

## CURRICULUM APPROACHES (4<sup>TH</sup> SEM)

The curriculum approaches are discussed in this section with a view to provide insights into the nature of the new Basic Education Curriculum in Mozambique. However, the pertinent reflections are made in section 2.3.7. According to Marsh and Willis (1999:18) curriculum approaches are:

different ways of thinking about curriculum and of connecting thought with practice, whether the many beliefs and ideas that constitute any particular curriculum approach are made explicit or remain implicit.

According to Ornstein and Hunkins (1993) the main curriculum approaches are the following:

- Behavioural
- Managerial
- Systems
- Academic
- Humanist

An expository discussion of those approaches follows:

### **The behavioural approach :-**

The behavioural approach is the oldest and still the reference approach to curriculum. —Behaviourism is primarily concerned with observable and measurable aspects of human behaviour (Standridge, 2002:1). According to Power (1982:168), the basic principle of behaviourism is:

Whatever can be known about human beings must come from an observation of behaviour, moreover, must be conducted according to the strict methods of scientific procedure that is used in the physical sciences.

So, the behavioural approach is logical and prescriptive and grounded on technical and scientific principles. It comprises paradigms or models as well as gradual and detailed strategies for formulating curriculum. This approach is generally underpinned by a plan specifying goals and objectives, contents and sequenced, structured activities, methodologies, and learning outcomes with corresponding criteria and evaluation forms, taking into account the established curriculum goals and objectives. Thus, the behavioural approach covers the curriculum development in its wider sense. It is not restricted to curriculum evaluation only. Williams (2002:2) avers that:

Behaviourists have a solid conviction that environmental forces responsible for making us what we are must be organized with extreme care and be reactivated in the school's curriculum with the same scientific precision that engineers employ when they design a complicated machine.

In fact, the behavioural approach is orientated to the behavioural objectives, which according to Zais (1976:312) —are simply objectives in terms of the observable behaviour expected of students after instruction. This means that the behavioural approach focuses on what learners should be able to do as a result of the teaching and learning process (Posner, 2004). Indeed, if curriculum workers are to agree on the meaning of the objectives that students are supposed to fulfil, they also need to agree on the operational criteria that express those objectives. In other words, everyone concerned with behavioural objectives, on the one hand, should know exactly what a given behavioural objective means; and on the other hand should be able to determine to what extent it has been achieved after instruction (i.e. teaching and learning process). Furthermore, as Standridge (2002) points out, behaviourists argue that human behaviour is learned although all behaviours can either be unlearned or relearned. This qualification should be taken into account in the process of curriculum development, especially in the curriculum design. At this point it is apposite to recall the observation by Lovat and Smith (2003:17) that —product and process cannot be separated: the process is the product: the way we learn is what we learn: we learn what we do. Hence, the behavioural curriculum approach implies a plan specifying goals and objectives, contents and sequenced, structured activities, methodologies, learning outcomes with corresponding criteria and evaluation forms, as noted above.

Alternative appellations for the behavioural approach are logical-positivist, conceptual-empiricist, and experientialist, rational-scientific and technocratic (Ornstein and Hunkins, 1993:2). It has recently regained much of its importance with the movement towards outcomes-based curriculum. These learning outcomes are skills, knowledge and behaviours embodied in the national curriculum and are the basis of all external exams and tests as well as reports on pupils' learning. Moreover, the learning outcomes are fundamental requirements or benchmarks designated to hold schools and teachers accountable in terms of producing verifiable evidence of the adequacy of learners' achievement (Lovat & Smith 2003). A careful reading and analysis of guidelines drawn up for the Mozambican new curriculum for basic education contained in a document titled —Curriculum Framework of Basic Education PCEB, will recall that the said curriculum is premised on the behavioural approach. However, the teaching methodologies suggested in the new curriculum, specifically in the syllabi or teaching programmes, are clearly constructivist. In fact, the PCB shows that the overall exercise of curriculum change started with a thorough audit of learning outcomes (i.e. skills, attitudes, knowledge) as a measure of the effectiveness of the curriculum declared defunct. The outcomes were measured against the general objectives set up in the National Education System Act for basic education and re-elaborated as the foundation stone of the new curriculum. With a view to integrating curriculum through interdisciplinary strategy the re-elaborated objectives form the intended graduated profile or outcomes for basic education in that the general objectives are reflected in each curricular subject and specific objectives are derived from them. The selected content and learning activities are aimed at realising the objectives. The syllabi or teaching programmes are the official documents which incorporate the learning objectives in general and in specific terms, the selected content or activities and the foreseen learning time of each selected learning experience. The methodological suggestions, broadly referred to in PCEB, are also included in the syllabi. These methodological suggestions are oriented to student-centred learning, based on a constructivist, reflective, interdisciplinary and spiral teaching-learning approach, designed to develop basic skills, attitudes and knowledge. For instance, in the Natural Sciences Teaching Programme (an integrated component of the Teaching Program for Basic Education in the Third Learning Cycle), the principle is emphasized that the learners, children are not —a clean slate.

