

Unit-5

AIMS, GOALS AND OBJECTIVES OF EDUCATION

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INTRODUCTION

Education is fundamentally a goal-oriented activity. An aimless education spells disaster and plays havoc with the destiny of a nation. Education without aims is like a ship without a rudder pushed on a perilous sea voyage. Aims provide a focus and direction to the entire system of education. That is why governments attach so much importance to the aims of national education.

The Quaid-i-Azam in his message to the First Educational Conference in 1947, stated emphatically that he wanted to establish a viable, productive and sound system of education suited to the needs and requirements of the people of Pakistan, with due regard to Muslim history and ideals. (Qureshi, 1975, p.27). It is regrettable to note that subsequent governments have failed to clearly define and implement the aims of Pakistani education. Speaking from an ideological standpoint, the story of Pakistani education is the story of aimless education. (Qureshi, 1975, pp.49,60-61,72).

An understanding of the meaning of aims, goals and objectives is essential for curriculum planners and teachers. Failure to gain this understanding is likely to produce a variety of problems for the various groups participating in educational programmes and activities. This unit is, therefore, concerned with the technical explication of these terms. It is divided into the following four parts.

1. Conceptualization
2. Objectives movement
3. Development of objectives, and
4. Critique of models of objectives

OBJECTIVES

After studying this unit, you should be able to:

1. Classify aims, goals and objectives and understand their significance.
2. Show the distinctions as well as the relationship between aims, goals and objectives.
3. List the major sources of aims, goals and objectives.
4. Indicate the principal sources of current interest in behavioral objectives.
5. Give a brief review of the objectives movement in education.
6. Explain Bloom's Krathwohl's and Harrow's taxonomies of educational objectives and mention important points in their favour and against them.
7. Describe the main approaches and different formats in writing behavioral objectives.
8. Develop statements of behavioral objectives.
9. Analyze and evaluate the principal models of curriculum objectives.
10. Develop a sound rationale for, and sketch an outline of a proposed Pakistani model of educational objectives.

1. CONCEPTUALIZATION

1.1 The Significance of Aims, Goals and Objectives

Aims provide a synoptic view of what we expect from education as a whole. Their major function is to provide purpose and direction to the whole educational system. (National Education Policy, 1979, p.1). Unless aims are first clearly stated, no educational programme can be meaningfully conceived, planned and initiated. Actually aims act as guiding principles and highlight the major emphases for central concerns of any system. Hence, knowledge of aims is indispensable to curriculum planners and other related groups.

The end-products of educational systems are shaped and moulded by the central aims which differ from one national to another. The aim of traditional Muslim education was to produce pious and practicing Muslims. American education is wedded by and large to the production of democratic and pragmatic individuals, while the socialist system endeavors to produce true "socialists". You can see the typical stamp in the end-products of the various school systems. And different systems may operate even within the same country. This is so because aims help to unify different educational programmes and objectives. Jamia Ashrafia (a religious Muslim University) and Forman Christian College, separated only by the Gulberg Canal in Lahore, represent two different viewpoints. Each entertains a peculiar outlook that is personified in the lives of the youth under their care. This indicates the powerful role of aims in education, be it Eastern or Western, public or the private. This different sets of aims represent different "colour schemes" and curriculum developers and teachers should be alert to the choice and implications of such schemes.

As for the goals of education, they are sharply focused on school-wide educational outcomes. (Zais, 1976, p.306). They are derived from aims and indicate more clearly what the aims actually stand for. In fact, they are the signposts on the highway of educational programmes. Goals, as Davies tells us, help curriculum planners focus their attention on the actual destination. Unlike aims, goals render a practical service in operationalizing the entire educational activity from the elementary to the higher stage. Their role is crucial (Davies, 1976, p. 14).

But both goals and aims are not enough in providing immediate direction for classroom instruction and evaluation (Bloom et/al., 1971, p.21). Objectives, on the other hand, present detailed and clear specifications of each goal in terms of knowledge, skills, values, beliefs, ideals and appreciations. Their use to curriculum planners, teachers and learners, is all too obvious.

Specific objectives can be of use in many ways. Firstly, they provide clear guidance in the selection of content and learning experiences. Secondly, they classify the types of powers and capacities to be developed in learner - how the content is to be used and with what purpose in view. Thirdly, they provide a common and consistent focus for varied curricular activities. Hopefully, the multiplicity of subjects and of teaching

approaches may be unified through objectives without which they will simply appear to be discrete and disjointed parts of an education programme. Lastly, they guide us in evaluating the output by providing a relevant and clear set of criteria (Taba, 1962, pp. 196-199). Thus aims, goals and objectives render positive service to all concerned, especially to curriculum planners and teachers.

1.2 The Classification of Aims, Goals and Objectives

Generally speaking, a vertical hierarchy of three broad categories—aims, goals and objectives—is usually mentioned in books on curriculum and education. However, many eminent writers, particularly in the field of curriculum, prefer to use pairs of terms like 'aims and objective' or 'goals and objectives', perhaps, to simplify the process of objectives formulation. Hilda Taba, Bloom and his associates, Michealis, Grossman and Scott may be cited as writers who exemplify this approach.

Document entitled "Goals and Aims to Education" (Ministry of Education, 1977, p.2), treated aims as something intermediary between goals and objectives. Aims being mainly concerned with the major stages of education; while the term 'goals' was used to refer to overall general statements of the purposes of Pakistani education. On the other hand, most of the curriculum experts and philosophers accept that aims are more general than goals. Ivor K. Davies (1976, pp.11-14), Robert S. Zais (1976, p.305) and many other writers forcefully represent the latter view, and it is this approach, which considers aims, goals and objectives as a hierarchy, which is adopted in this unit.

1.3 The Nature of Aims

Curriculum aims refer to general statements that describe expected life outcomes based on some value scheme borrowed from philosophy, consciously or unconsciously. Their distinctive quality is that they are not directly related to school or classroom outcomes. "Human Survival", "self-realization" and "ethical character" are examples of a few curriculum aims. Aims are thus remote and long-range and have to be converted into more immediate and specific school outcomes if they are to be realized in actual practice (Zais, 1976, p. 306).

An aim gives shape and direction to a set of more detailed intentions for the future. They are just a starting point and represent an ideal, an aspiration and a direction which education system should take in general. Thus they act as a guide to action and provide a general framework for the overall educational process (Davies, 1976, p.12). Since they are principally concerned with larger ends and purposes they act as unifying threads for different programmes and activities, they are relatively few in number but are broad in scope and applicability.

Aims are inspirational and visionary in character and are, therefore, vague and permanently open-ended (Richmond, 1976, p. 175). They have to be clearly defined from age to age as they take on new meanings. For example, the concepts of a "good life" or "educated citizens" admit of several interpretations that vary from age-to-age and from nation-to-nation even during the same period. Thus an aim needs to be clearly defined,

interpreted and explained with reference to the national ideology and socio-political climate obtaining in a country (Sharif, 1964, pp. 40-45). Besides, an aim has to be analyzed and broken down into its constituent parts for its practical realization and accomplishment.

In brief, statements of aims just provide overall direction and guidance to a school system; but they are not always helpful to teachers in classroom instruction or evaluation. They are basically meant to provide direction to policy-makers at different levels — national, provincial and local. Hence they are not valid for specific and concrete action (Bloom, 1971, p.21).

1.4 Examples of Aims

Harry S. Broudy classified aims under four categories:

- (a) Value pattern
- (b) Social organization
- (c) Social roles and
- (d) Life style. (Zais, 1976, pp:307-308).

All the categories must be inter-related with each other to produce the desired results. For instance, it is necessary that aims in other categories should be consistent with the aims and requirements of the central value pattern and display the same spirit. Any inconsistencies in this regard would be damaging to the dominant value pattern.

(i) *Value Pattern*

This is the general category which actively influences the character of aims in the other three categories. Aims in this category represent a philosophical position and viewpoint. If the central aim is the development of Islamic character, all other categories would be geared to the realization of this pivotal value.

The students of different educational system bear the stamp of their typical value pattern. For example, the products of Aligarh, Deoband, Nadva and public schools in Pakistan reflect the different value patterns and characteristics of their institutions. Sir Syed's main concern was to promote western sciences and help the Muslim youth to get jobs in the Government. Deoband aimed at the preservation of a classical religious orientation, while Nada attempted to modernize religious knowledge and bring it in line with the new demands of modern times. (Ahmad, 1977, pp. 72-72). These diverse value patterns shaped the institutions and hence the attitudes and behavior of their students.

(ii) *Social Organization*

This refers to "patterned relations of individuals and groups" (Broom and Selznick, 1958, p. 14). The way people behave is largely determined by their relations to each other and by their membership of different groups. Actually social organization is a network of relationships of individuals and groups that may impede or develop a social philosophy or viewpoint. No set of aims can prove fruitful until it is interwoven into the entire fabric of social organization.

