given age, between the child and reality, mainly the social reality that surrounds him. We call this relation the social situation of development at the given age" (1998, p. 198). The meaning constructing activity of the child is situated in the social processes and not isolated from it. Vygotsky argued that "the child is a part of the social situation, and the relation of the child to the environment and the environment to the child occurs through the experience and activity of the child himself; the forces of the environment acquire a controlling significance because the child experiences them" (Vygotsky, 1998, p. 294). Each time children reconstruct their conscious personality specific to the given age, Vygotsky argued, they do so within their social existence meaning they are influenced by the social situation of development. The reconstruction process brings in a new relation between the child's consciousness and his/her social existence "the child, having changed the structure of his personality, is already a different child whose social existence can not but differ in a substantial way from the existence of the child of an earlier age (1998, p. 199). This means the meaning-making process of the child goes through considerable changes when he/she passes through the critical periods "the essence of every crisis is a reconstruction of the internal experience, a reconstruction that is rooted in the change of the basic factor that determines the relation of the child to the environment, specifically, in the change in needs and motives that control the behaviour of the child" (1998, p. 296). It is important for teachers and parents to understand that the child's change in needs and motives reconstructs the internal experiences. When internal experiences are altered, the child's relationship to the social environment also changes. The effect of the environment on the child at various ages, one, three, seven or twelve, is completely different from the other. Vygotsky used a Russian term perezhivanie, to explain how children make meaning of their social existence. This term appeared in his article "The Problem of the Environment"(1994). The translators of this article explained perezhivanie; "The Russian term [perezhivanie] serves to express the idea that one and the same objective situation may be interpreted, perceived, experienced or lived through by different children in different ways" (Vygotsky 1994, p. 354).

Vygotsky believed that every experience of the child, since birth, is socially mediated. This social mediation shapes the perception, memory, appropriation, emotional experiences and internalization of the child. What characterizes the meaning making process through social interaction is "not the situation in itself taken in its absolute indicators, but how the child experiences the situation" (1998, p. 294).

Another contribution of Vygotsky to the theory of child development is his concept of the zone of proximal development. As discussed above children passing through various critical periods reconstruct their conscious personality within their social existence. Each critical period causes new mental formations. The meaning making process of the child changes from the earlier period. Vygotsky believed that children were capable of solving problems independently at given ages. He termed this level of ability as the zone of actual development. It is important that children are given opportunity to learn so that they reach the level of zone of proximal development. The
support given to a child in learning during the early stages is crucial for the cognitive development. As they grow older, children develop capabilities to guide their learning process, and thus need less support.

Language development begins in children in the late period of sensorimotor stage. Vygotsky viewed language as an important mediator between learning and development. There are different theories that explain how language is acquired. Are humans genetically programmed to learn language(s)? Nativist theorists like Noam Chomsky and Eric Lenneberg argue that children have innate, language-specific abilities that facilitate and constrain language learning. We are familiar with children imitating adults in various aspects of life. Social learning theorists suggest that language learning happens through observation and imitation. Linguists may differ in their views regarding how children acquire language but do not dispute the fact that language plays an important role in development. While learning does not always happen in school or in other formal set up (because one can learn by observation, imitation, experimentation etc) it is true that language ability promotes learning. Children are able to solve problems independently. But if they have to reach the zone of proximal development they need to understand the spoken language and the vocabulary. For later development without assistance, children would also need to understand the written language. School as an agency of learning provides organized learning experiences. Language plays a key role in the child's development in organized areas of knowledge.

Check Your Progress 2

Note: Write your answers in the space given below.

1) Point out any three key features of Vygotsky's cognitive theory.

..................................................................................................................
..................................................................................................................
..................................................................................................................

2) What is the point of difference between Piaget's and Vygotsky's theory of cognitive development?

..................................................................................................................
..................................................................................................................
..................................................................................................................

2.3.2 Moral Development

Some educators believed that it was important to impart moral education to children. Many schools in India include moral education in the school curriculum although it was not a component of the prescribed national curriculum framework. Much of the moral education syllabus included stories from different religions, folk and contemporary stories with morals. Whatever the content of the curriculum, the children were expected to imbibe good morals. Moral education is also referred to as character education. Of late, the term value education has replaced the term moral education in academic parlance. There is much debate going on about what is value education, whether and why value education should be part of the school curriculum. In this section, we will discuss different theories of moral/value development in children.

