# International organisations and the evaluation of education systems: a critical comparative analysis

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training evaluation

#### SUMMARY

This article seeks to develop research involving a macro-level critical comparative analysis of reference documents produced by international organisations (UNDP, OECD, UNESCO, the World Bank and the European Union) which guide world education policy decisions. The primary objective was to consider the key guidelines currently defined for education in terms of major millennium goals.

In other words, to what extent do education policy evaluation and monitoring indicators incorporate the new paradigm of lifelong learning as a human development model, and meet the millennium development goals in a context of globalisation?

# Introduction

This research starts from the assumption that education systems and policies are closely connected to sectors of social and political life, and pursue objectives related to a political philosophy and the development strategy arising from that philosophy.

The purpose of this study was to develop a macro-level critical comparative analysis of reference documents produced by international organisations (UNDP, OECD, UNESCO, the World Bank and the European Union) which guide education policy decisions. The primary objective was to consider the key guidelines currently defined for education in terms of major millennium goals.

In other words, to what extent do indicators for education policy evaluation and monitoring incorporate the new paradigm of lifelong learning as a human development model, and meet the millennium goals for education in a context of globalisation?

# Relevance of the study and methodology

Since the Rio World Summit (2001) on Sustainable Development in particular and the Johannesburg World Summit (2003), the need has arisen for a global understanding of balanced growth, the essential pillar of which is sustained human development through the progress of humankind and its abilities. This is a global project in which both governments and the public must be actively involved and in which each person will have shared responsibilities in the development process (Human Development Report - UNDP: 2002). This issue has philosophical, political, sociological and educational implications that go beyond the classical economic models, and which suggest that the relationship between education and development will have to be addressed in a new light. Many of these changes are conceptual, structural and theoretical, and call for fresh reflection on education and development.

Questions were accordingly raised on the coherence or otherwise of short and long-term policy strategies reflected in goals and objectives, accompanied by evaluation tools and a new philosophy of education focusing on sustained human development.

The aim was therefore to identify the principal international organisations with concerns in the field of education and training in order to identify the main global sources for formulating national education policies.

The organisations selected were the United Nations (UNDP and UNESCO), the OECD and the World Bank. The research field was subsequently broadened to the European context, since the European Union has become an important reference institution for the education and training policies of its Member States.

The information collected was compiled and subsequently organised into a reading grid based on a content analysis to allow a comparative and critical reading. This involved correlating a number of issues arising out of the theoretical framework and the ideological and political thinking underpinning the documentary sources analysed and the research issues defined beforehand.

# A new world awareness of development

The United Nations has been discussing and reflecting on the world's economic imbalances since the 1960s. In the 1990s, however, the political, economic, social and cultural climate led the UN to promote a series of summits and meetings on the far-reaching changes affecting societies. This led to greater global awareness, reflected in several experts' reports which sought to reconcile the objectives of economic gain with social development.

Development nowadays is taken to mean enhancing the quality of life and the environment by improving education, training and health systems while ensuring freedom and social justice.

The international community undertook to broaden the view of development based on the ideal of human development as the key to sustained social and economic progress in all countries. The millennium development goals were accordingly defined (1) as a reference framework for measuring the progress of development in the world.

According to these goals, people must have decent living conditions to be able to develop their own potential and to act jointly and responsibly in the development of societies.

The goals are underpinned by the paradigm of human development as a fundamental strand of the development models of societies, which must be sustainable in the short and long term.

In the 1990s, the UNDP (United Nations Development Programme) conceived the concept of *human development* with the creation of the Human Development Index. Most of the world's governments adhered to this concept, calling for the building of structures to

For further information on the process of setting the international development goals, see www.paris21.org/betterworld

eradicate poverty for the sake of human dignity. Nowadays the human development paradigm involves a development strategy based on human abilities in social systems with free and fair access

to opportunities so as to balance the economic growth of societies and share their gains and costs on an equitable basis (Human Development Report, 2003).

For Ambrósio (2003), human development must be the ultimate aim of all policies that contribute towards dignity and human resource capacity building in line with the values of global ethics.

The Nobel Prize winner for economics, Amartya Sen, similarly argues that personal freedom is the basic goal and most effective means of achieving economic sustainability and combating poverty and insecurity. For Sen, freedom and development interact on a reciprocal basis, as he takes freedom to be synonymous with development and sees development as freedom. For Sen, therefore, free and sustained action is an essential engine of development (Sen, 2003, p. 31).

According to the millennium development goals and the human development paradigm, education and training are considered to be the privileged social environment for enhancing personal specificities and understanding the individuality of other people, the advantages of lifelong education being flexibility, diversity and availability at different times and in different places (UNESCO, 1996, p. 17). We are therefore involved in a continuous process of education, training and self-improvement which enhances our knowledge and aptitudes.

