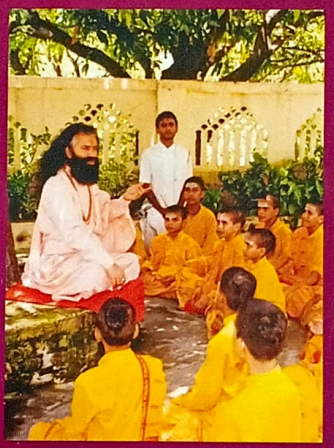
KNOWLEDGE AND CURRICULUM



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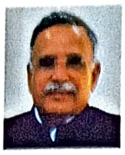

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First Edition: December, 2020

Published by
Inter-University Centre for Teachers Education (IUCTE), Department of Education (CASE & IASE), Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara - 390002, Gujarat, India.

ISBN: 978-93-5419-134-3

978-93-5419-134-3

Printed by
Sharp Printery, Lal Akhada, Fatepura, Vadodara 390 006, Gujarat

CONTENT

Unit - IV
BASICS OF CURRICULUM DEVELOPMENT

Sudhir H. Tandel

4.1 Introduction

Curriculum development is defined as a planned, purposeful, progressive, and systematic process to create positive improvements in the educational system. Every time there are changes or developments happening around the world, the school curricula are affected. There is a need to update them to address the society's needs. Curriculum development process depends on philosophical, sociological, psychological, historical and knowledge foundations of education. This chapter tries to understand these basic foundations of curriculum development.

4.2 Overview

This unit discusses the importance, principles, and foundations of curriculum development. In today's knowledge economy driven by rapid technological changes and climate changes, it is important that curriculum should fulfil the requirements of the future generation. Curriculum should be developed keeping in mind the basic principles of curriculum development. Generally, curriculum is developed keeping in mind general principles, but it should take into account Indian perspectives so that cultural and societal needs of the country can be fulfilled. Curriculum is developed based on the foundations of curriculum. Philosophical foundations give directions regarding the objectives of curriculum; sociological foundations take into account the society, its changes and culture; psychological foundation talks about what teaching learning processes need to be included in curriculum; while historical foundations give an idea about how previous curriculums focused on the different aspects. One cannot think of curriculum without what kind of knowledge should be included into the curriculum, and hence, knowledge foundations of curriculum are also focused upon.

4.3 Objectives

After studying this unit, the reader will be able to:

* Describe the importance of curriculum development;
* Discuss the principles of curriculum development with reference to general perspectives and Indian perspectives;
* Explain the philosophical, sociological, psychological and historical foundations of curriculum development;
* Explain knowledge as the foundation of curriculum development.

4.4 Importance of Curriculum Development

Curriculum development is not only for the school, the learners, and the teachers, but also for the development of society in general.

Curriculum development plays a very significant role in strengthening the economy of the nation in this knowledge economy era. It gives answers or solutions to the world's pressing

conditions and problems, i.e., environment, politics, socio-economics, and other issues of poverty, climate change, and sustainable development.

If the goals and objectives of curriculum development are clear in the curriculum developer's mind, cutting-edge achievements in various concerns can be realized. Following are the needs and importance of curriculum development.

* ***Clear purpose and goals:*** - Curriculum development ensures written curricular goals and objectives which are specified in considerable detail in behavioural terms, intended towards student development outcomes.
* ***Continuous assessment and improvement of quality:*** - As society changes, the curriculum followed by the institutions of the society also needs improvement. Hence continuous, valid, and reliable assessment of curriculum is required.
* ***A rational sequence:*** - Educational activities in a curriculum are chronologically arranged in developmental sequence which helps to form a well-planned (or coherent) curriculum.
* ***Making strategy in teaching and learning:*** - Suitable teaching-learning strategies, methods, materials etc. are suggested through curriculum development. It helps teachers and students in the proper implementation of the curriculum.
* ***Helps in the selection of learning experiences:*** - Appropriate selection and organization of learning experiences are needed for good curriculum. It helps in the selection of study material and other activities so that objectives of teaching can achieved.
* ***Grade specific curriculum:*** - Curriculum development process is required for determination of educational objectives for teaching-learning at a particular grade of school education.
* ***Helps in continuous and comprehensive education:*** - Continuous and comprehensive evaluation are integral parts of curriculum development. They help in bringing necessary improvement in the teaching learning process.