We have earlier discussed Piaget's theory of cognitive development. He also proposed a theory of moral development in children. Like his theory of cognitive development, Piaget described the theory of moral development in stages. He believed that till the
age of five, children did not understand the concept of rules, therefore they had no idea of morality. He termed this stage as premoral judgement. According to his cognitive development theory, children in the sensorimotor stage and early preoperational stage are incapable of complex mental operations. In these stages they have a very poor concept of other's mind and do not have much sense of morality.

The late preoperational stage is characterized by children’s understanding of the concept of rules. Piaget argued that, from age five to nine, children develop external morality or moral realism. At this stage of moral development children see rules as absolute. A child in the moral realism stage evaluates wrongdoing in terms of its consequences, not the intentions of the wrongdoer. Consider the example of a nine year old girl who locked her three year old sister in the bathroom because the kid sister poured paint over her drawings. When the mother reasoned with the nine year old (moral realist child) that her kid sister’s intention was not to ruin her painting, the older child said, nevertheless, she ruined my painting; therefore, she should be punished. The moral realist child's judgement is based on consequences of the action. This stage of moral development is characterized by the fact that children view rules as inflexible and not open to negotiation.

In the late concrete operational stage children shift to autonomous reality or morality of cooperation. This is the stage of moral relativity. With this development, children recognize that rules are flexible and not fixed. They understand that rules are developed by mutual consent and cooperation and can be changed. Children begin to develop internal morality. Bad behaviour is now judged by intentions rather than consequences, therefore, punishment is not considered automatic. Moral relativity stage corresponds to the concrete and formal operational stages of cognitive development during which children are able to carry out complex mental operations starting with concrete to abstract concepts.

Piaget’s theory of moral development is criticized for different reasons. One criticism is about his methods of research. Another criticism is that Piaget’s theory is based on moral universals which in fact may be culture-specific. Therefore its applicability to children from other cultures may be limited. Evolutionary psychologists hold the view that sense of morality is a cognitive adaptation resulted by natural selection, therefore, innate. However, Kohlberg was greatly influenced by Piaget’s theory of moral development.

**Kohlberg’s Stages of Moral Development**

Lawrence Kohlberg conducted a series of studies with children and adults. His findings suggested that moral development happens in a specific sequence of stages which is not culture specific. He identified six stages of moral development within three levels. There are two specific stages in each level. Moral development in stages indicate that each stage is qualitatively different from the previous one, more comprehensive and correspond to a particular age group.

**Level 1: Preconventional Morality**

This level consists of two stages:

- Punishment-obedience
- Market exchange

Stage 1 reasoning is that if you are caught doing a bad act you should be punished. If you are not caught it is okay. In stage 1, the attempt is to avoid punishment by a superior power. The stage II, market exchange, behaviour is based on satisfying one’s personal needs. For example, if you are caught jumping the red light at the traffic signal, the stage II behaviour would be to bribe the traffic police. The individual reasons that it is okay as long as one can get away with it.
Level 2: Conventional Morality

The two stages of level 2 are:

- Interpersonal harmony and
- Law and order

At the conventional morality level, the individual makes moral decisions by considering social appropriateness. Moral behaviour of the individual is aimed at pleasing the socially significant others and therefore in conformity with the social order. In this stage, moral judgments are guided by how others view the situation and feel about it. However, this stage poses conflicting situations to the individual as it is difficult to sort out the feelings of all those involved. With further development, the individual moves from the other-oriented moral behaviour to a more generalized orientation. The individual in stage 4 looks to codified laws, rules and regulations for making moral decisions. You may well recall a report in the media that a mob of about two hundred women lynched a notorious criminal, who grievously harassed them for several years, to death in a court premise in Maharashtra. In this case, the moral functioning of the mob of women at the time of committing the murder, did not operate from stage 4. A person at stage 4 will adhere to the law rather than following the mob to meet out vigilante justice.

Level 3: Post Conventional Morality

This is the highest level of moral development in Kohlberg's model. The two stages at this level are:

- Social contract and
- Universal principles.