More humanised thinking on education therefore emerges which seeks to establish new aims and objectives for education and training, placing greater emphasis on the process of cultivating the human being per se.

# Education and training evaluation at world level

Organisations such as the OECD, UNESCO, the World Bank and the European Union systematically produce international statistics that bring together a range of indicators relating to the piloting of reforms, thus making it possible 'to identify changes in quality and results; draw attention to aspects that must be improved; evaluate the impact of the effort of the system; develop initiatives in relation to other countries or political organisations; catalyse new ideas'. (Amaro, 2002. p. 316).

Education indicators are policy guidance tools that most industrialised countries have had for around 20 years. They were originally needed to justify education costs, and are now used as an information source applied to the evaluation, planning and administration of education and training.

Education indicators are designed to give information to policy-makers about the state of education systems to facilitate their analysis and evaluation so that questions can be raised in relation to old and new policy considerations (Nuttall, 1994, p 89).

As Gilbert Landsheere says (1994): 'piloter un système éducatif, c'est plus qu'accumuler des indicateurs. Le pilotage doit nécessairement comporter trois composants: la collecte régulière d'informations et évaluations de ces informations et leur traduction en actions institutionnelles' [piloting an education system involves more than accumulating indicators. Piloting must involve three components: the regular collection of information and evaluations of such information, and its translation into institutional action] (p. 12).

Since ever greater political and social pressure is being brought to bear for education and training performance data to be publicised with a view to ensuring a certain accountability (²), it has become necessary to ensure value for money by creating the social conditions for implementing accountability mechanisms (Afonso, 1998, p. 66).

This is connected to society's growing dissatisfaction with education systems, which have not produced the outcomes expected in terms of equal opportunities in access and social mobility for the most underprivileged sectors.

Researchers have begun to focus on analysing the possible short-sightedness of educational goals and how they fit into the human development process, which presupposes 'not only cognitive development, but also the integration and converging and complete development of the multiple dimensions forming the human personality and identity' (Sá-Chaves, 2003, p. 63).

Along similar lines, Nuttall (1994) also asserts that the criteria for choosing, developing and evaluating education indicators differ according to the political interests and political context in which the education system functions.

Referring to this approach in which the State starts to adopt a managerial role leading to the formulation of monitoring and accountability mechanisms that include evaluation, Almerindo Janela Afonso

<sup>(2)</sup> Accountability is taken to mean the fact that resource use effectiveness must be verified in order to optimise and improve outcomes.

states that the adoption of such policies has led to a positivist evaluation theory, and to evaluation based on measurable indicators, reflecting a greater concern for product rather than process. For Afonso, evaluation was a way of introducing a market logic into the sphere of the state and public administration (1998, p. 75).

In other words, the findings of indicator-based international studies may be limited due to their macro outlook, which excludes contextual details that influence education and training outcomes.

In this context Nuttall (1992, p.14) states that an education indicator provides information about the behaviour of an education system, and may provide policy-makers with an overview of current conditions in education, given the complexity of the systems involved. The information conveyed by the indicators will always be limited. however, hence the need for them to satisfy a number of substantive and technical criteria. To compensate for the unidimensional nature of each indicator, a set of indicators must be built that together provide a valid representation of the condition of a particular education system.

# Monitoring education in the European Union

The European Union's principal characteristic is its Member States' linguistic and cultural diversity. As a result, education systems tend to be isolated from each other to some extent, with different rules applying to each system. For individuals to benefit from this diversity, Member States clearly need to develop more cooperation and mobility in education and training. The EU has therefore been working on this field over the last 20 years.

Each Member State is responsible for the content, curricula and organisation of education systems. The principle of 'subsidiarity' gives the EU as an institution the capacity to support and supplement each Member State's action in particular areas of education and training (3).

This type of cooperation has been promoted since the Lisbon European Council in March 2000, which represented a milestone in the process leading to the adoption of the work programme on future EU education and training goals.

First, the European Commission drew up a draft report negotiated by the Member States on the concrete future objectives of education systems. The European Council subsequently adopted a final report presented at the Stockholm European Council in March 2001, which established three strategic objectives (COM(2001) 59 final):

- improving the effectiveness of education systems in the EU;
- · facilitating the access of all to education systems;
- · opening up education systems to the wider world.

This report was therefore the first official document defining an approach to EU education and training policies. The detailed work programme on the concrete future objectives of education systems in the European Union was adopted on 14 February 2002.