POINTS TO PONDER

Discuss the vital role of curriculum development.

4.5 General Principle of Curriculum Development

While developing the new curriculum, various principles must be kept in mind. Some of the general principles are discussed below:

The Principle of Child Centredness

Child learns from experience and activities and hence educational activities should be meaningfully appropriate for the child for his all-round development. Curriculum should be according to the needs, interests, capability, capacity, aptitudes, attitudes and abilities of the pupils of the particular age.

The Principle of Community Centredness

Social needs and local needs of the learner should be taken into account while developing the curriculum. Curriculum should reflect the values of democracy, ethos, and main concerns of the country. Child should understand the norms of the community being its member.

Activity Principles

Curriculum must be full of activities. It should include personal experiences, activities and efforts of the individual and should surround the individual's desires and needs.

The Principle of Integration

Curriculum should integrate the child's activities and the needs of the present century. The scholastic and non-scholastic abilities of the child should be integrated into the curriculum. Along with child activity and needs of the society; knowledge and experience, objectives and content, should also be integrated.

Forward Looking Principle

Capability of adjustment in different circumstances of life should be enhanced through the curriculum. It should equip the learner for future challenges. The vision should be enhanced through the curriculum.

Conservative Principle

Curriculum should cultivate a sense of respect for traditions and culture among the children. Preservation of the culture and traditions of the past should be there so that it can be transmitted to the next generation.

Renewal Principle

As the society and culture changes the individual should also adapt to the culture of the changing world.

Motivation Principle

Intrinsic motivation is needed for a child to learn effectively. Interest and motivation should be developed in the child.

Maturity Principle

The curriculum should support the maturity level of children so that all round development of the child becomes possible.

The Principle of Preparation for Life

Curriculum should prepare the child for future challenges.

The Presence of Elasticity, Flexibility and Variety

Curriculum should not be rigid but should be flexible to suit the changing needs of the people and the society. These should be able to meet the needs of individual differences.

The Principle of Comprehensiveness

A variety of subjects to satisfy a variety of pupil of different communities should be there. Besides, the curriculum should be comprehensive to cater to the all-round development of the child in terms of attitude, knowledge, skills and values.

The Principle of Balance

Curriculum should maintain a proper balance between the cognitive-affective-psychomotor domain as well as direct and indirect experiences.

The Principle of Utility

Curriculum should be useful to the child in his life and therefore should maintain a vocational and technical base. Emphasis should be given to work experiences.

POINTS TO PONDER

- *Explain the general principles of curriculum development.*

4.6 Foundations of Curriculum Development

4.6.1 Philosophical foundation of Curriculum

Educators, curriculum makers, and teachers must have adopted a philosophy or philosophies that are reckoned necessary for planning, implementing, and evaluating a school curriculum. The philosophy that they have embraced will assist them in defining the function of the school, the important subjects to be taught, the kind of learning students must have and how to acquire them, that is, the instructional materials, methods and strategies required and how the students will be assessed.

Let us now deal with how several different philosophies impact curriculum development:

1. Idealism
2. Realism
3. Pragmatism
4. Existentialism

1. Idealism

Idealism emphasizes that matter is not a reality but an illusion, and moral and spiritual reality is the chief explanation of the planet. For an idealist, truth and values are absolute, timeless and universal. The world of mind and ideas represents a perfect order and is permanent, regular and orderly. Eternal ideas are unalterable and everlasting. Rethinking the latest ideas present in the mind consists knowledge. It is the job of the teacher to draw out this dormant knowledge into the realization of the child.