Kohlberg suggests that a person at the highest level of moral development acts according to social contract or universal principles. At the social contract stage, the individual considers laws and rules as mutually agreed upon, a social contract based on principles of justice, liberty, freedom, equal opportunity that stand for common good. Finding solutions for moral dilemmas is not easy at stage 5. Let us take the earlier example of a mob of women killing the criminal. In stage 5, some would take the view that the women were denied justice by the system (delayed justice is denied justice), therefore, their action is morally justified. Others in stage 5 would take the view that till the accused is proved wrong he is innocent, therefore, the action of the women is morally wrong. At this level of moral reasoning abstract thinking is very important. In stage 6 moral reasoning is not necessarily based on written forms of laws but based on universal, abstract principles of justice and equality. At this highest level of moral development the individual make decisions based on internalized ethics.

Table 2.4: Kohlberg's Stages of Moral Development

<table>
<thead>
<tr>
<th>Level and Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1: Preconventional Reasoning</td>
<td>The ethics of egocentricity. Typical of children up to about age ten. Called preconventional because young children don't really comprehend the rules set down by others. The consequences of the act determine if it's good or bad.</td>
</tr>
<tr>
<td>Stage 1: Punishment-Obdience</td>
<td>The ethics of &quot;What's in it for me?</td>
</tr>
<tr>
<td>Stage 2: Market Exchange</td>
<td>Obeying rules and exchanging favors are judged in terms of benefit to the person.</td>
</tr>
<tr>
<td>Level and Stage</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Level 2: Conventional Ethics</td>
<td>The ethics of others. Typical often to twenty year olds. The name comes from conformity to the rules and conventions of society.</td>
</tr>
<tr>
<td>Stage 3: Interpersonal Harmony</td>
<td>Sometimes called “Nice girl/good boy”. Ethical decisions are based on what please, helps, or is approved by others.</td>
</tr>
<tr>
<td>Stage 4: Law and Order</td>
<td>The ethics of order. Right is doing one’s duty, obeying the law, and maintaining an orderly society.</td>
</tr>
<tr>
<td>Level 4: Postconventional Ethics</td>
<td>The ethics of principle. Rarely reached before age twenty and only by a small segment of the population. Focuses on the principles underlying society’s rules.</td>
</tr>
<tr>
<td>Stage 5: Social Contract</td>
<td>Rules are based on principles of justice and common good and are mutually agreed upon by members of society.</td>
</tr>
<tr>
<td>Stage 6: Universal Principles</td>
<td>Rarely encountered in life. Ethics determined by individual’s conscience guided by the abstract principles of justice and equality.</td>
</tr>
</tbody>
</table>


2.3.3 Psychosocial Development

You are aware of the crucial role of sociocultural environment of an individual in his/her psychological development. In this section, we will discuss Erikson’s theory of psychosocial development. His theory describes personality development in eight stages. He also called these eight stages as critical periods of life. Each stage is characterized by a psychological crisis. As the individual attempts to resolve these crises, a healthy personality evolves. Each time a crisis is resolved it adds a new dimension to the personality of the individual. The stages are in sequence and if a crisis remains unresolved in one particular stage it becomes difficult to solve a similar crisis at a later stage. Personality development depends on the person’s ability to interact with the environment and resolve the crisis. Each time the crisis is resolved or unresolved, leaves a lasting impact on the person’s self-concept. Let us now discuss the different stages.

Stage 1: Trust versus mistrust (birth - 2 years)

The physical and emotional care and warmth given to a new born baby develops in him/her a sense of trust or mistrust. If the infant experiences a predictable care behaviour he/she develops a sense of trust towards the caregiver and the immediate surroundings. If the care behaviour is not predictable and dependable the infant develops a sense of mistrust. Children whose dependency needs in early infancy are not met show general mistrust towards others (teachers, peer group) in later stages of life. On the other hand children who have developed a sense of trust generalize it to new situations in life.