A social organization acts as a social habitat for the development and promotion of a preferred value pattern whether Islamic, democratic or socialist. Given the above value pattern, social organization would be focused on Islamic social outcomes such as unity and social integration, brotherhood, concern for the collective good and a deep sense of respect for all individuals and groups on the basis of intrinsic personal qualities rather than surface qualifications, i.e. race, creed, colour, status or geographical location.

(iii) *Social Roles*

A social role refers to "pattern of behavior associated with a distinctive social position" such as the position of a mother, teacher, administrator, employer or student etc. it indicates what a person ought to do in his or her typical position. Social roles are complementary as well as complex. (Broom and Selznick, 1968, pp.12-13). Aims specifying preferred social roles would offer a particular set of qualities to be developed in parents, teachers, family members, neighbours, citizens and officials which are in consonance with the national ideology. The Prophet of Islam (Peace Be Upon Him) is the best model for the Muslims. The Quran exhorts believers to assimilate this model into their personality.

In Islam, several roles are combined within a single individual and he or she is expected to behave likewise in a given situation during peace or war. A ruler is not simply a head of the state; he is also a guardian of public morality, a friend, neighbor and a citizen. This is how Islamic values would influence the social role of individuals.

(iv) *Life Style*

This refers to the way in which one lives one's life. It is the practical manifestation of one's preferred value pattern. You can see a variety of life styles in any society - for example, that of a businessman, a gypsy or a hippy. The Eastern life style is very different from that in the West. However, each ideology attempts to develop, on the whole, a typical life style with reasonable scope for variation and spontaneity within its cultural framework. In brief, the life style must be in consonance with the spirit of the central value pattern.

Examples of Aims

Statements of aims may be short or long but detailed statements are generally preferred for curriculum building. The examples that follow are taken from the National Education Policy (1979, pp. 1-2).

1. To foster in the hearts and minds of the people of Pakistan in general, and the students in particular, a deep and abiding loyalty to Islam and a living consciousness of Muslim Nationhood.

2. To develop and inculcate in accordance with the Quran and Sunnah, the character, conduct and motivation expected of a true Muslim through effective elimination of gaps and contradictions between the professing and practice of Islam.

1.5 The Nature of Goals

Curriculum goals refer to school outcomes as a whole, and they are somewhat removed from immediate classroom assessment (Zais, 1976, p.306). they lie in the middle of the "aims-objectives" continuum and goals actually represent different aspects or major constituents of an aim and thus prove helpful in identifying its principal parts. They clarify and explain what a particular aim is directed at the intent as well as the content.

Goals are derived from aims and must be consistent with them. They attempt to operationalize the thinking represented by an aim, making it relatively clear and practical (Davies, 1976, p. 14). They are more explicit than aims and thus indicate the broad pathways to the attainment of over-arching and all-inclusive aims. In short, goals simply facilitate the achievement of aims.

An aim indicates the direction, while a goal points to the actual destination. Rather than being visionary in character, a goal takes on a concrete form and becomes the focus of an activity. It serves as a basis for action and helps us in bridging the gap between the 'ideal' and the 'real'. However, goals are less specific than objectives and are no more than inferred descriptions or hypotheses about the things learners will be able to do at the conclusion of a learning sequence (Davies, 1976, p. 14.) They do not specify the expected behavior of learners with precision.

Several goals may be derived from an aim. These goals are then ordered so that priorities can be determined and allocated. Some of the goals may be realized at an early stage in the learning process; others may be taken up in the middle and still others may be accomplished very late (Davies, 1976, p. 14).

Goals serve two main purposes. Firstly, they help us put concepts into writing and indicate what the learners must know at the end of a course (terminal goals). Secondly, they help the teachers and others concerned to bridge the gap between an aim and a specific objective (Leonard and Utz, 1974, p 88).

1.6 Examples of Goals

An example of an aim is to develop in students an understanding of how to write research proposals in Education. This statement may be broken down into the following five goals:

1. To acquire a concept of research proposal and its variants, as seen in historical, descriptive and experimental enquiries in education.
2. To appreciate the value of writing a research proposal as a basis for clarifying thoughts, analyzing tasks, synthesizing procedures and evaluating possible consequences.
3. To identify an educational problem, appropriate to the interests of the investigator which is capable of investigation by the methods proposed.
4. To prepare an appropriate research proposal, according to generally acceptable standards in educational enquiry.
5. To critically appraise the proposal as a means of determining both its deficiencies and its strengths as a planning document.

It is clear from the above that goals form aspects of an aim and are more explicit than the latter. They however, indicate scope for further clarity and detail i.e behavioural objectives.

Statements of goals may be long or short. For instance, national progress (as an aim) may be interpreted in the form of goals such as industrial development, agricultural advancement, political stability, elimination of illiteracy and so on. And quite a different set of goals may be generated depending upon the vantage point from what a person looks at the aim.

1.7 The nature of Behavioural Objectives

Behavioural objectives go by several names _ specific objectives, performance objectives and instructional objectives. Increasing interest has been shown in them during the last two decades. The educational community is, however, divided with a great many outstanding scholars like Bloom, Tyler, Gagne and Taba considering them a virtual renaissance, while other prominent figures regard them as too mechanistic and dehumanizing. The debate continues but with current rethinking, some sort of compromise may be reached in the near future.

The current interest in behavioural objectives has arisen from several sources. Among these are the famous works of educational theorists like Tyler, Bloom, Mager and Krathwohl which lay heavy stress on the need for accurate assessment and measurement of learners' knowledge in terms of observable and specific human behaviours. Several educational taxonomies have been offered and a considerable literature is available on the subject. Blooms taxonomy stands out to be the most written about in the realm of education. Another source is industrial economics with its input-output models and techniques such as cost benefit analysis, operational research, systems engineering and job evaluation, all of which require precise, detailed and clear-cut objectives, prior to the formulation of a problem and strategy of attack. These have had a positive impact on education. Combined with some other national and international forces, all the above developments have played an important part in popularizing the use of behavioural objectives.

According to Davies, behavioural objectives are called behavioural because they are stated in terms of overt human behavior which is both demonstrable and measurable. They describe in unambiguous terms the expected behavior of a learner at the end of a learning experience. Objectives are very specific and highly explicit with no ambiguity about their meaning, focus and intention. They are short-range, time-bound, quantifiable and operational in form and spirit.

They refer to the most immediate specific outcomes of classroom instruction. The most important thing to note about the objective is that they act as a clear guide and provide immediate direction to curriculum planning, classroom instruction and evaluation. They are sharply focussed on intended learning outcomes and leave no scope

for misinterpretation. Precision, clarity, specificity and quantifiability are the principal features of a truly behavioural statement of an objective.

Generally speaking, behavioural objectives are detailed specifications of desired outcomes at the end of a lesson, teaching unit, term, year or programme. And a large number of objectives can be developed from a given set of goals, the actual number depends upon several factors such as purpose, grade level, teacher's convenience and the generative capacity of the goals.

1.8 Examples of Behavioural Objective

Now look at the examples below and consider their adequacy as behavioural statement:

1. "to be able to write a summary"
2. "to explain the theory of relativity"
3. "to be able to complete a 100 item multiple-choice examination on the topic of Muslim contribution to Science within one hour, with 70 correct answers as the lowest limit of acceptable performance".

You will probably have noted that (1) is an example of an incomplete behavioural objective. It does not mention the related content to be summarized, which could, for example be an English poem, an historical event or a scientific theory. As regards (2), both the behaviour and the content are mentioned. However, by far the most comprehensive behavioural statement is (3) which contains all the necessary elements of a complete behavioural objective.

Activities

1. Discuss amongst your colleagues the differences amongst aims, goals and objective with examples.
2. Pick up any three aims of education of each education policy and develop goals and objectives form them.

1.9 Distinctions and Inter-relationships

If the title of a book is regarded as an aim, its various chapters would be parallel to goals and the countless facts, ideas, concepts, principles, and generalizations would resemble objectives. It is obvious that objectives are many and varied and that an aim is simply inexhaustible. For example, thousands of books have been written on Education with different formats and approaches and yet the basic theme continues. This simile may throw some light on the distinctions amongst the terms ;aims', 'goals', and 'objectives'.

To summaries what has been said earlier, aims, goals, and objective3s represent different positions in descending order, each with a specific purpose and role to play. Aims reflect philosophy, policy and rationale, while goals stand for strategies and objectives for tactics in the actual classroom situation. Aims represent life outcomes; goals refer to school outcomes; and objectives stand for specific outcomes of classroom instruction. Again, aims are general in nature, objectives are highly specific and goals,

which are in an intermediate position have the potential to generate a number of behavioral objectives.