2. Realism

The realist views object and matter as real. They believe that human behaviour is rational when it conforms to the laws of nature and is governed by social laws. People perceive the world through their senses and reason. According to realists, education is a matter of reality rather than speculation. For realists, curriculum follows a hierarchical order with the abstract subjects at the top and the transitory subjects at the bottom. They stress that an organized body of knowledge pertaining to specific areas should be in the curriculum. The three "Rs" (reading, writing and arithmetic)) are also necessary for fundamental education. According to the realists, the source and authority for determining the curriculum are the subject experts.

3. Pragmatism

Pragmatism suggests that the value of an idea lies in its actual consequences. Learning occurs as a person engages in problem-solving which is transferable to a wide variety of subjects and situations. Learning is considered an interaction between the learner and his environment. Curriculum, according to pragmatists, should be so planned that it induces teachers and learners to think critically, rather than telling them what to think. Teaching should, therefore, be more exploratory than explanatory. Teachers should provide learners with learning opportunities to construct their own learning experiences. They stress more on problem-solving using scientific method than acquiring an organized body of knowledge.

4. Existentialism

This doctrine emphasizes that there are no values outside man, and thus, suggests that human beings should have the freedom to make choices and then be responsible for the consequence of these choices.

According to the existentialist philosophy, learners are pushed into a number of choice-making situations. Learners should be given the freedom to choose what to study and what not to study, and also to determine what should be the criteria to determine these truths.

Now let us examine the implications of some more philosophies pertaining to curriculum.

- **Perennialism**

Perennialism rooted in realism advocates the permanency of knowledge that has stood the test of time and the values that have moral and spiritual bases. The underlying ideas are that education is constant, absolute and universal. The curriculum of the perennialist is subject-centred based on defined disciplines or logically organized bodies of content. It emphasizes teaching/learning of language, literature, sciences and arts.

- **Progressivism**

Progressivism is a development over pragmatic philosophy and is in contrast with perennialist thinking in education. For Dewey, the school is a miniature democratic society, in which students could learn and practice the skills and tools necessary for democratic life. According to progressivism, the skill and tools of learning include problem solving methods and scientific inquiry; in addition, learning experiences should include cooperative behaviour and self-discipline, both of which are important for democratic living (Ornstein and Hunkins, 1988). The curriculum, thus, should be inter-disciplinary in nature, and the teacher role is as a guide for students in their problem solving and scientific projects.

- **Essentialism**

Being a conservative philosophy, essentialism with its roots in both idealism and realism, does not totally reject progressive methods, as it does not believe that education should prepare the learner to adjust with the changing society. Thus, in essentialism, mastering the subject matter is the synonym of learning.

- **Reconstructionism**

Reconstructionism views education as a means to reconstruct the society. The subjects which promote new social, economic, and political education are the reconstructionist curriculum. The subject matter is to be used as a medium for studying social problems.

Curriculum specialists need to adopt an eclectic approach, the middle road, where there is no emphasis on extremes of subject matter or socio-psychological development, excellence or equality. We must understand that curricularists have to continuously reflect on their curricular decisions, and these should be based on the changing needs of the students and society.

4.6.2 Sociological Foundation of Curriculum

The school exists within the societal context and hence there is mutual relationship between society and curriculum. There are many developments which are difficult to cope with and to adjust to because society is ever changing and dynamic. Therefore, school curriculum must be innovative and interdisciplinary. It should address the diversities of inclusive & global learners, the explosion of knowledge through the research and internet, and the educational reforms and policies recommended by the United Nations.

Besides this, the country must maintain a curriculum that reflects and preserves its culture and aspirations for nationalism. It is the country's responsibility to ensure that the school serves its purpose of educating its citizens.

Social needs can be viewed from the status quo perspective, the reformist perspective, and the futuristic perspective.

The status quo perspective seeks to achieve the existing social order. The curriculum should contain such knowledge and skills which children will need as adults to fit into the existing social role.

The reformist goal of education is to reform the society and hence curriculum should fulfil this need. Schools should help society to achieve greater equity and justice.