Stage 2: Autonomy versus shame and doubt (2-3 years)

During this period the child does not depend on the caregiver for physical movement. The child is able to crawl, sit, walk and run and experiences personal autonomy. The child likes to explore the surrounding by himself/herself. Yet complete freedom is not
Learning: Concept and Process

allowed as it may be unsafe for the child. Therefore, both freedom and restraint are in play during this period. The feeling of independence is the positive aspect of this stage but there can be negative emotional development too. For example, the child likes to exercise his/her independence by exploring the house, drawing out objects and throwing them away. If the child is restrained or punished harshly, he/she may go through experiences of personal shame. On the other hand, if the caregiver overindulges the child, it may result in a self-indulgent personality. There is a tussle between the child’s sense of autonomy and sense of self control at this stage. If children are punished harshly for exploring the house or given harsh toilet training or over indulged during this period, Erikson indicated that such experiences led to personal shame and doubt and resulted in impaired sense of self control. Therefore caregivers and parents need to organize and structure the environment of the child for developing a sense of autonomy and self control.

Stage 3: Initiative versus guilt (3-6 years)

This period is marked by the child’s increased desire to explore new environment and investigate new challenges. Erikson called this the development of a sense of initiative. During this period children get into tasks of which parents do not approve. They become very inquisitive about their surroundings and ask many questions. They would want to help you with your work. Erikson believed that if the child is discouraged from taking up the initiative, the child would develop a sense of guilt about his/her tendency to explore and investigate. Children in this age group are expected to take up the new challenges like going to school, learning to read and write and such other activities. Therefore, parents and caregivers should encourage the initiative taking behaviour of the child as it is critical for the child’s future development.

Stage 4: Industry versus inferiority (6-12 years)

Erikson believed, during this period, children attempted to achieve mastery in whatever they do. He termed this a sense of competence or industry. As elementary students, children learn to read, write and compute. They now start using these skills outside school activities like reading a comic book. They now spend more time with others away from home. They get into many activities like riding, playing hide and seek, cricket etc. In this stage of development children want to succeed in what they do. Therefore, the term industry. If children are not encouraged to develop a sense of industry during this stage, Erikson believed that they would instead develop a sense of inferiority and feel about themselves as failures in whatever they do. It is important that children get appreciation and recognition for what they do from parents and teachers. In fact recent research has shown that peer group rejection is carried over from elementary to high school and affect academic achievement and lead to adjustment problems in later life.

Stage 5: Identity versus role confusion (13-18 years)

This is the period of adolescence. In search of identity, they want to find answer to the question “Who am I?” At the cognitive level adolescents develop a different way of understanding and thinking. Physically they go through several changes. They are confused about their identity and role in the society. They experiment with new ideas and relationships and they are not sure about their attitudes, beliefs and values. Erikson thought that adolescents are in Psychosocial moratorium, a period of delay that is granted to someone who is not ready to meet obligations. As adolescents experiment with different identities they may fail or face difficulties. Adolescents who are surrounded by caring adults get protection during such emotional crisis. Since they search for identity they often imitate people whom they admire. They would like to dress and behave like their hero/heroine. Having not sorted out who he/she is, the adolescent finds it difficult to make a career choice. Erikson argued that those who leave adolescence with these issues sorted out develop a sense of identity.
James Marcia's (1980) identity status theory described the four primary ways in which adolescents resolve the crisis of identity.

**Identity diffusion**
A situation in which the adolescent has not made any firm commitments to any ideology, occupation or interpersonal relationship and is not currently thinking about such commitments.

Adolescents in the status of identity diffusion tend to repress the issue of resolving their identity, because they remained in a state of denial that they had to make such an important decision. In this status, some adolescents develop a negative identity that is opposite to the values and culture they were brought up with. There is also a chance that adolescents with negative identity may enter into antisocial activities and crime.

**Identity foreclosure**
In this status the adolescent attempts to resolve the identity crisis by accepting the role authority figures and friends choose for him/her. Here, the teen is trying to avoid autonomous choice. The best example of this status is when adolescents choose the profession of their parents without examining the consequences of their choice.

**Identity moratorium**
This status is when the adolescent considers alternative choices and experiences different roles, but final decisions are not made. Some adolescents use the moratorium status as an excuse to avoid resolving the identity crisis while others use it in a healthy way to examine options.

**Identity achievement**
In this status, after thoughtfully considering different options, the adolescent develops a sense of commitment to life choices. Achieving this status is not easy for the teen as Marcia found that it contained elements of personal crisis, confrontation and thoughtful decision making.

