

## Chapter 1

# Understanding education quality

The goal of achieving universal primary education (UPE) has been on the international agenda since the Universal Declaration of Human Rights affirmed, in 1948, that elementary education was to be made freely and compulsorily available for all children in all nations. This objective was restated subsequently on many occasions, by international treaties and in United Nations conference declarations.<sup>1</sup> Most of these declarations and commitments are silent about the quality of education to be provided.

**The achievement of universal participation in education will be fundamentally dependent upon the quality of education available**

**Why focus on quality?**

Although some of the international treaties, by specifying the need to provide education on human rights, reproductive health, sports and gender awareness, touched on educational quality,<sup>2</sup> they were generally silent about how well education systems could and should be expected to perform in meeting these objectives. This remained true as recently as 2000, when the United Nations Millennium Declaration’s commitment to achieve UPE by 2015 was directly and simply set out without explicit reference to quality (see Box 1.1). Thus, in placing the emphasis upon assuring access for all, these instruments mainly focused on the quantitative aspects of education policy.

It seems highly likely, however, that the achievement of universal participation in education will be fundamentally dependent upon the quality of education available. For example, how well pupils are taught and how much they learn, can have a crucial impact on how long they stay in school and how regularly they attend. Furthermore, whether parents send their

children to school at all is likely to depend on judgements they make about the quality of teaching and learning provided – upon whether attending school is worth the time and cost for their children and for themselves. The instrumental roles of schooling – helping individuals achieve their own economic and social and cultural objectives and helping society to be better protected, better served by its leaders and more equitable in important ways – will be strengthened if education is of higher quality.<sup>3</sup> Schooling helps children develop creatively and emotionally and acquire the skills, knowledge, values and attitudes necessary for responsible, active and productive citizenship. How well education achieves these outcomes is important to those who use it. Accordingly, analysts and policy makers alike should also find the issue of quality difficult to ignore.

More fundamentally, education is a set of processes and outcomes that are *defined* qualitatively. The *quantity* of children who participate is by definition a secondary consideration: merely filling spaces called ‘schools’ with children would not address even

**Box 1.1 The Dakar Framework for Action and Millennium Development Goals**

■ **EFA Dakar goals**

1. Expanding and improving comprehensive **early childhood care and education**, especially for the most vulnerable and disadvantaged children.
2. Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities have access to complete **free and compulsory primary education of good quality**.
3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and **life skills** programmes.
4. Achieving a 50 per cent improvement in levels of adult **literacy** by 2015, especially for women, and equitable access to basic and continuing education for all adults.
5. Eliminating gender disparities in primary and secondary education by 2005 and achieving **gender equality** in education by 2015, with a focus on ensuring girls’ full and equal access to (and achievement in) basic education of good quality.

6. Improving all aspects of the **quality of education** and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

■ **Millennium Development Goals**

**Goal 2. Achieve universal primary education**

*Target 3.* Ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

**Goal 3. Promote gender equality and empower women**

*Target 4.* Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015.

1. Such statements are found in the declarations that emerged from a series of United Nations regional conferences on education in the early 1960s, in the treaties that formed the International Bill of Human Rights in the 1970s, in the World Declaration on Education for All adopted at the World Conference on Education for All in Jomtien, Thailand, 1990 and in the Millennium Declaration and the Dakar Framework for Action in 2000 (for details see UNESCO, 2003a: 24–8). The last two reaffirmed the commitment to achieve universal provision and access to primary schooling and added a target year: 2015.

2. This was most notably so with the Convention on the Rights of the Child, which came into force in 1990.

3. This categorization of the ways in which education is valuable to individuals and society is informed by the classification suggested by Drèze and Sen (2002: 38–40).

### Box 1.2 Education quality as defined in Jomtien and Dakar

In 1990, the World Declaration on Education for All noted that the generally poor quality of education needed to be improved and recommended that education be made both universally available and more relevant. The Declaration also identified quality as a prerequisite for achieving the fundamental goal of equity. While the notion of quality was not fully developed, it was recognized that expanding access alone would be insufficient for education to contribute fully to the development of the individual and society. Emphasis was accordingly placed on assuring an increase in children's cognitive development by improving the quality of their education.

A decade later, the Dakar Framework for Action declared that access to quality education was the right of every child. It affirmed that quality was '*at the heart of education*' – a fundamental determinant of enrolment, retention and achievement. Its expanded definition of quality set out the desirable characteristics of learners (healthy, motivated students), processes (competent teachers using active pedagogies), content (relevant curricula) and systems (good governance and equitable resource allocation). Although this established an agenda for achieving good education quality, it did not ascribe any relative weighting to the various dimensions identified.

quantitative objectives if no real education occurred. Thus, the number of years of school is a practically useful but conceptually dubious proxy for the processes that take place there and the outcomes that result. In that sense, it could be judged unfortunate that the quantitative aspects of education have become the main focus of attention in recent years for policy makers (and many quantitatively inclined social scientists).