You should note, however, that aims, goals and objectives are relative terms. They sometimes overlap and clear distinctions are not always possible. But in any case, they should be consistent with one another. Also their meanings can change in different contexts. Within the context of a whole curriculum, the goals for each course included in the curriculum could be regarded as objectives of that curriculum. The goals of an instructional unit may become the objectives of a course. Thus the goals objectives continuum is relative and flexible (Leonard and Utz, 1974,p.88). It is thus sometimes difficult to differentiate goals from aims. Perhaps that is why many writers use them interchangeable. Therefore, these terms should be viewed and differentiated in their interactive perspective, with full awareness of their functional role and potential. Otherwise, what does Peters mean when he speaks of the aim of lesson as being concerned with reaching the end of "Exercise 6". (Richmond, 1871,p.189). Now you may be able to visualize the difficulties entailed in the treatment of these popular terms.

In most cases, Zais points out, the distance between a curriculum objective and a curriculum goal is great; but between an aim and an objective it is enormous. Therefore, the curriculum worker must be vigilant in maintaining congruence in aims through goals to objectives. He should be able to demonstrate the relationship of the required school tasks (goals and objectives) to those of the desired life tasks (aims). But this can be possible only when he possesses adequate knowledge of the philosophical, psychological and logical bases of teaching and learning (Zais, 1976,p.307).

However, it must again be recognized that this inter-active relationship is sometimes very much confusing. At times, they overlap, and it becomes difficult to differentiate goals from aims and objectives from goal _ so much so that the very classification becomes doubtful. "at precisely what point in the continuum", remarks Zais, "an objective becomes a goal; or a goal an aim, is impossible to specify" (1976,p.307). In spite of these difficulties, these broad categories along with their inter-relationships can be of immense help to all concerned.

1.10 Self-assessment Questions

I. Write T (True) or F (False) in the space provided against each statement below:

- (a) Aims are highly imaginative and visionary by nature. _____
- (b) Curriculum planning involves aims and goals but excludes specific objectives _____
- (c) Goals help us to operationalize education thinking at a higher level. _____
- (d) Aims provide an overall direction to the whole system of education. _____
- (e) Objectives give direct help in classroom instruction. _____
- (f) The role of objectives is to specify human behavior in terms of knowledge, skills, values and attitudes. _____

- (g) Goals are less explicit than aims.
- (h) Goals provide a clearer indication of intended educational outcomes than aims
- (i) Goals are directly related to classroom evaluation.
- (j) Goals refer to the ultimate ends.
- (k) Statements of behavioural objectives are specific and clear.
- (l) Goals are more operational in form and spirit than objectives.
- (m) Aims, goals and objectives are relative terms.
- (n) Instructional objectives are different from behavioural objectives.

Answer:

- I (a) T (b) F (c) T (d) F (e) T
 (f) T (g) F (h) T (i) F (j) F
 (k) T (l) F (m) T (n) F

II Examine the following groups of Statements and identify whether each statement is an aim, goal of behavioural objective. Write a (aim), g (goal), o (objective) in the space provided before each statement.

1. To develop in citizens a deep sense of respect for the constitution. _____
2. To make citizens obey rules and regulations in their daily life as enforced by the state. _____
3. To enable all groups of people to gain a full understanding of the Constitution. _____
4. The college students will be able to differentiate between the law and the Constitution. _____
5. To study the implications of the constitution for various sections of the public. _____
6. To encourage Pakistani students to become enthusiastic about technical subjects. _____
7. The Business students will be able to type 50 words per minute with only one mistake for every 200 words. _____
8. To expound the view that scientific and technical development is the key to national progress. _____
9. To cultivate the spirit of enterprise in the children and youth in all educational institutions. _____
10. The Arab students will gain a variety of experiences during their stay in Pakistan. _____
11. Half of the fifth graders will correctly list the names of the first four Caliphs Of Islam. _____
12. In a 30-yard pool without competition, the student will swim 60 yards free style in less than 50 seconds. _____
13. To develop reflective thinking in philosophy. _____
14. Eighty per cent of the students on a course in Curriculum Development will be Able to differentiate between aims, goals and objectives as outlined above. _____

15. Developing Islamic character and abiding love for the principles of Islam.

16. Students study deeply new movement in the world of Islam.

Answers:

- II. 1. a 2. g 3. g 4. o 5. g
6. g
6. o 8. a 9. g 10. g 11. o 12. o
13. g 14. o 15. a 16. g

III Encircle the most appropriate item under each statement in the following:

1. The nature of aims indicates that they are basically:

- a. Operational
- b. Practical
- c. Philosophical
- d. None of the above.

2. Policy-makers at the provincial level are mainly concerned with:

- a. Aims
- b. Goals
- c. Objectives
- d. Goals and objectives.

3. To develop good speech habits among learners is a statement that comes under:

- a. Aims
- b. Goals
- c. Objectives
- d. Both a and b.

4. School-wide outcomes may be classified under:

- a. Aims
- b. Goals
- c. Objectives
- d. Both a and b.

5. A statement that is partly general and partly concrete and can be further broken down into its constituent parts belongs to:

- a. Aims
- b. Goals
- c. Objectives
- d. Non of the above

6. A statement that does not permit different interpretations falls under:

- a. Aims
- b. Goals
- c. Objectives
- d. Goals and objectives

7. To gain mastery over a subject is a (n):

- a. Aims

- b. Goal
- c. Objective
- 8. To classify rocks and describe them properly is a (n)
 - a. Aims
 - b. Goal
 - c. Objective

Answers:

- III' 1. a 2. b 3. c 4. d
 5. b 6. e 7. b 8. c

IV.

1. Write four points on the significance of aims goals and objectives and briefly describe each one of them.
2. How are objectives useful to planners and teachers? List four points. (Don't explain.)
3. The end-products of an educational system are shaped by the central aims of that system. Explain this statement in a paragraph by giving one concrete example.
4. Briefly describe the nature of aims under four points and given two concrete examples.
5. Why are aims not valid for guidance in classroom instruction? Explain in a paragraph.
6. Write a paragraph on the nature and role of goals in education in Pakistan.
7. Write a brief note on the nature of behavioural objectives. Also give two examples to explain your answer.
8. Write two points of difference between a) aims and goals and (b) between goals and objectives.
9. Inter-relate aims, goals and objectives in a paragraph.
10. "Aims, goals and objective are relative terms". Explain this statement with the help of two suitable examples.

2. A BRIEF REVIEW OF THE OBJECTIVES MOVEMENT IN EDUCATION

A historical review is always instructive as it enables the reader to understand the progressive development of the subject being studied. It is revealing in that it uncovers realities and can help us avoid future pitfalls.

2.1 The Origins

Generally speaking, the origins of the movement for explicit objectives can be traced back to the educational works of Herbert Spencer and Johann Herbart. Spencer proposed a classification of human activities as a basis of educational objectives and developed five major objectives for school curricula – self-preservation, securing the necessities of life, child-bearing, maintenance of socio-political relationships and leisure activities. As for Herbart, he highlighted the significance of a clear statement of aims for writing a lesson plan and proposed five instructional stages popularly known as the Herbartian steps of teaching (Davies, 1976, pp.44-45).

Zais contends that behavioural objectives are neither basically new nor are they a creation of educationists. They rather owe their genesis to the well-known concept of "Operationalism" in scientific disciplines (Zais, 1976, p.311). But why stop at "Operationalism"; why not go further back in the past to uncover the true origins of behavioural statements.

The truth of the matter is that the spirit (clarity of purpose) and general features of the behavioural approach were born with the birth of Islam. If clarity, behavior specification, action-oriented formulation and criterion-referenced description are accepted as the hall-marks of behavioural objectives, then the holy Quran heralded the beginning of this approach long before the educational writings of Spencer, Bobbit, Tyler, Bloom and Gagne.

The Quranic approach to behavioural statements is unique and distinctive. The set of "desired behaviours" is normally preceded by a general statement of the goal; and the short behavioural statements are accompanied with judgemental remarks or motivational inputs of reinforcement or feedback depending upon the situational mood of the verses. The Quran captures life in its entirety and does not tolerate any dichotomy between the material and the spiritual and the objective and subjective aspects. Consequently, the Quranic behavioural statements cover both overt and covert behavior. Therefore, they are not always behavioural in the rigid sense of the term. Rather, in their typical format, they present a blend of behaviouristic and humanistic approaches with several new additions. They appeal equally to the mind, heart and spirit; and appear to satisfy all the demands of human nature within the general framework of Islam. This is the true essence of the Quranic model.

The behavioural statements are generally short and pithy. But there are long explanatory statements as well. However, these belong to several categories; they are goal oriented, clarificational, explanatory and evaluative. Central themes like goodness, success, taqwa (piety), worship, life, faith, man, God and the Hereafter are repeatedly stated in behavioural terms in their manifold dimensions at different places in different context. The Quran avoids all possible detailed specifications of a given goal at one and the same place. Rather it "behaviourises" the concept under treatment on several occasions to unfold its rich potential in new situations. And in the process of behavior specification, God relies heavily on the common sense of people to understand the terms. This lends freshness, variety and balance to behavioural statements.

Below are given a few examples to substantiate the veracity of our claim. We offer a translation along-with the original text from the holy Quran so that you may appreciate the beauty and style of the Quranic verses and judge the truth for yourselves.