These objectives mark the beginning of a new stage of education and training development in the EU, based on respect for systems which are different but which share common objectives that form the basis for reforms in the various countries and for EU-wide action.

The indicators and benchmarks are also fundamental to the implementation of the Open Method of Coordination and to the success of the Lisbon Strategy, because countries need valid and comparable data to be able to compare their progress against the objectives to be achieved by 2010.

In Brussels in March 2003, the European Council called explicitly for using indicators and benchmarks (4) to identify best practice and to ensure efficient investment in human resources (*Commission staff working paper: Progress towards the common objectives in education and training, indicators and benchmarks*, 2004, p. 9).

Indicators are therefore used to measure progress in relation to the objectives proposed for education systems, while benchmarks are intended to act as reference points, emphasising the additional effort necessary for improving education systems.

The European Commission, however, has stressed that indicators should not be viewed in terms of measuring progress alone. They should also be seen as a basis for establishing dialogue and exchanges between Member States and as a tool for understanding the reasons for differences in performance, so that some countries can learn from the best practice of others. The use of indicators for exchanging best practices and new policy approaches in the EU is even more relevant in that many Member States are now achieving outstanding performance, while others are facing great challenges in achieving the objectives defined.

<sup>(4)</sup> According to the Communication from the Commission on 'European benchmarks for education and training: follow-up to the Lisbon European Council', COM 629 Final, the benchmarks are taken to be defined with reference to concrete objectives on the basis of which it is possible to measure the progress achieved.

# Evidence of the practice of evaluation of the international organisations

To be able to verify the coherence or otherwise of the objectives proposed for education and training in terms of human development and the indicators that monitor its progress, a critical comparative analysis has been developed on a range of world education policy evaluation and monitoring documents published by international organisations. The research sought to establish a link between the concepts embodied in the theory and the evidence of practice.

The international organisations and documents analysed were: OECD (*Education at a Glance*), UNESCO (World Education Report), World Bank (Education Sector Strategy), European Union (*Progress towards the Common Objectives in Education and Training: Indicators and Benchmarks*), United Nations (Millennium Development Goals) and the United Nations Development Programme – UNDP (Human Development Report).

To analyse the content of these documents a series of thematic categories was established that would allow the practice of education policy evaluation and monitoring carried out by the various international organisations to be compared.

In line with the summary table presented below, some of the conclusions of the comparative analysis are then presented, organised according to the thematic categories established, so as to highlight the coherence between education and training monitoring and the objectives defined for education and training in the millennium development goals and in the area of human development.

#### Personal development and social well-being

It was immediately noted in relation to *personal development and* social well-being that there are no indicators for monitoring citizenship skills and accountability for the quality of the environment.

As regards *mobility and exchanges*, arising out of the growing openness of societies to the global community through broader citizenship, the international organisations do not yet all appear to attach the same importance to this issue. Only the OECD and the EU establish indicators for monitoring mobility and exchanges. The OECD focuses more on student mobility in tertiary education, while the EU evaluates not only student but also teacher mobility. Due to its economic and political nature, the EU is clearly increasingly concerned with student and teacher mobility and exchanges, which it measures on the basis of data from the various European mobility and exchange programmes. No indicators from the other international

Table 1. Comparative table of the number of indicators attributed to each category of analysis, by organisation

CATEGORIES AND SUBCATEGORIES		OECD	UNESCO	WB	UE
Personal development and social well-being	Accountability skills for the quality and preservation of the environment				
	Citizenship skills				
	Mobility and exchanges	1			4
	Socioeconomic context		8	1	1
Quality of the education and training and professional path	Basic skills	5	2		4
	Skills for the knowledge society		5	1	2
	Awareness raising as regards scientific areas	2			4
	Teachers	5			
	Learning	4	1	2	1
	Employability and economic profitability	5			
	Continuing learning of professional skills				3
	Effectiveness of educational institutions	6	15	8	3
Equal opportunities	Gender balance	1	4	2	
	Respect for sociocultural and religious diversity				
	Recognition of skills and learning in non-formal contexts				
	LL opportunities for all				4
Resource optimisation	Financial	4	5	1	2
	Human	2	3		2
	Physical				

WB = World Bank

organisations were identified on education policy development in terms of the provision of more and better conditions of mobility in both educational and professional contexts.

A way of evaluating access to social well-being is to examine the distribution of the wealth generated by society. This is because wealth distribution is generally considered to be a good indicator for evaluating the capacity to fund the goods necessary to ensure a life of adequate quality. In terms of education for personal development and social well-being, it is therefore important for the international organisations to characterise the *demographic and economic context* of societies. UNESCO, the EU and the World Bank compile indicators relating to these aspects. UNESCO compiles a number of indicators that allow it to evaluate demographic trends and economic dependency relationships. The EU has developed demographic indicators that allow it to evaluate the number of young people as a percentage of the total population, identifying the population of formal education age. The World Bank only evaluates per capita GNP, providing an idea of the level of distribution of GNP per inhabitant.