It should come as no surprise, therefore, that the two most recent United Nations international conference declarations focusing on education gave some importance to its qualitative dimension (Box 1.2). The Jomtien Declaration in 1990 and, more particularly, the Dakar Framework for Action in 2000 recognized the quality of education as a prime determinant of whether Education for All is achieved. More specifically than earlier pledges, the second of the six goals set out in the Dakar Framework commits nations to the provision of primary education 'of good quality' (Box 1.1). Moreover, the sixth goal includes commitments to improve all aspects of education quality so that everyone can achieve better learning outcomes, 'especially in literacy, numeracy and essential life skills'.

Notwithstanding the growing consensus about the need to provide access to education of 'good quality', there is much less agreement about what the term actually means in practice.<sup>4</sup> Box 1.3 summarizes the evolution of UNESCO's understanding of education quality. This effort in

definition goes beyond the intrinsic and instrumental goals of education mentioned earlier. It seeks to identify unambiguously the important attributes or qualities of education that can best ensure that those goals are actually met. Similar formulations can be found in documents produced by other international organizations and in the vast array of literature dealing with the content and practice of education. Although the details differ, two key elements characterize such approaches:

- First, cognitive development is identified as a major explicit objective of all education systems. The degree to which systems actually achieve this is one indicator of their quality. While this indicator can be measured relatively easily – at least within individual societies, if not through international comparison – it is much more difficult to determine how to improve the results. Thus, if quality is defined in terms of cognitive achievement, ways of securing increased quality are neither straightforward nor universal.

- The second element is education's role in encouraging learners' creative and emotional development, in supporting objectives of peace, citizenship and security, in promoting equality and in passing global and local cultural values down to future generations. Many of these objectives are defined and approached in diverse ways around the world. Compared with cognitive development, the extent to which they are achieved is harder to determine.

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4. Adams (1993) identifies about fifty different definitions of the term.

### Box 1.3 The evolution of UNESCO's conceptualization of quality

One of UNESCO's first position statements on quality in education appeared in *Learning to Be: The World of Education Today and Tomorrow*, the report of the International Commission on the Development of Education chaired by the former French minister Edgar Faure. The commission identified the fundamental goal of social change as the eradication of inequality and the establishment of an equitable democracy. Consequently, it reported, 'the aim and content of education must be recreated, to allow both for the new features of society and the new features of democracy' (Faure et al., 1972: xxvi). The notions of 'lifelong learning' and 'relevance', it noted, were particularly important. The Report strongly emphasized science and technology as well. Improving the quality of education, it stated, would require systems in which the principles of scientific development and modernization could be learned in ways that respected learners' socio-cultural contexts.

More than two decades later came *Learning: The Treasure Within, Report to UNESCO of the International Commission on Education for the Twenty-first Century*, chaired by another French statesman, Jacques Delors. This commission saw education throughout life as based upon four pillars:

- *Learning to know* acknowledges that learners build their own knowledge daily, combining indigenous and 'external' elements.

- *Learning to do* focuses on the practical application of what is learned.
- *Learning to live together* addresses the critical skills for a life free from discrimination, where all have equal opportunity to develop themselves, their families and their communities.
- *Learning to be* emphasizes the skills needed for individuals to develop their full potential.

This conceptualization of education provided an integrated and comprehensive view of learning and, therefore, of what constitutes education quality (Delors et al., 1996).

The importance of good quality education was resolutely reaffirmed as a priority for UNESCO at a Ministerial Round Table on Quality of Education, held in Paris in 2003.

UNESCO promotes access to good-quality education as a human right and supports a rights-based approach to all educational activities (Pigozzi, 2004). Within this approach, learning is perceived to be affected at two levels. At the level of the *learner*, education needs to seek out and acknowledge learners' prior knowledge, to recognize formal and informal modes, to practise non-discrimination and to provide a safe and supportive learning environment. At the level of the *learning system*, a support structure is needed to implement policies, enact legislation, distribute resources and measure learning outcomes, so as to have the best possible impact on learning for all.

### Quality for whom and what? Rights, equity and relevance

**Education should allow children to reach their fullest potential in terms of cognitive, emotional and creative capacities**

Although opinions about quality in education are by no means unified, at the level of international debate and action three principles tend to be broadly shared. They can be summarized as the need for more relevance, for greater equity of access and outcome and for proper observance of individual rights. In much current international thinking, these principles guide and inform educational content and processes and represent more general social goals to which education itself should contribute.

Of these, the question of *rights* is at the apex. Although, as indicated earlier, most human rights legislation focuses upon access to education and is comparatively silent about its quality, the Convention on the Rights of the Child is an important exception. It expresses strong, detailed commitments about the aims of

education. These commitments, in turn, have implications for the content and quality of education. Box 1.4 summarizes the relevant sections.