The futuristic perspective views education as a tool to help students face the challenge of technological progress and to accept and accelerate scientific revolution. The role of school is to develop skills and useful knowledge so that students can participate in decision making processes and support the future direction of society.

Society and Curriculum

The norms of society produce a model personality-the attitudes, feelings, and behaviour patterns most members of a society share. It also assigns specific roles to each of its members and expects them to conform to certain established behavioural patterns. Sex roles—the way boys and girls, men and women are supposed to act—provide a good example for this type of socialization. This leads us to conclude that, society plays a vital role in shaping the attitudes of the young.

Social change and the curriculum

Contemporary society is changing so rapidly that we have difficulty coping with it, adjusting ourselves to the present and preparing for the future. Contrary to this fact, our colleges/schools appear to be conservative institutions that usually lag behind the change. To make education respond to social changes, the following things should be kept in mind:

1. growth of technology;
2. structure of the family; and
3. cultural diversity.

1. Growth of technology

The traditional ethics of work have changed drastically with the combination of the growth of technology and of the information society. Hence, curriculum will have to undergo a change in order to match with and capture social changes.

2. Structures of family

The picture of the family consisting of both natural parents and their children is steadily fading, replaced by a much more complicated diversity of family structures— separated, divorced, and childbirth without marriage, have given rise to the trend of single parent homes. Geographical mobility is weakening the bonds of the centrally located, extended family.

There is a breakdown of sex-role stereotypes visible in many areas of life. As women assume new roles and demonstrate excellence and ability in them, some disgust or resentment on the part of those who continue to adhere to old stereotypes cannot be avoided. The changing perception and reality of sex roles and opposition to such changes will also have a tremendous impact on curriculum development.

3. **Cultural diversity**

As we are moving away from "a melting-pot" society to a "salad bowl" one, the increasing trend away from a homogeneous culture towards one of diversity/plurality is quite prominent. Earlier, an educational institution was viewed as a major social agent in the "melting-pot" process but now it is caught in an ambiguous position between its traditional role and the emerging trend towards diversity.

Social forces and curriculum

The social forces in a society determine the objectives of education; therefore, it is necessary that while planning the curriculum, we must have a thorough knowledge of those social forces that have an effect on the educational system of the society. These forces are: governmental forces, quasi-legal forces, professional organizations, and special interest groups operating in a community.

4.6.3 Psychological foundation of Curriculum

Curriculum is influenced by psychology. Psychology also seeks answers as to how a curriculum be organized in order to achieve students' learning at the optimum level, and as to how much information they can absorb in learning the various contents of the curriculum. The basic psychological needs which are necessary for individuals to lead a full and happy life should also be a concern for curriculum developers.

Learning Theories and Curriculum

Behaviourism

Behaviourists advocate that:- Behaviour is likely to be influenced by the conditions under which learning takes place; attitudes and abilities of learners can change or improve over time through proper stimuli; learning experiences can be designed and controlled to create desired learning; selective reinforcement is essential.

Hence, we see that behaviourism has a major impact on education. Educators, who are behaviourists and in charge of curricula use many principles of behaviourism to guide the creation of new programme.

Cognitivism

Contrary to behaviourists, the cognitive school of thought believes that learning is cognitive in nature. It explains the phenomenon of human growth and development as cognitive, social, and psychological, and physical growth and development refer to changes in the structure and function of human characteristics.

Piaget (1950) describes the cognitive stages of development from birth to maturity:

1. **Sensori-motor stage (birth to age 2)**
2. **Pre-operational stage (age 2 to 7)**
3. **Concrete operational stage (age 7 to 11)**
4. **Formal operational stage (age 11 onwards)**

Learning and development is a process of maturation as described by Piaget's cognitive stage. It is continuous and is based on previous growth of the individual. The stages follow a hierarchical order and attainment in each stage varies depending on the hereditary and

environmental factors. However, the sequence of development remains the same for all individuals as suggested by Piaget. The curriculum principles propounded by Tyler, Taba and Bruner have basis in Piaget's learning theory.