Example No. 1:

"The believers must eventually win through these":

1. Who humble themselves in their prayers
2. Who avoid vain talk
3. Who are active in deeds of charity
4. Who abstain from sex except with those joined to them in the marriage bond, or the (captives) when their right hand processes, for they are free from blame. But these whose desires exceed those limits are transgressors.
5. Who faithfully observe their trusts and their covenants and
6. Who (strictly) guard their prayers. These are the believers who will inherit Paradise. They will dwell therein forever.

Example No. 2:

"It is not righteousness that you turn your faces to the East and West; but righteous is he:

1. Who believes in Allah and the last day and the angles and the scriptures and the Prophets.
2. Who gives his wealth, for love of Him, to his kinsfolk and to orphans and the needy and the wayfarer and to those who ask to set slaves free

3. Who observe proper worship

4. Who pays the poor-due

5. Who keep their treaty when they make one

6. Who are patient in tribulations and adversity and time of stress

7. Such are they who are sincere.
Such are the God-fearing.
(The Cow: 177)

Example No. 3:

"Be quick in the race for forgiveness from your Lord, and for the Garden whose width is that of the whole of heavens and of the earth, prepared for the righteous those:

1. Who spend (freely) whether in prosperity or in adversity

2. Who restrain anger

3. Who pardon all men, for God loves those who do good

4. Who having done something to be ashamed of or wronged their own souls, earnestly bring God to mind and ask for forgiveness for their sins. And who can forgive sins except God?

5. Who are never obstinate in persisting knowledge in (the wrong) they have done.

6. For such the reward is forgiveness from their Lord, and a Garden with rivers flowing underneath, and an eternal dwelling: How excellent a recompense for those who work and strive"
The Family of Imran: (133-136)

Note the break-up of general statements into several specific objectives. Also note the use of action verbs, moderate behavior-specification, necessary clarifications, and both short and long statements of objectives. Other interesting features are the beautiful general statements at the beginning of each example, and as indicated already, the judgemental remarks or motivational inputs at the endings.

Further, it must be recognized that the Quran avoids extremes in action verbs and in behavior specification. However, the Quran is not a book on curriculum development. It is, rather, a Book of Guidance which is unique in its form, message and approach. Hence the Quran cannot be expected to conform to professional formulations-behavioural, humanistic or any other. It simply transcends them. And transcendence, as Phenix (1974, pp. 118-130) appears to suggest is, perhaps, the future hope of education and the curriculum. In brief, the Holy Quran effectively communicates its message to the general reader (and not the professional alone) and effective communication is at the heart of behavioural approach. (Bloom et. Al, 1971, p. 36 and Mager 1962, p. 12). The Holy Book incidentally embraces several strands of new approaches such as humanism,

behaviourism and spiritualism and reintegrates and refashions them into something different which beautifully accommodates "specifics" into its larger "holistic framework", with a sharp emphasis on the long-range goals of human destiny.

2.2 Systematic Conceptualizations

Franklin Bobbit, writing in 1918, highlighted the need for clearly stated objectives for curriculum building. In a later work, he attempted to derive objectives from activity analysis. However, Bobbit's main emphasis was on the need for specificity, simplicity and clarity in objectives formulation (Davies, 1976, pp. 47-48).

In 1924, Werrett Charters put forward his theory of systematic curriculum design, in which he stressed that the first step in curriculum construction should be the delineation of its major objectives. This should then be analyzed into 'ideals' and 'activities'. Thus he classified objectives as 'ideal' objectives and 'activity' objectives. Ideals like "good citizen" by another. However, both should be further broken down into manageable working units, and their relationships exemplified by means of an 'analysis chart'.

Ralph Tyler improved upon the above work by attempting to produce more systematic and detailed procedure for objectives formulation in his small but revolutionary book *Basic Principles of Curriculum and Instruction* (1969). Among other things, Tyler proposed a two-dimensional matrix (behavior plus content) for stating behavioural objectives. He insisted that objectives should be expressed in terms of both the kind of behavior to be developed in the learning experiences through which to attain given objectives is highly instructive. (Tyler, 1949, pp. 46-50, 63). However, Tyler was mainly motivated by the requirements of accurate assessment and evaluation.

Inspired by Tyler's work on testing and evaluation, Benjamin Bloom and his associates produced an extremely influential book – *Taxonomy of Educational Objectives* in 1956 which dealt with the cognitive domain. Coverage of the affective domain was attempted later by Krathwohl Bloom and Masia in 1964; while Anita Harrow (1972) considered the last domain – the psychomotor. Each of these domains is a large category under which educational objectives are classified in a hierarchical arrangement from simple, low-level learning to complex high-level leanings. These taxonomies attempted a highly sophisticated and detailed treatment of educational objectives and have had a great impact on educational practices at an international level. Their collective influence on objectives formulation and evaluation has been profound. However, you should also be aware of the important contribution of other writers like Mager, Gagne, Taba and McAshan who have contributed immensely to the enrichment and extension of the behavioural approach.

In concluding this review, one must mention the fact that the behavioural approach has come under sharp criticism from several quarters. Perhaps you have formulated some criticisms yourself. If so, note them down and compare them with the views expressed in Section 5 where this issue is dealt with in detail.

2.3 * Taxonomies of Educational Objectives

Several taxonomies of educational objectives have been offered by a number of writers and teams of experts. The ones presented by Bloom, Krathwohl and Harrow for the cognitive, affective and psychomotor domains respectively are very popular and have been extensively used by curriculum planners, teachers and learners. The taxonomies represent classifications of objectives in hierarchical order in each domain and thus provide guidance in curriculum development, in test construction and evaluation and in teaching and learning.

The taxonomies serve several purposes. They help in specifying aims and goals in clearer terms, with the result that they no longer remain vague and hazy. Taxonomies also serve as tools in test construction and evaluation, and enlighten teachers and curriculum planners on several possible categories of objectives for different courses, lessons or tests. Moreover, they can also be helpful in the analysis of tests and examinations and can aid teachers and learners to focus their attention on the relative emphasis they have placed on different categories or levels of objectives.

Let us now look more closely at the work done on the three domains – (a) cognitive, (b) affective, and (c) psychomotor.

(I) *The Cognitive Domain*

Bloom and associates developed this taxonomy which includes six levels or categories of objectives ranging from simple to complex cognitive processes. The levels and their developmental sequence are arbitrary, based on the assumptions of the authors. The same levels may be defined and interpreted differently by other writers. However, Bloom's categories are as follows:

(i) *Knowledge:*

This is the lowest category of objectives in cognitive domain dealing with remembering facts and information. It treats knowledge as product and includes facts, concepts, principles, generalizations, trends, classifications, theories and structures (Michaelis et al., 1975, p. 78). This level does not pre-suppose any understanding and is confined simply to the memorization of the elements of knowledge. Corresponding pupil behaviours include recalling, stating, identifying, listing, describing. An example of an objective at this level would be: to describe the battle of Badr.

(ii) *Comprehension:*

This is more complex than the first category. It involves interpretation and explanation of what was memorized and stored in the mind; and prediction based on material learned earlier. Corresponding pupil behaviours include paraphrasing, summarizing, illustrating, interpreting, explaining, interpolating, extrapolating, predicting etc.

Examples: To illustrate the concept of *Jehad* with reference to Muslim conquests in the early days of Islam. To interpret a population graph.

(iii) *Application:*

This is the ability to solve new problems using previously learned material, concepts, laws, principles and theories in new settings. Corresponding pupil behaviours include solving, modifying, applying, computing, demonstrating, constructing, performing.

Examples: To apply two concepts of civil liberties by stating how they are involved in a recent action taken by the court to protect the rights of minority groups.

(iv) *Analysis:*

This refers to breaking up the whole into its different components, determining their relationships, distinguishing relevant from irrelevant features and recognizing the underlying theory involved. It is a process of reasoning in its highest form. Corresponding pupil behaviours include distinguishing, discrimination, analyzing, categorizing.

Examples: To analyze the components of the cognitive domain.

(v) *Synthesis:*

This refers to the ability to join together different discrete parts to form a new and complete whole. This is a process of reorganization and rearrangement, culminating ultimately in something new and fresh. It involves some sort of creative activity. Corresponding pupil behaviours are designing, creating, composing, formulating, concluding, generalizing, etc.

Example: To draw a generalization from the data collected in an experiment.

(vi) *Evaluation:*

This is the ability to make judgements based on a given set of criteria. Judgements involve a high level of thinking. This is the highest level of cognitive domain. Corresponding pupil behaviours include criticizing, justifying, concluding, evaluating, defending, comparing, contrasting, assessing, etc.

Example: To evaluate the secondary school curriculum in the light of the national Education Policy.

(II) *The Affective Domain*

Krathwohl, Bloom and Masia elaborated on this domain which includes five categories of objectives dealing with values, attitudes, feelings, appreciations and other affective dimensions of learning. The categories are arranged in hierarchical order according to the degree of internalization (Michaelis et al., 1975 p. 79).