When they start school they have already acquired a considerable body of knowledge through observation, activities, games and imitation of adult behaviour. So, the learners normally have an intuitive explanation of some natural phenomena. The teacher must know about these intuitive ideas (preliminary knowledge) and use them as starting point for the construction of a scientific vision. Von Glasersfeld (1996:7) notes in this regard that —the task of the educator is not to dispense knowledge but to provide students with opportunities and incentives to built it up|. Simultaneously, the teacher contributes to eliminate students' misconceptions formed by misinterpreting daily life experiences. The teacher bridges the gap between intuitive and scientific knowledge through dialogue and reflection; indeed, this kind of communicative teaching is essential when using constructivist methodology. Incidentally, Von Glasersfeld (1996:7) observes that —language is the most powerful tool available to the teacher, but it does not transport meanings or concepts. Language enables the teacher to orient the student's conceptual construction by precluding certain pathways and making others more likely|. Lieberman (2001:160) argues that —teaching is both transmitting and engaging in transactional learning|. The Natural Sciences teaching programme refers to this constructivist approach as mind challenging, transposition, elicitation and consolidation of knowledge.

The behavioural approach is strongly linked to the idea of efficiency (cf. Ornstein and Hunkins 1993; and Smith 1996, 2000) which is largely imported from business, technological and industrial settings, where they are supported by the scientific management theories of Frederick Taylor. In this regard, Ornstein and Hunkins (1993:2) note that —often ensuring efficiency in schools meant eliminating small classes, increasing student-teacher ratios, hiring few administrators, cutting costs in teacher salaries, maintaining or reducing operational costs, and so on, and then preparing charts and graphs to show the resultant lower costs|. These measures are also delineated in the Education Sector Strategic Plan (ESSP), 2006-2010/11 (following the previous one covering the period 1999-2003 and applied in the Mozambican education system. Thus, the ESSP (2006-2010/11) recognizes that financial constraints prevent the appointment of sufficient numbers of qualified teachers at schools. In effect, the ESSP (2006-2010/11) indicates that for the projected increase of the new pupils' admissions in the school system during the next five years within the efforts to Education for all (EFA), Mozambique Government would not be able to employ at primary schools graduated teachers from IMAPs, who 34 currently have a salary equivalent to 10.7 times of gross domestic product (GDP) per capita. Consequently, the ESSP (2006-2010/11) highlights that the affordable teachers, who have now been recruited are less than the real needs (in teachers). In fact, the student-teacher in EP1 ratio has risen from 62/1 in 1999 to 74/1 in 2005 and classes with more than 80 students in a classroom is the rule rather than the exception. (The 2005 Pretoria Declaration on Teachers, of which Mozambique is a signatory, recommends in paragraph 25 that —a useful benchmark for countries with excessive average class sizes would be 40 learners in a classroom|.) According to the ESSP (2006-2010/11) the growing deficit in the provision of education will be addressed by introducing measures such as the following:

- Reducing training for basic education (grades 1 to 7) to one year instead of two and lowering the salary accordingly
- Abolishing the three-year training programme substituting the one-year programme, which meant the entry qualification would be grade ten rather than grade seven which was prescribed for the three-year course, and the starting salary was unaffected.