Erikson's last three psychosocial stages are beyond the usual school-going age group. In the sixth stage, **intimacy versus isolation**, the major crisis is the development of a true and intimate relationship. Erikson thought that those who failed to experience this intimacy will develop a sense of isolation and tend to avoid relationships and make commitments. In stage seven, **generativity versus stagnation**, individuals in middle age develop a sense of generativity, which he defined as creativity or productivity, otherwise they experience stagnation. In the last stage of psychosocial development, **integrity versus despair**, those who have adapted to the ups and downs of life develop a sense of satisfaction and acceptance. Healthy resolutions in early stages of crisis develop a sense of integrity and unhealthy resolutions lead to despair.

---

**Check Your Progress 3**

**Note**: Write your answers in the space given below.

1) Mention the key developmental features of Kohlberg's three levels of moral development.

..................................................................................................................
..................................................................................................................
..................................................................................................................

2) Briefly describe the first six stages of Erikson's theory of psychosocial development.

..................................................................................................................
..................................................................................................................
..................................................................................................................
..................................................................................................................
In the above discussion we have examined cognitive development, moral development and psychosocial development, the developmental processes that determine learning. In the next section we will discuss learning through enculturation and acculturation.

### 2.4 ENCULTURATION AND ACCULTURATION

India has very rich and diversified sociocultural life. We speak different languages and come from different cultural backgrounds. If you have travelled beyond your sociocultural milieu, you would have noticed the differences between you and people from other sociocultural set up. This difference is not the physical difference, but the way you get socialized within the family and community. The differences are more noticed when you first move out of your place and live in a new sociocultural set up. You may find differences in the way people greet each other, the way one interacts with elders or women, their actions/behaviour. Sometimes these differences come as cultural shock. You realize that while members of your community behave in a particular fashion in a particular situation, members of other community behave differently in similar situations. Why do members of same community show similar behaviour? Why do people from different cultures exhibit different behaviours in similar situations? These realities underline the need of understanding the concepts of enculturation and acculturation.

**Enculturation**

Each society has certain accepted norms and values, which it expects individuals living in it to follow in order to become its accepted members. Children are taught to conform to these norms and values. The societal framework establishes the contours and boundaries specifying what is and is not acceptable. Enculturation is this very process of learning used in an established culture for teaching a member the expected ways of life. It is the process of inducting a child into the ways of the society of birth. Enculturation is a lifelong process through which the child learns by observing, imitating and communicating with others in the society. Enculturation can take place consciously or unconsciously. When children learn the societal ways by observing and imitating others, it is the process of enculturation at conscious level. Enculturation occurs unconsciously when child goes through events in a culture. Another way of enculturation is through direct teaching. Parents enculturate children through direct teaching when they prescribe do’s and don’ts to them. Children are taught to speak appropriately, use appropriate words, gesture etc.

You will find that habits, prejudices and attitudes are culturally learned group behaviour which change during the enculturation and acculturation processes. What is acculturation process? Is it different from enculturation? You will learn later. Let us discuss first what are habits, prejudices and attitudes.

As you know, when you begin a driving/riding lesson it is difficult to coordinate various instructions, but slowly you develop the competency to manipulate different devices (clutch, gear, brake etc) with ease. Earlier if you made conscious effort to slow down on approaching a traffic signal, later it became a habit. Before crossing a road, by habit you look on both sides, first to your right side then left. Looking on either side of a road before crossing it has now become an involuntary action unlike when done earlier. You make all the appropriate turns to your office/home without being consciously aware of it. Habit is thus an acquired behaviour pattern regularly followed till it becomes involuntary.

In the above paragraph, it was mentioned that habit is a culturally learned group behaviour. But the examples of habits given so far are individual learning. Let us examine a few habits that are part of group learning/behaviour. The customary practices of saying namaste or shaking hands as symbols of greeting are culturally acquired group behaviour. Often, addiction to substance is group behaviour. Smoking is an example. Mostly one is introduced to smoking by the peer group even if it is disapproved.
at home/school. Then there are some societies where smoking and consuming alcohol are accepted ways of life. Children growing up in these societies are introduced to such group behaviour early in life and develop addiction to smoking/alcohol. So, habit is a recurrent, often unconscious pattern of behaviour that is acquired through frequent repetition as a result of individual/group learning.