(i) **Receiving:** This is the lowest level. It refers to awareness or attention on the part of a learner toward the material being presented. It implies that the communication will

be attended to. Corresponding pupil behavior includes listening, attending, describing, identifying.

Example: To demonstrate an interest in music by listening to it.

(ii) Responding:

The category goes beyond awareness and results in some sort of response on the part of a student, accompanied by a feeling of satisfaction. The student not only attends but also reacts. Corresponding pupil behaviours include answering, reading, greeting, performing, complying, following.

Example: To enter the playground to play football.

(iii) Valuing:

This suggests commitment and the worth a student place on a particular object, material or behavior. Values of students are difficult, but not impossible, to ascertain: clues to one's values may be obtained from one's behavior. Corresponding pupil behaviours are inviting, justifying, supporting, advocating, preaching.

Example: To demonstrate a conviction by writing a letter to the editor of a newspaper on the need to educate the adult population.

(iv) Organization:

This involves conceptualization of values, clarification of relationships among them and organization of a value system. It involves the ability to bring together different values and an attempt to produce a coherent value system. Corresponding pupil behaviours include altering, combining, generalizing, formulating, organizing.

Example: To make a judgment on women's freedom in Islam.

(v) Characterization of a value complex:

This is the highest level which is combined with developing a life style that covers a broad range of activities consistently related with one another. This level may be achieved only in adulthood and is indicative of one's philosophy of life. Beliefs, attitudes and ideas are fused into one integrated whole. Corresponding pupil behaviours include performing, believing, qualifying, questioning, influencing.

Example: To support peace activities in the world.

(III) *The Psychomotor Domain*

Anita Harrow developed this taxonomy dealing with psychomotor activities in 1972. It includes six levels ranging from the simplest to the most complex motor activities. They are as follows.

(i) Reflex Movements:

There are involuntary motor responses to stimuli. They are functional at birth and develop throughout life and include, for example, stretching, stiffening, relaxing, etc.

(ii) **Fundamental Movements:**

These refer to inherent body movement patterns, such as walking, running, jumping, pushing, pulling, and manipulating objects.

(iii) **Perceptual Abilities:**

They involve kinesthetic discrimination, visual discrimination, auditory discrimination and coordination of eye and hand, eye and foot. They help learners to interpret stimuli in order that they can adjust themselves to their environment. Corresponding pupil behaviours include bending, bouncing, eating, writing, etc.

Example: To demonstrate the abilities to copy letters of the alphabet.

(iv) **Physical Abilities:**

They are concerned with the vigour of the person and are, therefore, related to strength, endurance, flexibility, agility and dexterity. Corresponding pupil behaviours include enduring strenuous activity, moving quickly and precisely, touching toes, stopping and starting immediately.

Example: To demonstrate the ability to carry 120 kilograms.

(v) **Skilled Movement:**

These refer to efficiently performed complex movements as in games, sports, dance and the arts. Corresponding pupil behaviours include typing, skating, filling, juggling, playing musical instrument.

Example: To demonstrate the ability to juggle with four balls at a time.

(vi) **Non-Discursive Communication:**

This refers to behaviours that are involved in movement communication, ranging from facial expressions to highly sophisticated communications. Responses in non-discursive communication come more from intuition than from reason. Objectives at this level are related to posture, gestures, facial expression and interpretive movement through creative expression.

Example: To move expressively so as to communicate emotions.

Although the three principal domains of educational objectives have been treated separately, they are fundamentally inter-related to each other. "When a student reviews a poem he not only uses cognitive analytical skills but also gives his valuing and organization of values by the selection of certain skills and the insistence upon a set of criteria in evaluating and ranking the poem and poet". Besides, the differences between various levels in the domains and the examples of corresponding pupil behaviours are not inclusive. An overlapping repetition of terms between and across the domains is possible and real (Leonard and Utz, 1974, p. 83).

In spite of several limitations, the taxonomic approach is useful in many ways. As indicated before, it is helpful in planning the curriculum and in teaching and evaluation. The various domains make us attentive to the different levels or categories of

objectives, some of which might otherwise be ignored in the educative process. These taxonomies have provided a great impetus to thinking in the field of learning and education. However, they should be handled intelligently, with due regard to the nature of the subject, its methodological treatment and other genuine concerns.

(c) Activity

Go through the curriculum of different subjects at, Secondary/Intermediate levels and identify the objectives to be achieved under the following domains:
Cognitive domain
Affective domain
Psychomotor domain

2.4 Self-assessment Questions

(I) Re-arrange the following categories of objectives in their proper order from simple to complex.

- a. (i) analysis (ii) application (iii) knowledge (iv) synthesis (v) evaluation (vi) receiving
- b. (i) valuing (ii) organizing (iii) receiving (iv) characterizing (v) responding

(II) For each of the items on the left hand side, choose the objective category on the right that goes with it, as already mentioned under the three principal domains of objectives classification. Put the letter on the line.

- | | |
|--|---------------------------------|
| 1. Deals with explanation and interpretation | a. Skilled movement |
| 2. Deals with critical judgment | b. Knowledge |
| 3. Deals with the preference of choice | c. Evaluation |
| 4. Deals with a generalized not a coherent values | d. Non-discursive communication |
| 5. Deals with expert skills | |
| 6. Deals with expressive movement | |
| 7. Deals with willing response | e. Characterization |
| 8. Deals with recalling of facts, principles and theories. | f. Comprehension |
| | g. Valuing |
| | h. Responding |

(III) Encircle the most appropriate item in the following statements:

1. Workable statements of behavioural objectives have been offered by:

- a. Tyler
- b. Bloom
- c. Harrow
- d. Krathwohl
- d. All of the above

2. The first modern attempt at the scientific treatment of behavioural objectives is associated with:

- a. Tyler
- b. Taba

- c. Gagne
 - d. Mager
 - e. Bloom
3. **The taxonomy of the cognitive domain was first attempted by:**
- a. Taba
 - b. Bloom
 - c. Harrow
 - d. Krathwohl
 - e. None of the above
4. **The true Origin of behavioural statements lies in:**
- a. The works of Bobbit and Charaters
 - b. The scientific concept of operationalism
 - c. The verses of the Holy Quran
 - d. The works of Johann Herbart
 - e. The works of Herbert Spencer
5. **The Quranic behavioural statements are characterized by:**
- a. Clarity
 - b. Behavior specification
 - c. Action verbs
 - d. Overt as well as covert behaviour
 - e. All of the above
6. **The Quranic behavioural statements, as found in different "Suras", are actually:**
- a. Short
 - b. Long
 - c. Explanatory
 - d. Clarificational
 - e. All of above
7. **From the viewpoint of curriculum building, systematic conceptualizations of objectives started with:**
- a. Bobbit
 - b. Charters
 - c. Tyler
 - d. Both a. and b.
 - e. Both a. and b.
 - f. None of the above

(IV) Study the following items very carefully. First, identify the realted domain and them determine its level. Place A for Affective, C for Cognitive and P for Psychomotor domain in the space provided in front of each item. Indicate the

exact level (category of objective) in symbols using the first two letters for various levels in the cognitive (a's for "analysis" and 'ap' for "application") and the first three letters in both the affective and the psychomotor domains, e.g. 'race' for "receiving" and 'per' for "perceptual" abilities.

Domain	Level	Items
_____	_____	1. The pupil writes a letter.
_____	_____	2. The pupil writes a creative letter.
_____	_____	3. The pupil likes creative letters.
_____	_____	4. The pupil writes a letter to the editor urging him to fight the problem of provincialism.
_____	_____	5. The pupil states the causes of the emergence of the Third World.
_____	_____	6. The pupil distinguishes between matter and energy.
_____	_____	7. The boy shot down a flying pheasant.
_____	_____	8. The girl smiles at the dramatic performance of her classmate.
_____	_____	9. The teachers condemn malpractices in the examination hall.
_____	_____	10. The pupil develops his personal philosophy of social welfare.
_____	_____	11. The pupil interprets the meaning of social justice in Islam.
_____	_____	12. The pupil criticizes the method of teaching.
_____	_____	13. The pupils run a 200 meter race.
_____	_____	14. The pupil listens to the viewpoint of others.
_____	_____	15. The pupil uses his knowledge of economics in the market.
_____	_____	16. The pupil develops a new design of the building after the study of several designs.

1.
 - a) In what sense is the Quran the first educational document on the behavioural approach to objectives? Clarify and explain in paragraph.
 - b) List two distinctive qualities of Quranic behavioural statements and describe each very briefly.
2.
 - a) Write a Quranic statement of goals along with its corresponding behavioural objectives.
 - b) Analyze Quranic behavioural objectives of any statements of goals with reference to the modern approach; and indicate their peculiar characteristics as actually found in the statements under study.
3. Indicate the contributions of Bobbit and Charters to the systematic conceptualization of behavioural objectives. Mention only two points, one for each.
4. Briefly describe Tyler's thinking concerning behavioural objectives.
5.
 - a) Develop a rationale for the taxonomical treatment of objectives.