The Convention takes the educational development of the individual as a central aim. It indicates that education should allow children to reach their fullest potential in terms of cognitive, emotional and creative capacities. The learner is at the centre of the educational experience, in a context also characterized by respect for others and for the environment.

The Convention has important implications for both the content and the process of education. It implies that the learning experience should be not simply a means but also an end in itself, having intrinsic worth. It suggests an approach to teaching (and the development of textbooks and learning materials) that upholds the idea of a child-centred education, using teaching

### Box 1.4 The aims of education, from the Convention on the Rights of the Child, Article 29 (1)

1. States Parties agree that the education of the child shall be directed to:

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|---|--|--|---|---|
| (a) The development of the child's personality, talents and mental and physical abilities to their fullest potential; | (b) The development of respect for human rights and fundamental freedoms, and for the principles enshrined in the Charter of the United Nations; | (c) The development of respect for the child's parents, his or her own cultural identity, language and values, for the national values of the country in which the child is living, the country from which he or she may originate, and for civilizations different from his or her own; | (d) The preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin; | (e) The development of respect for the natural environment. |
|---|--|--|---|---|

processes that promote – or at least do not undermine – children's rights. Corporal punishment is deemed here to be a clear violation of these rights. Some dimensions of this 'rights-based approach' to education is evident in the position adopted by UNICEF (Box 1.5).

Other international legislation, such as the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, addresses the principle of equity by stressing government's responsibility to ensure that all children have access to education of an acceptable quality. Brazil, Costa Rica and the Philippines provide three examples of countries that have constitutional provisions guaranteeing a percentage of the budget for education, in accordance with the International Covenant on

Economic, Social and Cultural Rights. Such legal safeguards permit stakeholders to hold governments accountable for progressive realization of the right to education and for aspects of its quality. (Wilson, 2004)

Where human rights legislation deals with education, its central concern is *equity*: the objective of increasing equality in learning outcomes, access and retention. This ambition reflects a belief that all children can develop basic cognitive skills, given the right learning environment. That many who go to school fail to develop these skills is due in part to a deficiency in education quality. Recent analyses confirm that poverty, rural residence and gender inequality persist as the strongest inverse correlates of school attendance and performance (UNESCO, 2003a) and that poor instruction is a significant source of this inequality. Quality and equity are inextricably linked.

**The Convention on the Rights of the Child stresses a child-centred approach to teaching and learning**

### Box 1.5 The UNICEF approach to quality

UNICEF strongly emphasizes what might be called desirable dimensions of quality, as identified in the Dakar Framework. Its paper *Defining Quality in Education* recognizes five dimensions of quality: learners, environments, content, processes and outcomes, founded on 'the rights of the whole child, and all children, to survival, protection, development and participation' (UNICEF, 2000). Like the dimensions of education quality identified by UNESCO (Pigozzi, 2004), those recognized by UNICEF draw on the philosophy of the Convention on the Rights of the Child.

The notion of *relevance* has always attended debates about the quality of education. In the past, and particularly in developing countries, imported or inherited curricula have often been judged insufficiently sensitive to the local context and to learners' socio-cultural circumstances. The Convention on the Rights of the Child stresses a child-centred approach to teaching and learning.<sup>5</sup> This in turn emphasizes the importance of curricula that as far as possible respond to the needs and priorities of the learners, their families, and communities.

Relevance is also an issue for national policy. With the acceleration of global economic integration, governments have become more

5. According to the Appendix to General Comment No. 1 on Article 29 (1) of the Convention on the Rights of the Child (United Nations, 2001a), "this article emphasizes the message of child-centred education: that the key goal of education is the development of the individual child's personality, talents and abilities, in recognition of the fact that every child has unique characteristics, interests, abilities, and learning needs. Thus, the curriculum must be of direct relevance to the child's social, cultural, environmental and economic context..."

6. See footnote 24.

7. The 'traditions' discussed here entail different ideas of what constitutes quality in teaching and learning. While each differs in its ideology, epistemology and disciplinary composition, all ask what individual or social purposes education should serve and how teaching and learning should occur. It is important to distinguish between these broad traditions and the more specific pedagogies discussed later in the Report. While few pedagogies are value-neutral, none is restricted to one tradition. Nor do education systems usually reflect a single model of education. Accordingly, this Report will consider pedagogies in functional terms rather than from the philosophical perspectives that inform them.

8. Focusing on absolute output characteristics of education programmes does not preclude a 'value-added' approach that takes differences in ability into account.

9. Some writers distinguish between two relative approaches. One, emphasizing the extent to which an education programme suits its intended purpose, might focus on organizational processes; the other, emphasizing learners' needs and capacities, would be strongly responsive to particular 'client groups' (Sallis, 1996: 15-7).