It is important for teachers and curriculum specialists to determine the appropriate emphasis to be given to a particular Piagetian stage of development and thinking processes. This is particularly critical for school-teachers. It is during this stage of schooling that children move from the second to the third and fourth stages of development.

Humanistic Psychology

Humanistic psychology views the total organism in relationship to his environment, and the personal meaning constructed in a given situation. Learning is explained in terms of the "wholeness" of the problem. Human beings do not respond to isolated stimuli but to an organization of pattern stimuli. The teachers and curriculum framers should view the learner as a whole person and learning as a lifelong process.

Transfer of Learning and Curriculum

Formal education is based on the premise that whatever is taught and learnt in the school gets transferred over to life situations and forces to be of functional value to the student. School curricula must, therefore, be based on such content as will promise maximum transfer and develop a knowledge and understanding of matters, which lie beyond what is taught directly.

One view holds that the study of certain subjects assures a general and automatic transfer. It was believed, for example, that the study of Latin improved intelligence, of Maths, logical reasoning and so on. This view influenced curriculum-selection a great deal in the past and is still an influential force, a belief that the inclusion of a particular subject in the curriculum trains a particular faculty of the mind.

The second view is based on the premise that transfer is not automatic but is possible only if there are identifiable elements in the content involved in the process of training. Therefore, curriculum should be based on teaching specific knowledge and repertoire.

A third view of transfer holds that transfer occurs not by means of specific identical elements but through generalization of the content or of the methods employed in learning of that content. The last view is backed by cognitive field theories of learning and has influenced the modem curriculum considerably.

4.6.4 Historical foundation of Curriculum

Historical foundation of curriculum addresses different phases of human development. The study of history can help students gain perspective on events and issues they face. From historical foundation of curriculum, a study on politics, economics, geography, agriculture, religion, and sociocultural practices are expounded to be certain about the past and predetermine the future for the well- being of the society. Curriculum developers should ensure the historical perspective is well reflected while designing a curriculum.

Curriculum has always been and continues to be influenced by educational philosophers, besides societal needs. In the ancient times, though a formal curriculum did not exist, young

people were oriented towards meeting cultural and social demands. Depending on the influence of educational philosophies, however, curriculum-content for such orientations varied from one period to the other. Tracing the historical background of curriculum may give us a framework of its gradual growth.

Twentieth century curriculum

Early 20th century curriculum affirmed the shift in emphasis from sectarian education to liberal education. Traditionally, curriculum was confined to religion-related orientations and classics. Gradually, more and more subjects were added to the curriculum. As the focus was on mental discipline, social needs, student interest or capabilities were given little emphasis. Further, during this period, compartmentalization, and not interdisciplinary subject matter, was considered the norm. There was a reluctance to recognize the values of arts, music, physical and vocational education. This was based on the theory that these subjects had little mental or disciplinary value. Even though we offer vocational, industrial and/or technical programmes now, there is a tendency to consider traditional academic programmes superior to them.

Industrial development led a growing number of educators to question changes, as well as the authenticity of the traditional curriculum and its emphasis on mental discipline. This shift was also influenced by the scientific movement in child psychology.

In the new curriculum, the stress on psychology and science; and the concern for social and educational reform was made evident. Thus, the aims of education went hand in hand with the particular type of society involved: conversely, the society that evolved influenced the aims of education. Now curriculum is viewed as a science with principles and methodology not just as content or subject matter.

POINTS TO PONDER

- *How do philosophical perspectives affect the curriculum development process?*
- *How do western philosophical perspectives and Indian philosophical perspectives differ in terms of curriculum development?*
- *How do social changes affect the curriculum development process?*
- *While developing a curriculum, sociological perspectives should be given utmost importance. Why?*
- *How is the curriculum development process influenced by psychological perspectives?*
- *What is the relation between development stages and curriculum?*
- *While developing the new curriculum, the old curriculums should be studied thoroughly. Explain.*

4.7 Knowledge Foundation of Education

Knowledge refers to the awareness regarding things that one is surrounded by. Several notions and processes are associated with knowledge. It is the basis for learning and is therefore a never-ending process. Knowledge acquisition is the process that enables a person to develop knowledge. There are several processes of knowledge creation and generation. A person can acquire knowledge by observations, experiments and by interacting with others.