- b) List all the levels of the cognitive domain, explaining the first and the last level with the help of one example for each level (in terms of corresponding pupil behavior only).
6. a) Inter-relate the various levels of the cognitive domain in running paragraph.
 b) Show the difference between the lowest and the highest level of the affective domain.
7. List the various levels of the psychomotor domain. To which of these levels are reading and writing related and how? Briefly explain.

Answers:

- I a) iii, vi, ii, i, iv, v
 b) iii, v, i, ii, iv
- II 1. f 2. c 3. g 4. e 5. a 6. d 7. h 8. b
- III 1. e 2. a 3. b 4. c 5. e 6. e 7. d
- IV. 1.p (per) 2.c (sy) 3.a (vak) 4.a (val) 5.c (kn) 6.c (an) 7.p (ski) 8.p (non) 9.a (v)
 10.ā (char) 11.c (co) 12.c (ev) 13.p (fuh) 14.a (rec) 15.c (ap) 16.c (sy)

3 THE DEVELOPMENT OF OBJECTIVES

3.1 The Main Approaches to Stating Educational Objectives

Objectives can be defined and stated from the standpoint of teacher behavior content and pupil behavior (Tyler, 1949, pp.44-47) and Bloom, pp.22-24).

(i) The Teacher-centred Approach:

This approach emphasizes teacher behaviours in the statement of objectives, as is illustrated in the following examples:

- To discuss the emergence and achievements of the Third World.
- To illustrate the Quranic principles of the rise and fall of nations.
- To expound the social theory of Shah Waliullah.
- To discuss new teaching approaches.

The above statements indicate what the teacher intends to do, but they do not reveal what behavioural changes are to be developed among students. Thus such statements may be helpful to teachers in planning classroom tactics. But it is the change in learners' (not teachers') behavior that justifies teachers' activity. In this way, this approach ignores the learner's position. Hence this approach is indirect and subsidiary.

(ii) Content-centred Approach

The second approach to stating educational objectives is content-oriented. The content or subject-matter to be covered in a course is detailed, as in the following examples:

- Iqbal's theory of ego
- The life and activities of Imam Shamil
- Sura Al-hijrat
- The contribution of Muslim culture in Spain

The content is reactively clear, but what is not clear is what is to be done with this content and what behavioural changes in students are desired in relation to the content. The content which can be manipulated in several ways is a means to develop certain intellectual and social skills or processes in the learners. It must be subordinated to this central purpose. Hence this approach, too is incomplete and inadequate.

(iii) The Behaviour-centred Approach

Some writers over-emphasize the desired pupil behavior to the exclusion of content. Incomplete formulations such as "to develop creative thinking", "to improve problem solving skills", and "to develop a spirit of inquiry" are presented as educational objectives. These statements are too vague and general to provide direction in the actual classroom situation. They must be properly defined and accompanied by the related content. Without the specification of content, the selection of suitable materials and teaching strategies become impossible. This approach is, therefore, also incomplete and unrealistic.

(iv). *The Behaviour and Content Approach*

After considering the above three possible ways of stating objectives, Tyler (1949, pp. 47) came up with another model: pupils' behaviour plus content. He advises us to specify both the kind of behaviour to be developed in the learner and the content or area of life in which this behaviour is to operate. Thus, if critical thinking is the desired pupil behaviour, this must also be accompanied by the related content, for example, science, history or language.

3.2 Writing Behavioural Objectives

Writing behavioural objectives is a highly technical and complex task. It involves several aspects such as deciding on the elements of objectives, seeing, taxonomic relevance, choosing proper language and sequencing. Each of these requires understanding and experience. Tyler, Mager, Michaelis, MaAshan, Gronlund, Leonard, Utz and several other writers have developed typical forms. It is neither possible nor desirable to survey all these different formats. However, a few significant viewpoints are mentioned for your consideration and use.

Authors differ over the necessary elements of a behavioural objective. Tyler proposes two, Mager three, Leonard and Utz four, Kibler and associates five and Michaelis, Grossman and Scott as many as six elements for really complete behavioural objectives.

Tyler (1949, p. 46) insists that both the intended pupils' behaviour and the related content or area of life must be included. Mere indication of behaviour is not enough; the content related to that particular behaviour must also be specified.

Example: To illustrate the law of supply and demand.

To develop critical thinking in mathematics.

'Illustrating' and 'developing critical thinking' indicate behaviours, while 'the law of supply and demand' and 'mathematics' point to the related content. This is the general pattern that is adopted in most curricular materials.

However, Robert Mager (1962, p. 12) mentions three elements of a specific objective. His approach is also very popular and has greatly influenced the thinking and practice of writers and educational practitioners. The three elements are as follows.

- a) The desired terminal behaviour that we want the student to perform should be clearly specified.
- b) The objective should state the important conditions (materials, procedures, activities, etc.) under which the students are to perform the desired behaviour.
- c) The criteria of acceptable performance should be specified.

However, Mager is of the view that all three elements need not necessarily be present in each objective statement. The central purpose of writing behavioural objective, he clarifies, is to communicate clearly the intent of a lesson course or unit. That's all of course, Mager, lays special stress on the "doing" aspect of behavioural objectives. "An objective is useful to the extent that it specifies what the learner must be able to do or perform when he is demonstrating the mastery of the objective" (Mager, 1962, p. 13).

Example: The student will list (behaviour) at least three causes of the revival of Islam (criteria) as given in the class text book (conditions).

It is interesting to note that Leonard and Utz recommend four elements; Kibler, Barker and Miles, five; elements and Michaelis, Grossman and Scott as many as six elements for complete performance objectives. These six elements are concerned with time, person behaviour, object, performance level and conditions. The format is reproduced below:

- a) *Time*: Indicate the time by which a student should meet the objective, e.g. 'after completing this lesson' 'at the end of the unit' 'by the end of the year'
- b) *Who*: Note whether all or only certain students should attain the objective, e.g., 'students who have complete' '80% of the students' 'all students should.'
- c) *Behaviour*: Note the behaviour to be observed, e.g. state, describe, list, name
Arrange
- d) *Object*: Note the criteria of performance that are desired, e.g., 'at least three'. '100% accuracy
- e) *Conditions*: Indicate related activities or materials that the essential, e.g., 'given a ruler and pencil; 'using a dictionary; when given three choices' (Michaelis et al 1975, pp 85-86).

Example: By the end of the term, all the students of the course of Islamic Culture' will be able to complete a 100 item multiple-choice examination on the topic of Muslim contributions to science within one hour duration, with 70 correct answers as a lower limit of acceptable performance.

In this example, the desired behaviour is the completion of the examination. The conditions are the 100-item multiple-choice test and the one hour time limit. Muslim contributions to science represent the object and the criterion is 70 correct answers. Other elements of this format are obvious.

The above format is exhaustive, covering almost all the possible aspects of an ideal objective. It must, however, be mentioned that most curricular materials do not generally contain all these elements. They are mainly confined to the specification of 'behaviour' and the related 'object' or the content. The most important point in behaviour specification is effectiveness of communication. And it is neither necessary nor desirable to follow completely any one format. These different approaches are simply meant for general guidance. Therefore Pakistani teachers and planners should feel free in adapting these approaches to their typical conditions and working environments.

Relevant educational taxonomies may be used for guidance. These will help considerably in selecting the desired learning level and matching it to the appropriate word that describes the behaviour. If the teacher wishes a student develop his or her

cognitive powers, he can have a look at various levels of the cognitive domain, select the suitable level and proceed methodically in objectives formulation. Thus he can get to know the various aspects of 'cognition', its progressive development and the related action-verbs pertaining to each level or aspect. This is how taxonomy may be used as a tool for writing objectives.

The language of objectives should be very simple and clear. Although it looks plausible that behavioural statements should be stated in a single sentence, it is not necessary that they should always be in this form. More than one sentence may be used to write a behavioural objective (Leonard and Utz, 1962, p.90). Clear, operational and action verbs should be used and ambiguous verbs avoided, as should, be-clear from the following examples:-

Action Verbs

to define
to classify
to analyze
to compare.
to compute
to list

Ambiguous Verb

to know
to understand
to appreciate
to enlighten
to learn
to respect

In addition, behavioral objectives should be properly *sequenced* in progressive order to facilitate the achievement of the intended educational goal. Thus, they should move from simple to complex categories. Sequencing objectives helps teachers to focus their attention on several dimensions of knowledge, values and skills. They no longer remain confined to a few limited learning, as is often the case in traditional instruction. Many new avenues are thrown open to them by way of this analytical approach.

In conclusion, besides the above considerations, several others should also be kept in view while writing behavioral objectives, e.g., the nature of the subject, the grade level, teachers' competencies, future learning and the distinction between closed and open objectives. (An open objective is meant to develop creative behavior, while a closed objective is designed for repetitive performance).