10. See Russell (1961: 577-83) and Elias and Merriam (1980).

11. In this context, Rousseau believed there was one developmental process common to all humans. This, he asserted, was an intrinsic, natural process whose primary behavioural motivation was curiosity. An advocate of universal schooling, Rousseau designed a method that involved removing children from society (for example, to a country home) and exposing them to changed environments and problems to solve or overcome. Once children reached the age of reason (about 12 years), they were considered capable of engaging as 'free' individuals in a continuing process of education (Rousseau, 1911).

12. Dewey (1916) saw pupils as creating knowledge in the classroom and transforming their identities through 'a process of learning by performing new roles' (Fenwick, 2001: 3).

preoccupied with whether their education systems produce the skills necessary for economic growth in an increasingly competitive environment. Increasing mobility has also brought concerns about the extent to which learning, measured in terms of qualifications, is transferable. This has led to increased monitoring and regulation of education systems and to a flourishing industry of cross-national learning assessment using comparative benchmarks. Critics have voiced caution that such studies, such as those discussed in Chapters 2 and 3 of this Report, may contribute to the standardization of cognitive skills informed by a set of culturally exclusive principles and knowledge. Recent research has shown that even skills as basic as literacy and numeracy can be conceived and taught in quite varied ways<sup>6</sup> and thus run the risk of misrepresentation by culturally insensitive assessment.

As with all aspects of development, a balance should be struck between ensuring the relevance of education to the socio-cultural realities of learners, to their aspirations, and to the well-being of the nation.

## Education traditions and associated notions of quality<sup>7</sup>

When thinking about the quality of education it is useful to distinguish between educational outcomes and the processes leading to them. People who seek particular, defined outcomes may rate quality in those terms, ranking educational institutions according to the extent to which their graduates meet 'absolute' criteria concerning, for example, academic achievement, sporting prowess, musical success, or pupil behaviour and values. The standard of comparison would be in some sense fixed, and separate from the values, wishes and opinions of the learners themselves.<sup>8</sup> By contrast, relativist approaches emphasize that the perceptions, experiences and needs of those involved in the learning experience mainly determine its quality.<sup>9</sup> Drawing on a business analogy, 'client orientation' in education puts strong emphasis upon whether a programme fits its purposes in ways that reflect the needs of those who use it. These different emphases have deep roots, and are reflected in major alternative traditions of educational thought.

## Humanist approaches

The ideas that human nature is essentially good, that individual behaviour is autonomous (within the constraints of heredity and environment), that everyone is unique, that all people are born equal and subsequent inequality is a product of circumstance and that reality for each person is defined by himself or herself characterize a range of liberal humanist philosophers from Locke to Rousseau.<sup>10</sup> Such principles, where accepted, have immediate relevance for educational practice. Learners, for humanists, are at the centre of 'meaning-making', which implies a relativist interpretation of quality. Education, strongly influenced by learner actions, is judged central to developing the potential of the child.<sup>11</sup>

The notion that acquisition of knowledge and skills requires the active participation of individual learners is a central link between humanism and constructivist learning theory. The latter was influenced strongly by the work of John Dewey, who emphasized the ways in which people learn how to construct their own meanings and to integrate theory and practice as a basis for social action.<sup>12</sup> Piaget (1971) was also influential in developing a more 'active'

### Box 1.6 Quality in the humanist tradition

- Standardized, prescribed, externally defined or controlled curricula are rejected. They are seen as undermining the possibilities for learners to construct their own meanings and for educational programmes to remain responsive to individual learners' circumstances and needs.
- The role of assessment is to give learners information and feedback about the quality of their individual learning. It is integral to the learning process. Self-assessment and peer assessment are welcomed as ways of developing deeper awareness of learning.
- The teacher's role is more that of facilitator than instructor.
- Social constructivism, while accepting these tenets, emphasizes learning as a process of social practice rather than the result of individual intervention.

### Box 1.7 Quality in the behaviourist tradition

- Standardized, externally defined and controlled curricula, based on prescribed objectives and defined independently of the learner, are endorsed.
- Assessment is seen as an objective measurement of learned behaviour against preset assessment criteria.
- Tests and examinations are considered central features of learning and the main means of planning and delivering rewards and punishments.
- The teacher directs learning, as the expert who controls stimuli and responses.
- Incremental learning tasks that reinforce desired associations in the mind of the learner are favoured.

and ‘participatory’ role for children in their learning.<sup>13</sup> More recently, social constructivism, which regards learning as intrinsically a social – and, therefore, interactive – process, has tended to supersede more conventional constructivist approaches.<sup>14</sup> Box 1.6 summarizes the approach to education quality in the humanist tradition.