Knowledge and Its Notions

In simple terms, knowledge means to know. It is the awareness or understanding of something and has been a subject of interest and research for thousands of philosophers and experts. Therefore, knowledge has been defined in several ways and from different perspectives. There are three perspectives of knowledge that are prominent. These are as follows:

- **Knowledge as potential:**

According to this perspective, knowledge is viewed as a by-product of an enquiry and thus it can be a collection of information, a potential or even an activity. As a potential, it enables a person to adjust his or her behaviour to the changing circumstances. It is the potential of knowledge that enables a person to convert data into information to perform a specific activity.

- **Knowledge as an endpoint of a continuum:**

The terms data, information and knowledge are used interchangeably these days and are considered to be a part of a continuous process wherein data gets converted to information which in turn gets converted to knowledge. Data is defined as a sequence of events or statistics. When meaning is associated with this data, it becomes information. Information complemented by context and theory is knowledge. Therefore, data and information are re-ordered and re-designed to produce what is known as knowledge. Hence, the end-product of this continuum is knowledge.

- **Knowledge as an object or process:**

Knowledge can be viewed as an object which exists independently of the person who possesses the knowledge. Thus, knowledge can be a report, an equation, a patent, or anything that can be distributed, captured, measured, and managed. Knowledge on the other hand can also be considered as the process of knowing wherein knowledge is not separate from the knower. According to this perspective, only human beings are capable of possessing knowledge and not books or databases. Therefore, as a process, knowledge can be nurtured, guided, and motivated. Knowledge comes from information as well as learning. There are four learning processes that are fundamental to acquisition of knowledge: socialization, externalization, combination and internalization.

Theories of Knowledge

There are many theories of knowledge that are associated with how knowledge originates and how it is acquired. These theories are the following:

- **Rationalism:**

According to the theory of rationalism, knowledge is acquired because of reasoning and intellectual activity. This theory rejects all knowledge that is gained by the experience of the senses. Socrates and Plato were the earliest promoters of this theory. According to them, true knowledge originated from reason. There were several other philosophers who also advocated this theory of knowledge. There are some rationalists who attach importance to experience in the process of knowledge while there are others who consider experience as misleading in the process of acquiring knowledge. All rationalists, however, stand united on the fact that reason alone can help in the acquisition of perfect knowledge.

- **Empiricism:**

According to this theory of knowledge, experience is the source of true knowledge. As per the theory of empiricism, knowledge is dependent on experience. Locke was one of the first proponents of this theory of knowledge. According to him, mind at the time of birth is a blank sheet and receives ideas from experience. The experience is two-fold, i.e., sensation and reflection. Sensation helps us to form knowledge that has been gained and experienced from our senses. Reflection is the source of internal knowledge like perceptions and beliefs. Thus, the process of gaining knowledge begins with a person getting a sensory experience and then reflecting upon it.

- **Criticism:**

The theory of criticism of knowledge combines the doctrine of empiricism and rationalism. Neither rationalism nor empiricism are satisfactory theories of knowledge. Rationalism becomes one-sided by denying the ideas of experience, and empiricism becomes one-sided by rejecting the idea and role of reason in knowledge. Immanuel Kant tries to reconcile the idea of empiricism and rationalism into the theory of criticism and gives a view that true knowledge is universal and novel. According to Kant, knowledge is not possible without experience. He also holds that true knowledge is not completely derived from experience as experience alone cannot give knowledge universality. Kant asserts that human mind receives sensations which are discrete and as such cannot impart any knowledge. However, when these sensations are combined by some form of activity, knowledge is imparted.