3.3 Self-assessment Questions (Pick out action verbs from the following :)

- | | |
|---------------|----------------------|
| 1. know | 9. compare |
| 2. comprehend | 10. contrast |
| 3. understand | 11. distinguish |
| 4. list | 12. write critically |

- | | |
|------------------|--------------|
| 5. state | 13. write |
| 6. appreciate | 14. speak |
| 7. appreciate | 15. describe |
| 8. differentiate | 16. Apply |

II. (a) For each item on the left, choose the appropriate items on the right and put the letter in the blank space provided in front of each statement. All items on the left should be read as: A complete behavioural statement should contain, for example:

(b) Indicate in the blank space, different elements of behavioural objectives associated with the names of the authors given at the left side. Simply put the letters that represent elements.

- | | |
|----------------------|--------------------------|
| a. time | e. product or result |
| b. person | f. conditions |
| c. behavior | g. performance criteria. |
| d. content or object | |

1. Tyler
2. Mager
3. Michaelis and associates

III. Distinguish between correctly and incorrectly stated behavioural objectives in Accordance with Tyler's form. Write "c" for correctly stated and "i" for incorrectly stated objective.

1. To enable the students to write
2. To develop in students habits of thinking in history.
3. To be able to analyze the factors of production.
4. To be able to write a paragraph in Arabic.
5. To develop effective speech habits among students
6. To be able to appreciate, this poem with great pleasure.
7. To be able to identify letters or alphabet.
8. To prepare a summary of the proceedings of the students' council
9. To be able to distinguish between an assumption and an hypothesis
10. To write a creative letter in Urdu in the style of Ghalib without making any tense mistakes.

1. List the various aspects involved in writing behavioural objectives. Briefly describe any two of them.
2. Why are non-action verbs discouraged in writing behavioural statements? Give one important reason.
3. How are disciplines! a source for deriving curriculum goals and objectives? Explain with the help of two examples.
4. Write two examples of behavioural objectives for each of the following authors in their typical format.
 - a. Tyler
 - b. Mager
 - c. Michelis and associates

Answers

I.	4	5	8	9	10	11	15	16
II.	(a)	1 d	4.	C	(b)	1.	C and d	
		2 c	5	b		2	c, f and g	
		3. a				3.	A, b, c, d, f and g	
III	1	I		5.	I	9	c	
	2	C		6.	I	10	c	
	3	C		7.	C			
	4.	C		8.	C			

4. A CRITIQUE OF MODELS OF OBJECTIVES

This section attempts to present a critique of behavioural objectives as voiced by the opponents of this model. The alternative models, "process" and "humanistic" will be briefly explored and their weaknesses indicated. This will be followed by an outline of a proposed model suited to Pakistani youth.

4.1 Criticism of the Behavioural Objectives Model

The behavioural approach to objectives which has been so much popular, especially during the mid 1960, has been subjected to criticism from. Several quarters. Humanists and process-oriented scholars among others are strongly opposed to the objectives model. The protagonists as well as the opponents both are busy clarifying their viewpoints. However, it appears that James Popham's car sticker slogan 'Help stamp out non-behavioural objectives' has undergone some positive changes. The modified approach reads 'Help stamp out some non-behavioural objectives'. Let us now review some of the major points of criticism of the objectives model.

The most important allegation is that it is nakedly dehumanizing as it treats human behaviour mechanically and fails to take care of the affective side of human life beliefs, feelings, hopes, attitudes and concerns. Truly human problems like the development of the self-concept, self-actualization, the development of responsibility and other such humanistic goals are simply ignored (Combs, 1975, p. 124). The human organism, it is claimed, is not a finished product; hence it is not reducible to a set of prescribed behaviours. Rather it offers rich possibilities of 'becoming', which should be the real goal of education. "What can man become is the most significant question in curriculum studies (Zais, 1976, p. 14). The critics repeatedly point out that the subjective or inner side of human life is more crucial and important than the objective or outer one. That is why Eisner strongly supports "expressive objectives" which are evocative rather than prescriptive (Stenhouse, 1975, p. 78).

Another fundamental objection is that the model is mistaken about the nature of knowledge. It simply capitalizes on the fact that it makes knowledge fragmentary while knowledge, in fact, is synthetic concerned with integration (Stenhouse, pp 79-83). The model does not deal properly with higher-order tasks such as holistic thinking, internalization and appreciation of art and literature. It is suitable, it is argued, for lowest levels of learning and thus trivializes learning and the curriculum. Besides, the approach ignores the 'tacit' dimension of knowledge, a kind of knowledge which is simply indescribable but real, lasting and useful (Zais, 1975, pp. 313-314 and Davies, 1977, pp. 63-64). The relationship between knowledge and behaviour is indirect and complex. Knowledge may find expression in a variety of behaviours (Simons, 1974, p. 379).

Stenhouse points out that the objectives model not only mistakes the nature of knowledge but also the nature of process of improving educational practice as well. Since the whole attention is focused on progress rather than diagnosis, and all efforts are

directed towards the clarification of ends and purposes, there is little guidance for teachers to better their teaching practices.

This behavioural approach does not differentiate between training and education and is mainly confined to the former, is another objection voiced by critics. Training involves specific behaviour, while education involves patterns of generalized behaviour of a high order. This, it is asserted, renders the behavioural approach irrelevant to the process of 'education'. Education deals with the total personality of the child and its aims and goals are different from those of training and instruction. Some behaviourists attempt to resolve this problem through developing comprehensive lists of specific behaviour. But since "behavioral pursuits" lay heavy stress on maximum specificity, this turns curriculum development into an area clustered with millions of specifics which is obviously unsound and unmanageable. (Zais, 1975, pp. 314-315).

Further, Jackson argues that pre-specification of explicit objectives can adversely affect the teaching process because the teacher, in that case, may ignore several instructional opportunities unexpectedly occurring in the classroom. Thus prior conditioning may blind him to the use of novel, fruitful situations. The realities of the classroom must be squarely faced. Mere logic will not do; warns Stenhouse (1975, pp. 73-74). Furthermore, the pre-specification of ends amounts to clear indoctrination i.e. knowingly fashioning and moulding the young in a specific direction. That is why Kliebard equates behavioural teaching with brainwashing and indoctrination. (Stenhouse, 1975, pp. 74, 75, 81).

In addition, it has been suggested that certain areas of knowledge such as fine arts and the humanities do not easily lend themselves to the behaviouristic approach; and that it is extremely difficult to identify measurable pupil behaviours in these subjects.

Robert S. Zais, (1977, pp. 3 15-3 16) =1 the dogmatic application of the principle of operationalism underlying model. He feels that the principle must be applied liberally and openmindedly and that objectives should not be considered as completely independent units or dead ends towards which the action is directed. And knowledge gained through objectives must not be considered final and completely dependable. Hence placing full faith in the infallibility of the behavioural model is unwarranted and unjustifiable.

Yet more practical problems plague the behavioural approach. It is said that developing behavioural statements is too time-consuming a business for teachers. And all forms of behaviour do not easily submit to the precise quantification or accurate assessment that lies at the heart of this approach. Furthermore, teachers feel threatened because of accountability.

Last but not the least, the objectives approach has been called a "a political move for the purpose of accountability; hence it is a part of a political dialogue rather than an educational one concludes Stenhouse (1975, p. 77). Thus it is argued that the issue is a complex one, involving several socio-political factors.

I hope that as you have been reading this section, you have formed opinion of your own on the validity of these criticism of the behavioural objectives approach. My view is that the accusations are partly true and partly misplaced. It is true that overt behaviour is overemphasized at the cost of significant subjective behaviour but it does not follow that overt behaviour should not be studied and developed with clarity, precision and accuracy. As regards knowledge, it is, of course, integrative in character but no individual can digest it in its ideal form. It has to be analysed and presented to learners in bits as the occasion demands. Thus the fundamental objection of knowledge fragmentation is misconceived or misunderstood. Analysis should not be equated with triviality. As for prespecification of clear ends, it is something positive and constructive that guides and facilitates learning. Clear goals must be preferred to vague undefined distinctions. However, there should be enough scope for accommodating incidental learning. Rigidity is surely bad.

Possibly you are still uncertain about where you stand in this controversy. If so, I hope that the additional information on the process and humanistic models which follows will help you to clarify your opinions.

4.2 The Process Model

Lawrence Stenhouse is one of the chief advocates of the process approach. As has already been noted, this model is opposed to the objectives model. It emphasizes process rather than product (Stenhouse, 1975, p. 92). It is, therefore, concerned with means rather than ends. And since process connotes an on-going activity, the model has strong leanings towards freedom and spontaneity in teaching and learning of new uncharted paths of knowledge. The process model is fundamentally open-ended and inquiry-oriented. Actually, it is wedded to the thinking of Bruner; he lay heavy stress on "fluid enquiry" and on the "structural components of disciplines".

The advocates of the process approach argue that prior detailed specifications of intended human behaviour are neither necessary nor useful. Rather these impose unnecessary constraints on the learning process, making it dull and mechanical. Knowledge, they believe, should be 'discovered' and aims and objectives must emerge from within the content during learning encounters. So aims and objectives should grow from within as John Dewey (1951, p. 103) had long ago suggested and should not be imposed from outside.