Children learn many stereotypes in their social environment. They learn stereotypes from media, peers, parents, and literature. Such learning is not tested but considered as fact and accepted. In the face of certain situations, they show behaviour based on their stereotyped learning. They continue to hold prejudices in later life as well. Stereotype behaviour is based on shared sociocultural beliefs. Psychologist, Gordon Allport (1954) defined prejudice in “The Nature of Prejudice”: prejudice is an antipathy based on faulty and inflexible generalization. It may be felt or expressed. It may be directed toward a group or an individual of that group. Prejudices about individuals or groups are usually developed on the bases of perceived differences of one or more characteristics or traits. These differences may be physical, sexual, social, national or religious, or may pertain to particular language, accent, social status or age. Once persons have identified themselves as belonging to one group (the in-group) and others as belonging to another group (the out-group), regardless of the original reasons for this social categorization, they expect to find intergroup differences and will go far enough to create them if necessary.

Attitudes are positive or negative views or a frame of mind in favour of or opposed to a person, behaviour, policy, belief, institution etc. It is a learned predisposition which makes people react in a consistently favourable or unfavourable fashion toward a particular target. In some society women are considered inferior to men in status. A person (man/woman) having such a predisposition will react negatively to the proposal of equal rights for women. In societies where marriages are arranged, finding a partner by one’s own choice is looked down. People having such predisposition will hold a negative attitude towards marriages not arranged by parents. Therefore, you can say that attitude is a way of thinking, behaving or feeling that shows one’s predisposition. With the development of new learning and belief systems some people challenge their earlier learning and review their behaviour.

**Acculturation**

The term *acculturation* is used in anthropology for more than a century. Acculturation means the learning of the ideas, values, conventions, and behaviour that characterize a social group. Acculturation is also used to describe the outcome of contact between two or more different cultures; a new composite culture emerges, in which some existing cultural features are combined, some are lost, and new features are generated. Usually one culture is dominant as in the case of colonization (Source: The American Heritage New Dictionary of Cultural Literacy, 2005, 3rd ed. Houghton Mifflin Company). In the process of acculturation the attitude and/or behaviour of people from one culture are modified. Acculturation implies a mental influence in which elements of two cultures mingle and merge (Encyclopedia of public health, 2002, the Gale group). Acculturation is the process of assimilating new ideas into an existing cognitive structure (WordNet 1.7.1, 2001, Princeton University). Acculturation is the process of change in artifacts, customs, and beliefs that result from the contact of societies with different cultural traditions (encyclopedia Britannica).

One familiar example of acculturation you would notice is the pervasive presence of English language in the sociocultural life of many Indians which is a result of British colonization of India and the forced introduction of English language in Indian schools. In acculturation both adoption and adaptation of the cultures occur. For example, the English spoken in India is the Indian version of English rather than the queen’s English, similarly, the Oxford Dictionary includes now many Indian words like sahib, memsahib and curry.
2.5 CURRICULUM BASED LEARNING

For most people the concept of learning is associated with the term school. Does that mean learning takes place only in school? By now you are aware that learning takes place in varied contexts including school. As an agency of learning, school plays a significant role in a child's development. Learning in school is structured and organized. We call it curriculum based learning. Curriculum is planned in sequence to develop knowledge and skills. In a sense you can say school based learning is formal learning as children are provided learning experiences in different areas of knowledge based on a predecided curriculum. According to Stenhouse (1975) curriculum consists of knowledge, techniques, skills and values that are considered relatively more desirable for children to learn. Curriculum based learning in school is not only about intellectual development but also about emotional, social and physical development of children. Each school is a miniature society and a subculture of its own. Therefore children go through the process of psychocultural learning characteristic of the school. The psychocultural learning is not explicitly stated in the curriculum, but is often referred to as the hidden curriculum. Instruction is a key aspect of curriculum based learning which means children are taken through organized, structured and guided learning experiences. School curriculum provides individual as well as group learning. You will learn more about curriculum based learning in Unit 15.

