Assignment No.1

Q.1 Discuss the efforts of curriculum development in Pakistan.

An **organized developmental scope and sequence** outlines what the early childhood curriculum focuses on and how the plans and materials support children at different stages of development. The **scope** refers to the areas of development addressed by the curriculum. Scope includes both the breadth (the curriculum addresses development across all of the Head Start Early Learning Outcomes Framework (ELOF) domains) and depth (curriculum content addresses specific developmental goals within each sub-domain). A content-rich curriculum ensures that this scope is sufficiently deep that it engages and sustains children's interests across multiple learning experiences. The **sequence** includes plans and materials for learning experiences to support and extend children's learning at various levels of development. A sequence of learning experiences progress from less to more complex, with the goal of supporting children as they move through the developmental progressions.

An organized developmental scope and sequence:

- Helps education staff support children's development of skills, behavior, and knowledge described in the ELOF and a state's early learning and development standards

- Includes examples of materials, teaching practices, and learning experiences that support children at different levels of development

- Allows flexibility to respond to the needs of individual children, including dual or tribal language learners and children with disabilities (or those suspected of having delays) and other special needs

- Provides information to education staff that helps them plan and communicate with families and other education partners

To be effective, curricula must be comprehensive in scope and provide learning experiences specifically designed to support children at various levels of development. A scope and sequence can be a helpful tool that education staff use to plan learning experiences tailored to children's ages and developmental levels. It helps staff look ahead to see where development is going, and intentionally scaffold their learning. It also helps education staff implement research-based teaching practices that support children as they move through the developmental progressions, including those described in the ELOF. Elmwood Head Start education staff review their curriculum in the area of mathematics development. The **scope** of the curriculum includes number sense, operations and algebra, measurement, and geometry. The materials and plans for learning experiences are organized around a **sequence** designed to support children at various levels of development. The curriculum offers multiple learning opportunities that support children as they learn to understand simple patterns.

For example, the curriculum includes learning experiences that invite children to experience patterns through movement (e.g., tap-clap-tap-clap) and to describe patterns while playing with colored blocks. Children are encouraged to say the pattern aloud as a group (e.g., red-blue-red-blue) or to fill in the missing element in a pattern (e.g., red-blue-red-). The curriculum also includes learning experiences that invite children to copy

simple patterns (e.g., with stringing beads). At a more advanced level, the curriculum provides learning experiences in which children, with teacher guidance, can create and extend patterns using objects, movements, or sounds.

The lesson plans within each of these learning opportunities describe how education staff can scaffold children's learning and development at various levels (e.g., asking a child earlier in the developmental progression to identify what would come next in a simple pattern, and asking a child later in the developmental progression to describe a pattern the child has created). This sequence of learning experiences supports children as they move along the developmental progression of understanding patterns.

Q.2 Explain the factors that influence curriculum.

Based upon fundamental beliefs that arise from one's philosophy of Education, curricular decisions involve consideration of several topics and issues. Precisely for this reason, we consider philosophy one of the major foundation areas in curriculum. In this section, we shall explore several different philosophies of education that influence curricular decisions. Studying philosophy helps us deal with our own personal systems of beliefs and values, i.e., the way we perceive the world around us and how we define what is important to us. As philosophical issues have always influenced society and institutions of learning, a study of the philosophy of education in terms of Curriculum development is essential. In essence, a philosophy of education influences, and to a large extent determines, our educational decisions and alternatives. Those who are responsible for curricular decisions, therefore, should be clear about what they believe. If we are unclear or confused about our own beliefs, then our curricular plans are bound to be unclear and confusing. One important step in developing a personal philosophy of education is to understand the various alternatives that others have developed over the years.

The doctrine of idealism suggests that matter is an illusion and that reality is that which exists mentally. It emphasizes moral and spiritual reality as the chief explanation of the world and considers moral values absolute, timeless and universal.

If we apply this view to education what would be the implications for the role of teachers and curriculum in education? Obviously, teachers would act as role models of enduring values. And the school must be highly structured and ought to advocate only those ideas that demonstrate enduring values. The materials used for instructions, therefore, would centre on broad ideas particularly those contained in great works of literature and/or scriptures. Since it is based on broad ideas and concepts, idealism is not in line with the beliefs of those who equate learning with acquisition of specific facts from various Proponents of realism view the world in terms of objects and matter. They believe that human behavior is rational when it conforms to the laws of nature and is governed by social laws. Applied to education, those ideas begin to reveal a second possible philosophy of education. What kind of philosophy will that be? 'Realists' consider Education a matter of reality rather than speculation. Application, The paramount responsibility of the teacher, then, is to impart to learners the knowledge about the world they live in. What scholars of various disciplines have discovered about the world