- Expanding the cost-effective in-service teacher training programmes with adequate resources coordinated by the ZIPs shed light on CRESCER Programmes (Courses of school capacity building: Systematic, continuous, experimental and reflexives).

These decisions may to some extent jeopardize the intended effectiveness of education. For example, effectiveness is by overcrowded classes, low salaries of teachers, unsatisfactory working conditions, reduced initial training periods and financial constraints that inhibit staff development. These problems are not only attributable to the poverty of the country, but especially to the tendency to mistakenly apply economic strategies designed to increase productivity in business and industry (e.g. the principle of measuring efficiency as a function of producing more in less time and also using relatively less resources) to the domain of education.

However, the behavioural approach has the benefit of clarity and precision in the specification of outcomes, although it is also the object of criticism for this very reason. Zais (1976) and Smith (1996, 2000) argue that the benefits of precise specification are only observable at the lowest level of learning where trivial skills, competencies or outcomes are concerned (e.g. adding numbers, memorizing facts, answering specific questions), which are considered closed-end goals. The higher order tasks (e.g., critical analysis of literature and art, analytic or synthetic thinking) imply open-ended goals requiring the definition of a vast number of specific objectives, which is impracticable in the process of curriculum development. In this debate, it is worth bringing up Zais's (1976:315) remark in which he emphasizes that:

Most of the criticism of behavioural objectives is based on what turns out to be a dogmatic application of the operational principle to a pre-Deweyan notion of —ends— i.e., objectives viewed as independently validated terminal points toward which action is directed.

Thus, it is clear that behavioural approach needs to be updated and improved by applying it critically.

### **The managerial approach :-**

The managerial approach entails consideration of the school as a social system, based on organizational theory, in which the constituent members (e.g. students, teachers, curriculum specialists, and administrators) interact in harmony with certain norms and behaviours. In this context the managerial approach focuses on programmes, schedules, space, resources and equipment, as well as personnel, requiring cooperation among teachers, students and those who are responsible for curriculum supervision outside of school. Ornstein & Hunkins (1993:3) noted that —consideration is given to committee and group processes, human relations, leadership styles and methods, and decision making. That is to say, the managerial approach gives more emphasis on the supervisory and administrative aspects of curriculum, focusing mainly on the organizational and implementation aspects of the process.

The managerial approach has to do with change and innovation, exploring —how curriculum specialists, supervisors, and administrators can facilitate these processes! (Ornstein & Hunkins, 1993:3). Under this viewpoint, the curriculum specialist or supervisor is regarded as a facilitator, a resource person (person who is available to help teachers or colleagues to achieve curriculum goals), an agent of change. As 36 noted earlier, the implementation strategies employed o introduce the Mozambican new basic education curriculum as defined in PCEB reflect the managerial approach. Indeed, the PCEB asserts that the success of any curriculum change initiative unquestionably depends on the appropriate use of implementation strategies, for which read a suitably adapted managerial approach translated into effective implementation strategies (see section 3.4 of this report). Above all, the following observation by Hall and Hord (2001:13-14) served as a guiding principle from the outset:

Administrators also have to secure the necessary infrastructure changes and long-term resource supports if use of an innovation is to continue indefinitely. And finally, yes, policy-makers need to design policies that legitimize the infrastructure changes and innovate practices and encourage the continued use of the innovation.

### **The humanistic approach :-**

According to Ornstein & Hunkins (1993), the humanistic approach is underpinned by child psychology with a view to coping with the needs and interests of children and by humanistic psychology with emphasis on valuing, ego identity, psychological health, 39 freedom to learn, and personal fulfilment. The teacher therefore serves as facilitator and resource person for students. The curriculum mainly focuses on active interaction among students and teachers, on problem solving, and on inquiry. These procedures are included in the framework of the new curriculum (PCEB).