2.6 LET US SUM UP

Children pass through different developmental processes in life. We have discussed here these developmental processes with a focus on learning. Piaget argued that humans organize their environment to adapt to that environment. He explained adaptation having four processes: schema, accommodation, assimilation and equilibration. Schema is the mental structure by which individuals adapt to and organize their environment. Assimilation is the process through which a child makes sense of experiences and perceptions by fitting them into the existing cognitive structures. Accommodation is the process of creating a new schema in the absence of existing cognitive structures for assimilation when encountered with a new experience. Equilibration is the balancing act between assimilation and accommodation. When a state of disequilibrium emerges children would attempt to sort out the discrepancy between the perceived and the understood either by assimilating or by creating new schemata. Piaget described cognitive development of children in four stages. The sensorimotor stage extends from birth to two years. In this period children move from the stage of limited motor abilities like sucking, grasping etc to the stage of object permanence. By the end of this period their cognitive development extends to simple problem solving activities. In the preoperational stage, from two to seven years, children make vast advances in language development. Initially the child's thinking is ego centric in nature and can not see others perspective. The key features of this stage are the child's tendency to concentrate on one aspect of his/her activities, inability to reverse operations, tendency to attribute life to inanimate objects and inability to generalize from events around him/her. The third stage, concrete operational stage (7-11 years), is characterized by the child's ability to think logically. They are able to solve concrete problems and understand the concept of reversibility. They can clarify objects into categories and organize objects in ascending and descending order. In the fourth stage of formal operational stage (4-16 years), children are able to use logical thought to solve abstract problems. They are able to think of solving a problem in different ways. They also develop the ability to understand the thoughts of others. Vygotsky's view of cognitive development offered a sociocultural perspective. His theory of child development is centred around the critical periods in a child's life. He identified five critical periods in a child's life: when the child begin to walk, when the child begin to talk, when the child starts school, when the child begins to use conceptual thinking and when the child gains self-awareness during adolescence. Vygotsky focussed on
children's meaning making processes and the development of their social relations. The interdependence of the individual’s internal processes and the external social processes in learning and development is the main focus of Vygotsky's theoretical framework. He emphasized that the social situations of development influence qualitatively the child's experiences. The meaning making processes of child go through changes when he/she passed through different critical periods. Vygotsky considered every experience of the child as socially mediated. Another important concept of his cognitive theory is the zone of proximal development which indicates a child’s ability to solve problems, with help, beyond his/her actual development. Moral development is another developmental process. Piaget discussed different stages of moral development in children. To him, in the premoral judgment stage children do not understand the concept of rules, hence no idea of morality. In the external morality or moral realism stage children see rules as absolute. In the autonomous reality stage children recognized that rules are flexible and begin to develop internal morality. This is called the stage of moral relativity. We have also discussed Kohlberg’s stages of moral development. He identified six stages of moral development: punishment obedience, market exchange, interpersonal harmony, law and order, social contract and universal principles. These six stages of moral development are described at three levels. At preconventional morality level individual’s reasoning is based on personal needs. At the second level, conventional morality, the individual makes moral decisions by considering social appropriateness. At the highest level of moral development, post conventional morality, the individual acts according to social contract or universal principles of justice and equality based on internal ethics. We also talked about Erikson’s theory of psychosocial development. He has described psychosocial development in eight stages: trust versus mistrust, autonomy versus shame, initiative versus guilt, industry versus inferiority, identity versus role confusion, intimacy versus isolation, generativity versus stagnation and integrity versus despair. The first five stages are of particular interest to classroom teachers. We have also discussed Marcia’s identity status theory that described the four primary ways in which adolescents resolved the crisis of identity. We, then, examined learning behaviour acquired through the processes of enculturation and acculturation. School is another agency of learning, as they take children through organized and structured learning in different areas of knowledge.

### 2.7 UNIT END EXERCISES

1) Based on your observations, give illustrations that characterize the stage(s) of Piagetian cognitive development of your students.

2) What teaching strategies would be appropriate for the stage of cognitive development of your students?

3) Describe Vygotsky’s theory of the zone of proximal development. Illustrate how you will use Vygotsky’s principles to support a child working in the zone of proximal development.

4) How does the understanding of Kohlberg’s stages of moral development help you in dealing with the issue of values in classroom situation?

5) How will you use Erikson’s stage of psychosocial development to help students to make career choice?

### 2.8 REFERENCES AND FURTHER READINGS