### Behaviourist approaches

Behaviourist theory leads in the opposite direction to humanism. It is based on manipulation of behaviour via specific stimuli.<sup>15</sup> Behaviourism exerted a significant influence on educational reform during the first half of the twentieth century (Blackman, 1995). Its main tenets were that:

- Learners are not intrinsically motivated or able to construct meaning for themselves.
- Human behaviour can be predicted and controlled through reward and punishment.
- Cognition is based on the shaping of behaviour.
- Deductive and didactic pedagogies, such as graded tasks, rote learning and memorization, are helpful.<sup>16</sup>

Although few educationists accept the full behaviourist agenda in its pure form, elements of behaviourist practice can be observed in many countries in teacher-training programmes, curricula and the ways teachers actually operate in classrooms.<sup>17</sup> Forms of direct or structured instruction, which have an important place in this Report, share a key element with the behaviourist tradition: the belief that learning achievement must be monitored and that frequent feedback is crucial in motivating and guiding the learner. Box 1.7 summarizes the behaviourist approach to education quality.

### Critical approaches

Over the final quarter of the twentieth century, several important critiques of the precepts of humanism and behaviourism emerged. Sociologists had already perceived society as a system of interrelated parts, with order and stability maintained by commonly held values.<sup>18</sup> Since the role of education is to transmit these values, quality in this approach would be measured by the effectiveness of the processes of value transmission. In the latter part of the twentieth century, critics began to acknowledge these processes as highly political. Some neo-Marxist approaches characterized education in capitalist societies as the main mechanism for legitimizing and reproducing social inequality.<sup>19</sup> Others, in the ‘new sociology of education’ movement of the 1970s and 1980s, focused their critiques on the role of the curriculum as a social and political means of transmitting power and knowledge.<sup>20</sup> A separate group of critical writers, known as the ‘de-schoolers’, called for the abandonment of schooling in favour of more community-organized forms of formal education.<sup>21</sup> Other critiques of orthodox approaches included various postmodern and feminist views.<sup>22</sup>

While the critical approaches encompass a vast array of philosophies, they share a concern that education tends to reproduce the structures and inequalities of the wider society. Though many retain the founding humanist principle that human development is the ultimate end of thought and action, they question the belief that universal schooling will result automatically in equal development of learners’ potential. As a reaction against this, advocates of an ‘emancipatory pedagogy’ suggested that ‘critical intellectuals’ should work to empower

13. Piaget (1972), in his theory of ‘genetic epistemology’, identifies patterns of physical and mental activity corresponding to stages of child development. Rather than seeing new learning as simply linking to prior learning, Piaget argues that learners need to be faced with a conflict between the two; otherwise, knowledge is static and learning cannot take place.

14. These approaches derive largely from Dewey’s pragmatism and the ‘social development theory’ of Vygotsky (1978). The latter advances the notion that learning happens first in relation to others, only later being internalized individually. Thus, social interaction leads to cognitive development. This is the opposite of Piaget’s standpoint.

15. As an example of ‘classic’ behaviourist theory, consider two types of conditioning – ‘respondant’ and ‘operant’ (Skinner, 1968). The first refers to a process by which a subject is conditioned to respond to an external stimulus (for example, Pavlov’s dog salivating at the sound of the bell announcing feeding time). Operant conditioning refers to reinforcement of such a response through reward/punishment systems (for example, feeding the dog or withholding food) that stimulate new learning and/or the abandonment of old behaviour.

16. These notions generated the ‘objective’ school of education, first manifested in attempts by Bobbitt (1918) to apply the ideas of the management expert F. W. Taylor to school curricula. Other noteworthy approaches are Tyler’s *Basic Principles of Curriculum and Instruction* (1949) and Bloom’s taxonomy (1956), which set out educational objectives against which finely tuned testing instruments could be developed.

17. Jarvis (1983: 61) suggests that even seemingly ‘innocent’ practices such as ‘praising a reticent student for contributing to a group discussion’ have underpinnings in Skinner’s operant conditioning.

18. These included functionalist theorists (e.g. Parsons, 1959) and some structuralists (e.g. Durkheim, 1956).

19. Notably Bourdieu and Passeron (1964), Bowles and Gintis (1976), Apple (1978), Spring (1972) and Michéa (1999).

20. Notably Young (1971), Keddie (1971) and Bourdieu (1977).

21. Notably Illich (1971).

22. ‘Postmodernism’ and ‘post-structuralism’ are often used interchangeably. Their common theme is that power and knowledge reside in discourse, not in structures. Foucault (1977) argues that power and power relationships create the conditions for the production of knowledge. This is reflected at a deep level within curricula.

### Box 1.8 Quality in the critical tradition

Critical theorists focus on inequality in access to and outcomes of education and on education's role in legitimizing and reproducing social structures through its transmission of a certain type of knowledge that serves certain social groups. Accordingly, these sociologists and critical pedagogues tend to equate good quality with:

- education that prompts social change;
- a curriculum and teaching methods that encourage critical analysis of social power relations and of ways in which formal knowledge is produced and transmitted;
- active participation by learners in the design of their own learning experience.

marginalized students by helping them analyse their experience – and thus redress social inequality and injustice. Critical pedagogy, in this view, is emancipatory in the sense that it lets students find their own voices (Freire, 1985), frees them from externally defined needs (Giroux, 1993) and helps them to explore alternative ways of thinking that may have been buried under dominant norms (McLaren, 1994). Box 1.8 outlines the key features of the critical approaches as regards education quality.