constitutes this knowledge. However, like the idealists, the realists too stress that education should reflect permanent and enduring values that have been handed down through generations, but only to the extent that they do not interfere with the study of particular disciplines. Clearly, unlike the idealists who consider classics ideal subject matter for studies, the realists view the subject expert as the source and authority for determining the curriculum. In contrast to the traditional philosophies, i.e., idealism and realism, Pragmatism gives importance to change, processes and relativity, as it suggests that the value of an idea lies in its actual consequences. The actual consequences are related to those aims that focus on practical aspects in teaching and learning (Nash, 1995). According to pragmatists, learning occurs as the person engages in transacting with the environment. Basic to this interaction is the nature of change. In this sense, whatever values and ideas are upheld currently would be considered tentative since further social development must refine or change them. For instance, at a particular period of time it was generally believed that the earth was flat which was subsequently disproved through scientific research. To consider, therefore, what is changeless (idealism) and inherited the perceived universe (realism) and to discard social and/or perceptual change is detrimental to the overall development and growth of children. You can now visualize how pragmatism would have influenced the framing of curriculum. Curriculum, according to the pragmatists, should be so planned that it teaches the learner how to think critically rather than what to think. Teaching should, therefore, be more exploratory in nature than explanatory. And, learning takes place in an active way as learners solve problems which help them widen the horizons of their knowledge and reconstruct their experiences in consonance with the changing world. What then might be the role of the teacher? The role is not simply to disseminate information but to construct situations that involve both direct experience with the world of the learner and opportunities to understand these experiences. Having seen three basic philosophical positions that have influenced curriculum development, let us now look at the fourth one. This doctrine emphasizes that there are no values outside human beings, and thus, suggests that human beings should have the freedom to make choices and then be responsible for the consequences of those choices. According to this philosophy, learners should be put into a number of choice-making situations, i.e., learners should be given freedom to choose what to study. It emphasizes that education must centre on the perceptions and feelings of the individual in order to facilitate understanding of personal reactions or responses to life situations. Of primary concern in this process is the individual. Since life is based upon personal meanings, the nature of education, the existentialists would argue, should be largely determined by the learner. Individual learners should not be forced into pre-determined programmes of study. Whatever the learner feels he/she must learn should be respected and facilitated by the system. An existentialist curriculum, therefore, would consist of experiences and subjects that lend themselves to philosophical dialogue and acts of making choices, stressing self-expressive activities and media that illustrate emotions and insights. The teacher, then, takes on a non-directive role. The tender is viewed as a partner in the process of learning. As a professional, the teacher serves as a resource facilitating the individual's search for personal meaning rather than imposing some predetermined values or interests on learners Existentialism has gained greater popularity in

recent years. Today, many educationists talk about focusing on the individual, promoting diversity in the curriculum and emphasizing the personal needs and interests of learners. Here, perhaps, we can recall the philosophy that underlies the open distance education system. Learner-autonomy, which the existentialists seem to suggest, has been and remains the prime characteristic feature of the distance mode of teaching-learning. Because of the explosion in knowledge and tremendous growth in information technology, the curriculum of the past seems to be obsolete. To plug the gap between the needs of the learner, the society and the curriculum content, rethinking in the area of curriculum development appears to be unavoidable. What might have been relevant in a particular situation need not necessarily always be so. In essence, social changes demand changes in the existing pattern of education. The inherent potentiality of the system of distance education enables it to accommodate and cater to these changes. It should be clear from the above discussion that by and large, in operational terms, both pragmatism and existentialism find ample expression in open distance education. Each of the four major philosophies just described begins with a particular view of human nature and of values and truths, and then proceeds to suggest what such a view implies for curriculum development. Before we conclude our discussion on the philosophical foundations of curriculum, we should make note of a few educational philosophies in order to reinforce what has been said so far.

Q.3 Discuss the instructional strategies that are apporapriate for achieving objectives in different domains.

FUNCTION OF OBJECTIVES

Objectives perform two important functions for instructional designers, instructors, and teachers. **First**, they offer a means for the instructional designer to design appropriate instruction—specifically, to select and organize instructional activities and resources that facilitate effective learning. The result is a highly focused unit of instruction.

Second, instructional objectives provide a framework for devising ways to evaluate student learning. Because written tests and performance activities are the major means of measuring student achievement, objectives should guide the design of relevant testing items and procedures. Thus, the writing and use of instructional objectives can have a worthwhile impact on improving both teaching and the resultant learning.