Types of Knowledge

Knowledge refers to what a person knows and has an understanding of. Knowledge can be divided into several categories; these are as follows:

- **Situational knowledge:**

Situational knowledge refers to the knowledge that is typical of a situation or a specific domain. This type of knowledge enables one to solve problems and answer questions specific to the domain.

- **Conceptual knowledge:**

Conceptual knowledge is the knowledge about facts, concepts and principles that apply within a specific domain. Conceptual knowledge is additional knowledge that is associated with a specific domain.

- **Procedural knowledge:**

Procedural knowledge refers to the actions associated with a specific domain. Procedural knowledge can be strong and related to a domain or it can be weak and more general in nature.

- **Scientific knowledge:**

Scientific knowledge is the knowledge that is gained from observations and can be provided as well as demonstrated. Scientific knowledge is true and is not based on intuitive ideas.

- **Propositional knowledge:**

This is the knowledge about different things, and it can be provided whether the knowledge is true or not. Propositional knowledge can be further categorized into:

Logical knowledge:

Logical knowledge is the one that is based on the understanding of the relationships of ideas with one another. There are certain rules that are stated for relationships of ideas and if the ideas and their relationships fulfil these rules, the knowledge so obtained is considered to be true.

Semantic knowledge:

Semantic knowledge is the knowledge obtained by understanding the meaning of words. This knowledge is usually considered to be true.

Systemic knowledge:

Systemic knowledge is the knowledge that is gained from understanding the meaning of a system of words and symbols and how these relate to one another. It is essential that the relation between these words and symbols is such that it follows the rules and procedures stated so that the acquired knowledge can be considered to be true.

Empirical knowledge:

This is the knowledge that is acquired from our senses. This knowledge is based on observations and involves the process of deduction, analysis, reasoning and thinking to acquire knowledge.

- **Explicit and implicit knowledge:**

Explicit knowledge is the one that is gained practically and is not openly stated. Implicit knowledge on the other hand is the one that is acquired through informal learning.

The process of knowledge acquisition is not a simple one and involves the cognitive processes of perception, communication, and reasoning. Perception is when the idea first comes to the human brain. When the human brain first perceives an idea, it is blank and therefore the idea has no meaning for the brain. It is reasoning which adds a dimension, concept and definition to the idea, so that it becomes meaningful and of use. Communicating knowledge is also essential because if knowledge is not communicated, it does not have any importance. Knowledge sharing and communication is important else knowledge loses its very meaning. Knowledge can be communicated in any form—written or verbal. The main aim is to get the idea across to the others so that it is understood in its right concept.

Implications for curriculum development

* The curriculum is based on academic standards and technical rigor as the needs of the

learners are considered more important.

* The curriculum is authentic and is based on and models real world problems.
* The curriculum enables students to develop applied learning wherein they gain practical knowledge related to a concept.
* The curriculum based on this approach involves active exploration on the part of the students as well as the teachers. The curriculum so designed extends beyond the classroom and therefore enables students to learn better.
* The curriculum enables the students to develop critical thinking and assessment abilities. It should be given to work experiences.

POINTS TO PONDER

- *Which are the different types of knowledge which could be included into the curriculum?*
- *Why is knowledge considered a base for curriculum development?*

4.8 Summary

Curriculum development is a very important process for building the nation. Any change in the social structure due to any reason leads to change in the curriculum to meet the requirements of a nation. Curriculum should be developed keeping in mind the basic principles and different perspectives like philosophical, sociological, psychological, and historical. Curriculum should include different types and theories of knowledge, so that any change in knowledge could be included in it.

4.9 Practicum

- *Interview the persons involved in the curriculum development process and try to understand the different principles and perspectives they keep in mind while developing the curriculum.*
- *Take any textbooks of standard IX to XII and study which types of knowledge are included in them.*
- *Compare the types of knowledge included in Science and Social Science subject textbooks.*
- *Study any textbook from the psychological perspective.*
- *Critically analyse the National Curriculum Framework 2005.*
- *Compare the National Curriculum Framework 2000 & 2005.*

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