### Indigenous approaches

Some important efforts to develop alternative educational ideas are rooted in the realities of lower-income countries and have often arisen as challenges to the legacies of colonialism. Prominent examples include the approaches of Mahatma Gandhi and Julius Nyerere, both

of whom proposed new and alternative education systems with culturally relevant emphases on self-reliance, equity and rural employment.<sup>23</sup>

Such indigenous approaches challenged the 'imported' knowledge, images, ideas, values and beliefs reflected in mainstream curricula. A positive example of the alternatives offered, in curriculum terms, is in the field of mathematics. 'Ethno-mathematicians' claim that 'standard' mathematics is neither neutral nor objective, but culturally biased and that alternative forms exist that have implications for teaching and learning.<sup>24</sup> Box 1.9 presents some important features common to indigenous approaches.

### Adult education approaches

Adult education is frequently ignored in debates about education quality, but it has its share of behaviourist, humanist and critical approaches (see Box 1.10). Some writers, with roots in humanism and constructivism, emphasize the experience of adults as a central learning

### Box 1.10 Quality in adult education approaches

In the adult education tradition, experience and critical reflection in learning is an important aspect of quality. Radical theorists see learners as socially situated, with the potential to use their experience and learning as a basis for social action and social change.

### Box 1.9 Quality in the indigenous tradition

Challenging dominant Northern ideas about the quality of education, indigenous approaches reassert the importance of education's relevance to the socio-cultural circumstances of the nation and learner.

The following principles are implied:

- Mainstream approaches imported from Europe are not necessarily relevant in very different social and economic circumstances.

- Assuring relevance implies local design of curriculum content, pedagogies and assessment.
- All learners have rich sources of prior knowledge, accumulated through a variety of experiences, which educators should draw out and nourish.
- Learners should play a role in defining their own curriculum.
- Learning should move beyond the boundaries of the classroom/school through non-formal and lifelong learning activities.

23. Gandhi and Nyerere both incorporated the teaching of simple vocational skills in formal curricula. Nyerere (1968) set out a vision of 'Education for Self Reliance' for the United Republic of Tanzania. His vision rested on several key educational aims: preserving and transmitting traditional values, promoting national and local self-reliance, fostering co-operation and promoting equality. In southern Africa, the notion of *ubuntu*, with its connotations of community, informs an alternative vision of education as embracing the social nature of being, rather than individual advancement (Tutu, 2000).

24. Examples of this approach, as identified by Gerdes (2001), include:

- Sociomathematics of Africa: Zaslavsky (1973: 7) examines 'the applications of mathematics in the lives of African people and, conversely, the influence that African institutions had upon the evolution of their mathematics'.
- Mathematics in the [African] socio-cultural environment: Touré (1984: 1-2) draws attention to the mathematics of African games in Côte d'Ivoire and suggest that crafts belonging to learners' socio-cultural environment should be integrated in the mathematics curriculum.

resource.<sup>25</sup> Others see adult education as an essential part of socio-cultural, political and historical transformation.<sup>26</sup> The latter view is most famously associated with literacy programmes and with the work of the radical theorist Paulo Freire, for whom education was an intensely important mechanism for awakening political awareness.<sup>27</sup> His work urges adult educators not only to engage learners in dialogue, to name oppressive experiences, but also, through ‘problem posing’ and ‘conscientization’, to realize the extent to which they themselves have been influenced by repressive societal forces.

## A framework for understanding, monitoring and improving education quality

Given the diversity of understanding and interpretation of quality evident in the different traditions discussed above, defining quality and developing approaches to monitoring and improving it requires dialogue designed to achieve:

- broad agreement about the aims and objectives of education;
- a framework for the analysis of quality that enables its various dimensions to be specified;
- an approach to measurement that enables the important variables to be identified and assessed;
- a framework for improvement that comprehensively covers the interrelated components of the education system and allows opportunities for change and reform to be identified.

As earlier sections of this chapter have indicated, cognitive development and the accumulation of particular values, attitudes and skills are important objectives of education systems in most societies. Their content may differ but their broad structure is similar throughout the world. This may suggest that in one sense the key to improving the quality of education – to helping education systems better achieve these objectives – could be equally universal. Considerable research has been directed towards this question in recent years. As Chapter 2 shows, however, the number of factors that can affect educational outcomes is so vast

that straightforward relationships between the conditions of education and its products are not easy to determine.

Nevertheless, it helps to begin by thinking about the main elements of education systems and how they interact. To this end, we might characterize the central dimensions influencing the core processes of teaching and learning as follows:

- learner characteristics dimension;
- contextual dimension;
- enabling inputs dimension;
- teaching and learning dimension.
- outcomes dimension.