THREE OBJECTIVE DOMAINS

Objectives are typically grouped into three major categories (or domains, as they are generally called): **cognitive, psychomotor, and affective**. These areas are often discussed in the literature related to objectives. Understanding the levels within each domain is important when planning instruction. For example, if you were designing a course that focuses on problem solving, you would not expect to have the majority of your objectives written at the knowledge level of the cognitive domain. You may also find that it is difficult to classify your objectives at one level of a domain. Designers, teachers, and evaluators often disagree as to the classification of objectives, as they may feel they fit at different levels in a domain. Often agreement is reached when we consider both the verb and the content, or the whole objective.

Cognitive Domain

The domain receiving the most attention in instructional programs is the cognitive domain, which includes objectives related to information or knowledge, naming, solving, predicting, and other intellectual aspects of learning. Bloom, Englehart, Furst, Hill, and Krathwohl (1956) developed a widely used taxonomy for the cognitive domain. (A taxonomy is a method of sequential classification on different levels.) The taxonomy is organized within two major groups: (1) simple recall of information and (2) intellectual activities. Bloom labeled the lowest level as knowledge, and the higher mental abilities are classified into the five increasingly more intellectual levels of comprehension, application, analysis, synthesis, and evaluation

Too often, major attention is given in a course to memorizing or recalling information—the lowest cognitive level. One reason for the abundance of recall objectives may be the ease of writing them. One of the challenges in an instructional design, however, is to devise instructional objectives and then design related activities that can direct students to accomplishments on the five higher intellectual levels. If the task for which you are designing instruction requires application, problem solving, or evaluation, then recall objectives will not help the learner master the task. Although Bloom's taxonomy is used to design instructional strategies, others such as Merrill (1983) have developed specific strategies for classifying objectives and then prescribing appropriate instructional strategies.

Bloom's original cognitive domain taxonomy has been revised to include two dimensions (Anderson et al., 2001). The original categories have also been updated to better reflect cognitive processes. A new dimension has been added that identifies the type of knowledge similar to our expanded content–performance matrix. This revision has yet to be widely adopted by educators in all fields.

Level of Bloom's Taxonomy

Knowledge: Recall of specific information

Comprehension: Lowest level of understanding

Application: Application of a rule or principle

Analysis: Breaking an idea into component parts and describing the relationships

Synthesis: Putting the parts together to form a new whole

Evaluation: Making judgments

Psychomotor   **Domain**

The second category for grouping instructional objectives is the psychomotor domain, which encompasses skills requiring the use and coordination of skeletal muscles, as in the physical activities of performing, manipulating, and constructing. Although no taxonomy is universally accepted for this domain, Heinich, Molenda, and Russell (1993) presented a taxonomy based on the degree of coordination that is applicable to many design projects (Table 5-2). Most muscular movements required for performing a task, whether it's doing a somersault or using a screwdriver, can be derived from this taxonomy.

Affective Domain

The third category of instructional objectives is the affective domain, which involves objectives concerning attitudes, appreciations, values, and emotions such as enjoying, conserving, and respecting. This area is typically believed to be very important in education and training, but it is the area in which we have been able to do the least, particularly in writing useful instructional objectives. Krathwohl, Bloom, and Masia (1964) organized the affective domain into five levels (see Table 5-4). The levels of the affective domain, like those of the cognitive domain, form a continuum for attitudinal behavior, from simple awareness and acceptance to internalization, as attitudes become part of an individual's practicing value system.

Interrelation of Domains

As you plan your instruction, keep in mind all three domains and attempt to treat the higher levels as they affect your topics and general purposes. Remember, too, that even though we are examining the three domains separately, they are closely related in two ways. First, a single major objective can involve learning in two or even all three domains. For example, when a technician learns to mix chemicals, he or she must first acquire knowledge about the different chemicals and their relationships as well as the psychomotor skills of performing the mixing operation. To this knowledge we might add the affective behavior of valuing neatness and safe practices during the mixing procedure. Second, attitudinal development may even precede successful learning in the other domains. Learners often need to be motivated to learn subject matter before the instruction even begins. This step may be particularly true in a self-paced learning or distance education program because these students must take responsibility for their own learning, and both receptiveness and cooperation can, in some measure, determine their level of achievement.