The concepts of 'structure' and of 'worthwhile activities' underline the process model. It is believed that it is possible to select curricular content and judge its worthwhileness without reference to objectives. For example, scholars like Peters and James D. Rath (1974, p. 375) have proposed criteria of worthwhile activities. It is further maintained that each discipline or form of knowledge has its own structure which possesses intrinsic value and that each area of study reveals or suggests its own principles of procedure, concepts and suitably be used in content selection, in teaching and evaluation.

The very form of knowledge suggests how the content should be treated and handled, arts possess intrinsic content and suggest their own method of inquiry. Thus speculation, inquiry, intuition, depth of understanding and open-mindedness are greatly emphasized in this model. It is a quality-oriented, critical model which is not directed towards the accurate assessment of anticipated end-products.

What would this process model look like in practice? The Humanities Curriculum Project in England and the Social Science Curriculum Course - Man: A Course of Study' - in the U.S.A. may be cited as examples of its implementation. No specific objectives were formulated in advance. The most valued changes in behaviour were not anticipated in detail. Rather ambiguities were favoured and the subjects were taught by the discovery approach (Stenhouse, 1975, pp. 91-93).

However, these projects entailed a number of difficulties because this model is not without weaknesses: Stenhouse himself recognizes that it is highly exacting and only scholarly teachers can handle it properly. And it is more suited to the needs of gifted than average students. It is a teacher development model with a sharp emphasis on knowledge and depth of understanding. Thus the learner tends to be relegated to the background.

The process' model, as we know, is based on the idea of the structure of disciplines. And it is interesting to note that the chief exponents of disciplinary content have already begun to realise their mistakes. Bruner has revisited *his Process of Education* and is no longer so enthusiastic about pure academic content. Phenix and Schwab have also revised their stance in favour of a multidisciplinary approach to curriculum building (Tanner and Tanner, 1975, pp. 413-414, 416). Thus the very foundation of the process model has been undermined. Now Bruner talks of more students problems than of structural components. The prophecy of goodlad has come true.

Besides, does the process model satisfy humanistic concerns? It is purely a logical model and consequently fails to take care of the affective side of life. Its main emphasis is on inquiry, knowledge and depth of understanding and these have nothing to do with sensitivities and humaneness.

4.3 The Humanistic Model

As for the humanistic model, it is focussed on liberating and actualizing human potentials. It is characterized by becoming, happiness and search for meaning. (Zais, 1976, p. 3 17). This approach has taken several forms. The liberal arts curriculum is perhaps the oldest design. A.S. Meill's Summer-hill School represents one category. Paulo Freire (1971)

Suggests another and silberman (1975) sounds somewhat different note. Iven Illich (1971) goes to the extreme of deschooling society. Anyway, the common thread that unites these various forms is humaneness.

4.4 Synthesis

The old and new models vary greatly in emphasis, with the former stressing the

intellect and the latter being mainly feeling-oriented. In fact, no single approach is adequate in itself. The principal models discussed above display weaknesses as well as strengths. Each, with its own limited conceptual framework, lacks comprehensiveness and balance. Consequently, each has failed to fully realize the actual difficulties faced by teachers and students.

Detailed pre-specifications of learners behaviour and limiting the entire teaching to foreseen ends with no scope for flexibility and humanistic values is a short-sighted view of education. On the other hand, aimless activity fed simply on discipline content with no clear direction stands equally challenged. Reality lies somewhere in between these approaches. Some sort of workable synthesis is the needs of modern times and there are indications of such a synthetic approach.

Behaviourism and humanism are getting closer to each other, and a new synthesis is on the verge of appearing (Ricks, Wandersman and Poppen, 1976, pp. 383, 391). We are now a days constantly reminded of the significance of comprehensive approaches, such as the 'life history framework', the 'ecological approach' and 'transcendence'. Following slavishly in the footsteps of any one approach without critical examination of its worth and suitability is simply suicidal. We must adopt a bold realistic attitude towards curriculum models. (Robert S. Zais, 1976, p. 316). There is nothing sacred about them. Zais displays this spirit beautifully when he says "As curriculum dogma, both behavioural and non-behavioural objectives deserve rejection" (1976, p. 316).

The world is moving towards unity, synthesis and integration at all levels, personal, national and international. Even the physical phenomena are no exception to this. The recent discovery by the Nobel Prize Winner Dr. Abdus Salam isre, we should develop a conceptual framework that unifies the various. Is them into an integrated whole. It must be comprehensive and unify transcendence (Phenic, 1974, pp. 118-132) appears to be the future hope of the curriculum education and humanity. The best version of transcendence islam which is highly comprehensive, balanced and integrated in character, encompassing all aspects of human of human life with full scope for future developments. Actually, Islam is predominantly future-oriented but with full realization of the present an the past. It starts with the 'real' and moves towards the 'ideal'. It embraces matter and spirit, the outer and the inner, intellect and emotion, knowledge and institution, change and performance, the self and then on-self, the present and the future in its bread sweep with full scope for emerging problems" and crises (Qutub, 1963, pp. 97-98). The Holy Quran is the best manifesto for the general guidance of humanity, education and the curriculum.

4.5 A Proposed Pakistani Model

The Pakistani model of curriculum objectives should be developed with reference to our peculiar situation, keeping in view our ideological commitments, teachers' capabilities, their daily teaching load, the nature and demands of different subjects, humanistic considerations, aesthetic sensitivities and the socio-cultural context in which

the educational drama is being staged and acted. Due consideration should be given to new trends and approaches in the professional field and some of these may be assimilated into our model after through critical examination and scrutiny.

Since the Quran emphasizes purpose, clarity and effective communication, we must have clear-cut aims to start with. The fundamental aims will be stable and permanent while others will change with the march of time. These aims must embrace the various aspects of human life including emotion and intellect, the behavioural and non-behavioural, the material and spiritual, the process and the product. We should never allow our vision to be blurred by transient intellectual idiosyncracies tempered with emotion. Beliefs, values and ideals constitute the core of Islam, and we should not shy away from our cultural core. A balanced and creative synthesis should be our goal.

Coming to behavioural objectives, I would like to emphasize that the broad concept of human behaviour, as contained in the Holy Quran and demonstrated earlier in this section, should be utilised in objectives formulation. We need not avoid operationalism nor should we follow it blindly and push it beyond reasonable limits. In the same way, humanistic concerns should not be considered taboo. No banishment but constant dialogue and accommodation should be the motto of a curriculum developer. However, we must resist the temptation to follow rigidly any one taxonomic approach in its entirety. An attempt should be made to try to bridge the gap between 'behaviour' and the 'behaving individual'. Behaviour should be approached in the Quranic perspective, with ample scope for feeling and sensitivity. We should not sacrifice or distort reality for the sake of inspired rigid objectivity.

As for the level of specificity of objectives, no hard and fast rules can be formulated. Effective communication appears to be a useful working criterion. Also the nature and demands of a subject will further determine the position. In general, however, over-detailed specification should be avoided, with highly technical and complex formats being used only at critical points in planning, programming and teaching. We should utilise the principle of operationalism but with sense of preparation and balance.

The Pakistani model thus conceived would not be a prototype of any existing, be it behavioural, humanistic or any other. Rather it would transcend all these approaches in a peculiar fashion, combining creatively the healthy points to the Islamic framework as applied in the Pakistani situation.

In brief, the Pakistani model must emerge from the educational soil of Pakistan with reference to Islam and our typical educational situation. Thus cultural relevance, comprehensiveness, balance and dynamism are the four cardinal principles of this proposed Pakistani model.

In conclusion, we would like to quote of few verses from the poet of the east which are relevant at this point:

4.6 Activities

1. Meet a farmer, a businessman, a labourer, a politician, a student and a shopkeeper. List their two most significant aims in order of priority. Then study their comparative positions and reflect on the implications for Pakistani education.
2. Develop your own list of aims for Pakistani education and discuss it with your class fellows. On which aims is there agreement or disagreement? How would you go about resolving any disagreement?

4.7 Self-assessment Questions

1. List any six points of criticism of the objectives model and critically analyze them.
2. Explain how does the process model differ from the objectives model?
3. Explain in what ways the humanistic model is different from the process model?
4. Critically evaluate the proposed Pakistani model of the curriculum, suggesting modifications where necessary.
5. Develop an outline of your own model of the curriculum, preceded by a detailed rationale.
6. Study critically the first chapter of the Report of the Commission on National Education 1959 (a) indicate the phrases or statements that are aims, goals and objectives from a technical viewpoint (b) Outline the rationale given for any two aims or goals (c) Give your own comments on the proposed aims/goals/objectives of education in respect of their format and adequacy
7. Study the statements of aims in the New Educationally analyze them from a technical viewpoint and indicate their strengths and weakness (if any).

Answers to self-assessment questions please see the unit.

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