Figure 1.1 illustrates these dimensions and their relationships, and the following subsections discuss their characteristics and interactions.

### Learner characteristics

How people learn – and how quickly – is strongly influenced by their capacities and experience. Assessments of the quality of education outputs that ignore initial differences among learners are likely to be misleading. Important determining characteristics can include socio-economic background, health, place of residence, cultural and religious background and the amount and nature of prior learning. It is therefore important that potential inequalities among students, deriving from gender, disability, race and ethnicity, HIV/AIDS status and situations of emergency are recognized. These differences in learner characteristics often require special responses if quality is to be improved.

### Context

Links between education and society are strong, and each influences the other. Education can help change society by improving and strengthening skills, values, communications, mobility (link with personal opportunity and prosperity), personal prosperity and freedom. In the short term, however, education usually reflects society rather strongly: the values and attitudes that inform it are those of society at large. Equally important is whether education takes place in the context of an affluent society or one where poverty is widespread. In the latter case, opportunities to increase resources for education are likely to be constrained.

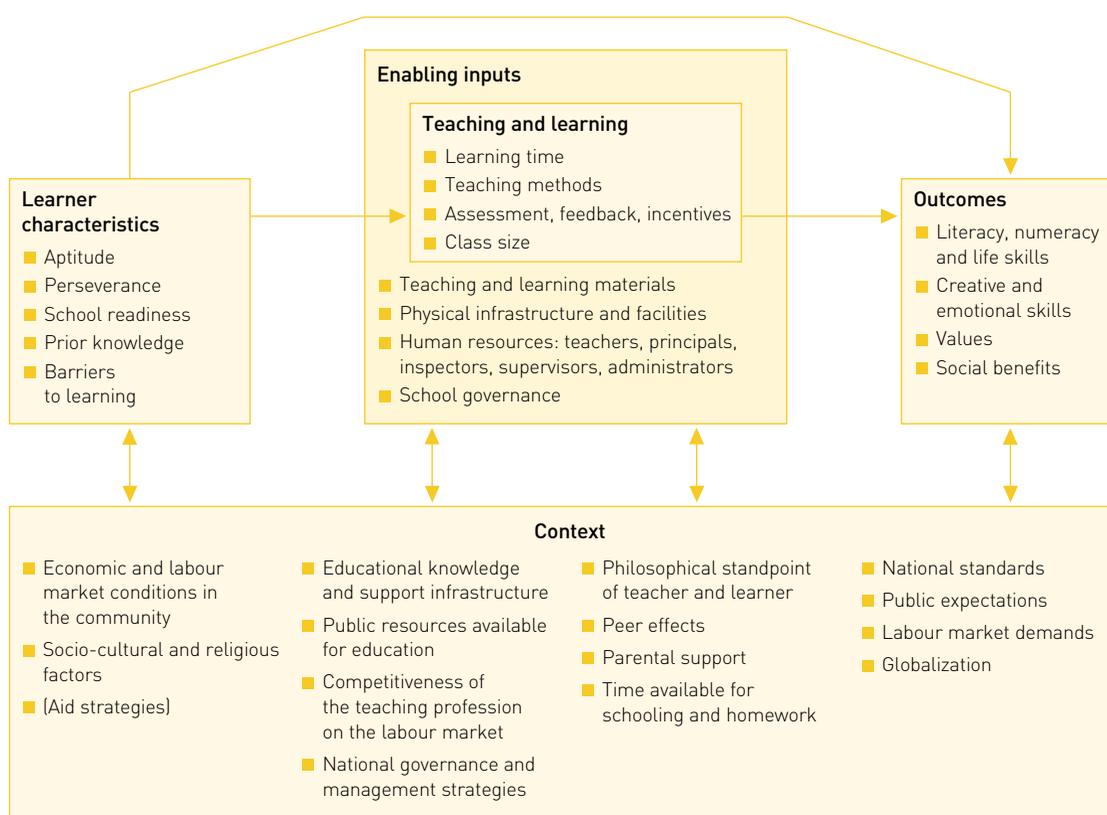
## Links between education and society are strong, and each influences the other

25. Knowles (1980) lists experience as one of five principles of adult learning theory in which reflection by individuals is a central part of the educational process. The learning cycle developed by Kolb (1984) also has ‘concrete experience’ as the starting point for learning, based on reflection.

26. For an overview of paradigms in adult learning, see UIE (2004).

27. In his most influential work, *Pedagogy of the Oppressed*, Freire characterized the education normally provided to the poor as ‘banking education’, seeing it as being of inferior quality and irrelevant to learners’ needs. He argued that educational practice that excludes alternative interpretations of a particular reality reinforces the power of the teacher and encourages non-critical analysis by students. Freire saw the agency of the learner and her or his prior knowledge as central to the learning process, maintaining that the learner must take on ‘full responsibility as an actor with knowledge and not as recipient of the teacher’s discourse’ (Freire, 1985: 47–8). This activist perspective drew attention to the deeper political changes and reforms necessary for improvement in education quality. Newer approaches include those of Usher and Edwards (1994), who bring post-structural and postmodern perspectives to bear on adult education and learning, and Fenwick (2001), who draws on experiential learning in innovative ways.