DEVELOPING INSTRUCTIONAL OBJECTIVES

Some instructional designers insist that instructional objectives be defined immediately after formulating the goal or statement of general purposes for a topic. Sequentially, this approach may sound correct, but in actual practice it is not always feasible. Although some subject-matter experts (SMEs) can verbalize the direction the instruction should take, others are not able to provide detailed information this early in the design process. To an instructional designer, the content may be unfamiliar, and additional information may be needed to formulate meaningful objectives. Thus, the task analysis element is placed in the instructional design plan preceding the element of instructional objectives. Writing instructional objectives is a design activity that requires changes and additions as the instruction is developed. Sometimes it is not until the instructional strategies are selected or evaluation methods stated that the ''real'' objectives for a topic are evident. Thus, your project may start with broadly defined objectives that you refine as design progresses. Our experiences have shown that designers often refine and modify the objectives as the SMEs provide additional details during the design procedure.

The Basis for Objectives Objectives

are based on the results of the task analysis and provide a refinement and implementation of the needs of and/or goals of a project. There are two cases, however, in which a discrepancy may exist between the goals or needs of the project and the objectives. First, the SME who helps with the task analysis may have a better

understanding of the problem and provide different content and focus. Second, the SME simply may take a different approach to solving the problem. In either case, when this discrepancy exists, you should verify the accuracy and validity of the objectives with the group that helped you with the goal analysis or identification of needs. Instructional objectives identify information necessary to solve the performance problem. Deriving the objectives is a four-step process to be completed after the task analysis.

These steps are as follows:

1. Review the task analysis and identify the essential knowledge, tasks (i.e., procedures), and attitudes the learner must master to solve the performance problem.

2. Group the task analysis in clusters with the goals or needs you have identified.

3. Write an objective for each of the goal statements or needs.

4. Write objectives for any additional information that is essential and that is not addressed by an objective.

Approaches to Objectives

Historically, instructional designers have insisted on the use of precise objectives (often referred to as Mager-style objectives), which evolved from the design and research on programmed instruction. This approach is based on behavioral psychology principles that require the learner to demonstrate an overt response indicating mastery of the content. The Mager (1984c) approach was applied to writing objectives for all three domains of learning: cognitive, psychomotor, and affective. Recent trends in cognitive psychology, however, have prompted a reconsideration of the specification of objectives for each of the learning domains (Marken & Morrison, 2012). In the following sections, we describe how to write different styles of objectives. We begin with the behavioral and cognitive approaches to writing objectives in the cognitive domain, then we describe how to write objectives for the psychomotor and affective domains.

Q.4 Write short note on:

a. Subject centerred curriculum

Subject-centered curriculum design revolves around a particular subject matter or discipline. For example, a subject-centered curriculum may focus on math or biology. This type of curriculum design tends to focus on the subject rather than the individual. It is the most common type of curriculum used in K-12 public schools in states and local districts in the United States.

Subject-centered curriculum design describes what needs to be studied and how it should be studied. Core curriculum is an example of a subject-centered design that can be standardized across schools, states, and the country as a whole. In standardized core curricula, teachers are provided a pre-determined list of things that they need to teach their students, along with specific examples of how these things should be taught. You can also find subject-centered designs in large college classes in which teachers focus on a particular subject or discipline.

The primary drawback of subject-centered curriculum design is that it is not student-centered. In particular, this form of curriculum design is constructed without taking into account the specific learning styles of the students.

This can cause problems with <u>student engagement</u> and motivation and may even cause students to fall behind in class.

b. Core curriculum

The body of knowledge, skills and attitudes expected to be learned by all students, generally related to a set of subjects and learning areas that are common to all students, such as languages, mathematics, arts, physical education, science and social studies.

Florida Atlantic University believes that higher education should go well beyond the preparation of individuals for demanding careers in their chosen fields. It should also provide broad intellectual enrichment through systematic exposure to a diversity of academic experiences. The purpose of the core curriculum in this endeavor is to develop the intellectual skills, habits of thought, ethical values and love of learning that transcend the choice of major. These are the hallmarks of educated men and women capable of meeting effectively the social, political and economic challenges of contemporary life. Perhaps at no other time in history has a well-rounded, inquiring intellect been more important and useful than in the world of rapid technological change and ever increasing globalization in which we now live. Thus, the mission of a comprehensive university education as reflected in its core curriculum is to produce graduates who can:

- intelligently analyze information
- appreciate diverse peoples and ideas
- adapt to change through the self-motivated acquisition of new knowledge.

Consequently, the FAU core curriculum is a carefully devised program that draws on many subject areas to provide and reinforce essential skills and values from different points of view. It equips students with the academic tools they will need to succeed not only as undergraduates in their degree programs, but also as responsible citizens in a complex world. Thus, the courses that comprise the FAU core curriculum combine to develop:

- substantive knowledge in a breadth of fields
- the ability to think critically
- the ability to communicate effectively
- an appreciation for how knowledge is discovered, challenged and transformed as it advances.

Students are invited to select from a number of the core curriculum courses listed in the catalog in completing their core requirements. All courses in the core curriculum contribute to meeting its purpose thereby allowing flexibility in making individual choices.

Q.5 Critically examine the experimental procedure for content selection.

The term curriculum is viewed in two different ways: the micro and the macro. The micro curriculum refers to subjects while the macro curriculum refers to curricular programs. For example, the subject biology is a micro curriculum while BS in Civil Engineering is a macro curriculum.

The selection of subject matter for micro curriculum employs the seven criteria below. For the macro curriculum, the subjects needed for the curricular program or course.

1. SELF-SUFFICIENCY

To help learners attain maximum self-sufficiency in the most economical manner is the main guiding principle of subject matter or content selection (Scheffler, 1970) as cited by Bilbao et al. (2008). Although the economy of learning implies less teaching effort and less use of educational resources, students gain more results. They can cope up with the learning outcomes effectively.

This criterion means that students should be given a chance to experiment, observe, and do field study. This system allows them to learn independently.

With this principle in mind, I suggest that for a high school curriculum or preparatory year, there should be a one-day independent learning activity each week. However, this should be carefully planned by the teacher. When the students return, they should present outputs from the activity.

2. SIGNIFICANCE

The subject matter or content is significant if it is selected and organized for the development of learning activities, skills, processes, and attitude. It also develops the three domains of learning namely the cognitive, affective and psychomotor skills and considers the cultural aspects of the learners. Particularly, if your students come from different cultural backgrounds and races, the subject matter must be culture-sensitive.

In short, select content or subject matter that can achieve the overall aim of the curriculum.

3. VALIDITY

Validity refers to the authenticity of the subject matter or content you selected. Make sure that the topics are not obsolete.

For example, do not include typewriting as a skill to be learned by college students. It should be about the computer or Information Technology (IT).

Thus, there is a need to check regularly the subject matter or contents of the curriculum, and replace it if necessary. Do not wait for another 5 years to change it.

Modern curriculum experts are after current trends, relevance and authenticity of the curriculum; otherwise, the school or the country becomes obsolete.

4. INTEREST

This criterion is true to the learner-centered curriculum. Students learn best if the subject matter is meaningful to them. It becomes meaningful if they are interested in it. However, if the curriculum is subject-centered, teachers have no choice but to finish the pacing schedule religiously and only teach what is in the book. This approach explains why many fail in the subject.

5. UTILITY

Another criterion is the usefulness of the content or subject matter. Students think that a subject matter or some subjects are not important to them. They view it useless. As a result, they do not study.

Here are the questions that students often ask: Will I need the subject in my job? Will it give meaning to my life? Will it develop my potentials? Will it solve my problem? Will it be part of the test? Will I have a passing mark if I learn it?

Students only value the subject matter or content if it is useful to them.

6. LEARNABILITY

The subject matter or content must be within the schema of the learners. It should be within their experiences. Teachers should apply theories in the psychology of learning to know how subjects are presented, sequenced, and organized to maximize the learning capacity of the students.

7. FEASIBILITY

Feasibility means full implementation of the subject matter. It should consider the real situation of the school, the government, and the society, in general. Students must learn within the allowable time and the use of resources available. Do not give them a topic that is impossible to finish.

For example, you have only one week left to finish the unit but then, the activities may take a month for the students to complete. Thus, this requirement is not feasible.

Do not offer a computer subject if there is no even electricity in the area, or there are no computers at all.

Further, feasibility means that there should be teachers who are experts in that area. For example, do not offer English for Business Communication if there is no teacher to handle it.

Also, there is a need to consider the nature of the learners. The organization and design of the subject matter or content must be appropriate to the nature of students.

So, it would be better if students in a subject-centered curriculum (with pacing schedule that must be religiously implemented every week) shall be grouped homogeneously; otherwise, many will flunk in that subject.

In conclusion, teachers in elementary and high school are not directly involved in the selection of subject-matter because there are already lesson plans made by the Department of Education. All they have to do is to follow it. However, they can also customize the lessons if their department heads or principals allows them.

As regards macro curriculum, the Commission on Higher Education sets guidelines and policies on what subjects to offer as minimum requirements for the course. Then, the Curriculum Development Committee will takes charge of the selection, organization and implementation of the curriculum with the approval of the Academic Council.

The Curriculum Development Committee headed by the Director of Curriculum Development sees to it that the selection of the subject-matter and the subjects for a curricular program be examined and scrutinized using the 7 criteria mentioned above.

But, this is not the end of the process yet! The selection of the subject matter or content of the micro and macro curriculum is only one of the considerations in designing the curriculum.