Figure 1.1: A framework for understanding education quality



**It is obvious that schools without teachers, textbooks or learning materials will not be able to do an effective job**

More directly, national policies for education also provide an influential context. For example, goals and standards, curricula and teacher policies set the enabling conditions within which educational practice occurs. These contextual circumstances have an important potential influence upon education quality. International aid strategies are also influential in most developing countries.

### Enabling inputs

Other things being equal, the success of teaching and learning is likely to be strongly influenced by the resources made available to support the process and the direct ways in which these resources are managed. It is obvious that schools without teachers, textbooks or learning materials will not be able to do an effective job. In that sense, resources are important for education quality – although how and to what extent this is so has not yet been fully determined. Inputs are *enabling* in that they underpin and are intrinsically interrelated to

teaching and learning processes, which in turn affects the range and the type of inputs used and how effectively they are employed. The main input variables are material and human resources, with the governance of these resources as an important additional dimension:

- Material resources, provided both by governments and households, include textbooks and other learning materials and the availability of classrooms, libraries, school facilities and other infrastructure.
- Human resource inputs include managers, administrators, other support staff, supervisors, inspectors and, most importantly, teachers. Teachers are vital to the education process. They are both affected by the macro context in which it takes place and central to its successful outcomes. Useful proxies here are pupil/teacher ratio, average teacher salaries and the proportion of education spending allocated to various items. Material and human resources together are often measured by expenditure indicators, including

public current expenditure per pupil and the proportion of GDP spent on education.

■ Enabling school-level governance concerns the ways in which the school is organized and managed. Examples of potentially important factors having an indirect impact on teaching and learning are strong leadership, a safe and welcoming school environment, good community involvement and incentives for achieving good results.

### Teaching and learning

As Figure 1.1 indicates, the teaching and learning process is closely nested within the support system of inputs and other contextual factors. Teaching and learning is the key arena for human development and change. It is here that the impact of curricula is felt, that teacher methods work well or not and that learners are motivated to participate and learn how to learn. While the indirect enabling inputs discussed above are closely related to this dimension, the actual teaching and learning processes (as these occur in the classroom) include student time spent learning, assessment methods for monitoring student progress, styles of teaching, the language of instruction and classroom organization strategies.

### Outcomes

The outcomes of education should be assessed in the context of its agreed objectives. They are most easily expressed in terms of academic achievement (sometimes as test grades, but more usually and popularly in terms of examination performance), though ways of assessing creative and emotional development as well as changes in values, attitudes and behaviour have also been devised. Other proxies for learner achievement and for broader social or economic gains can be used; an example is labour market success. It is useful to distinguish between achievement, attainment and other outcome measures – which can include broader benefits to society.

### Using the framework

This framework provides a means of organizing and understanding the different variables of

education quality. The framework is comprehensive, in that the quality of education is seen as encompassing access, teaching and learning processes and outcomes in ways that are influenced both by context and by the range and quality of inputs available. It should be remembered that agreement about the objectives and aims of education will frame any discussion of quality and that such agreement embodies moral, political and epistemological issues that are frequently invisible or ignored.

While the framework is by no means the only one available or possible, it does provide a broad structure which can be used for the dual purposes of monitoring education quality and analysing policy choices for its improvement. In Chapters 2 and 3 of this Report, the determinants of education quality are analysed according to the extent to which variables from different dimensions result in improved learning outcomes (measured primarily in terms of cognitive achievement). Chapter 4 then adapts and modifies the framework to facilitate a more holistic discussion of policy strategies for the improvement of education quality. It focuses on the central teaching and learning dimension of Figure 1.1, placing the learner at the core.

### The structure of the Report

The primary purpose of the EFA Global Monitoring Report is to monitor changes in education around the world in the light of the Dakar goals. As in the earlier volumes, a substantial amount of attention is given (particularly in Chapter 3) to analysing progress towards the goals – mainly in a quantitative sense. In taking the quality of education as its theme and thus focusing attention particularly upon progress and prospects for achieving the sixth Dakar goal, the Report has already illustrated the importance of education quality to EFA and addressed questions of how it can be defined and monitored (Chapter 1). It now goes on to identify what factors particularly affect education quality (Chapter 2), what strategies for improvement can be adopted, particularly by developing countries<sup>28</sup> (Chapter 4), and how the international community is meeting its international commitments to EFA (Chapter 5).

**Agreement about the objectives and aims of education embodies moral, political and epistemological issues that are frequently invisible or ignored**

28. Throughout the Report, the word 'countries' should generally be understood as meaning 'countries and territories'.