### The quality of education and training and the career path

The first step in evaluating the quality of education and training was to highlight the *basic skills* each individual must have to be able to carry out their day-to-day activities. The analysis shows that all the organisations except for the World Bank compile indicators referring to basic skills. The OECD compiles indicators on reading and literacy skills and on the reading habits of 15-year-old pupils.

Literacy is also still an important issue for many of the world's countries. UNESCO, the UNDP and the United Nations therefore address this basic skills issue by evaluating youth and adult literacy rates. UNESCO compiles estimates of the number of illiterate adults, while the UNDP and the United Nations (by monitoring the millennium development goals) have compiled youth and adult literacy rates. The EU makes an evaluation based on average performance percentages and distributions as regards students' results.

For the international organisations studied, the concept of basic skills represents an observable type of behaviour that emphasises the outcome or final product.

In terms of *skills for the knowledge society*, a series of indicators encompassing various areas of knowledge were brought together.

UNESCO evaluates access to the principal means of information and communication, such as daily newspapers, radio and television, telephone, computers and the Internet, as a way of monitoring access to and the use of the respective new information and communication technologies. The World Bank presents a single indicator relating to the estimated adult literacy rate. The EU stands out again for the type of indicators defined. Its political and economic nature means that it must evaluate aspects of importance for the knowledge society, and it has therefore created a set of indicators relating to foreign language learning. The lack of another type of indicators, however, is clear. In terms of millennium development goals and human development, skills for the knowledge society are eval-

uated by means of statistics relating to the number of people with access to communication and information resources. The UNDP focuses on the number of fixed and mobile telephone subscribers, while the UN also considers the number of personal computer and Internet users.

Another important aspect for the quality of education and training in the context of the knowledge society is raising young people's awareness of scientific areas as a way of responding to competitive needs. In rating this aspect, only the OECD, the EU and the UNDP show a concern for 'measuring' progress to achieve this strategic objective. The OECD outlines tertiary qualifications and students by area of study, thus providing an idea of the areas in which students make their choices. The EU evaluates the number of students enrolled on mathematics, science and technology courses, and the number of graduates in these subjects. The UNDP has produced an indicator for analysing the number of students enrolled in these subjects as a percentage of the total number of higher education students. This analysis highlights the lack of indicators for monitoring education strategies that include the use of scientific language, by interpreting a variety of information sources, analysing and setting out ideas underpinned by the new information and communication technologies.

Teacher training is generally considered to be a powerful tool for offering high-quality teaching. Only OECD data were found in this area. The OECD provides an overview of the professional situation of teachers in terms of professional development, pay, working time, supply and demand and the distribution of teachers and other education personnel by age and gender. The other international organisations do not compile indicators for monitoring teaching staff activity.

The issue of *learning* is another important aspect in international discussion and reflection on the new requirements for the knowledge society. In this area, the international organisations place great emphasis on evaluating classroom organisation. The OECD provides indicators that 'measure' the number of training hours scheduled for primary and secondary education, and the teacher/pupil ratio. This organisation nevertheless adds indicators which are highly relevant to this issue which monitor the learning process of 15-year-olds, and evaluate the use of NICT as a learning tool by pupils and teachers. UNESCO, the World Bank and the EU also evaluate the learning environment in terms of the number of pupils per teacher, although the World Bank and the EU do so by level of education. In other words, the type of evaluation carried out does not cover new learning

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methods and strategies. Only the OECD stands out for the importance it attaches to autonomy in learning, which is fundamental for consolidating lifelong learning skills, and the use of NICT as a learning tool in schools.

The OECD alone focuses on the results of educational institutions, defining an indicator for comparing student performance across institutions. This type of indicator allows the countries themselves to establish rankings of the various educational institutions based on student results. In the present context, this indicator seems to be skewed, since it evaluates the quality of educational institutions solely on the basis of exam results.

Along the same lines as the previous subcategory, employability and the economic profitability of education is one of the concerns of the OECD, which has compiled a set of 'measurements' to evaluate the number of years young people spend in education, employment and non-employment. The OECD evaluates the situation of young people in terms of training and employment, and the situation of young people with low levels of education. In terms of income, the OECD has an indicator for comparing the level of education to the level of income, and the links between human capital and economic growth.

Work-based learning is addressed only by the EU, which evaluates company expenditure on vocational training courses and the hours allotted for workers to attend such courses.

The effectiveness of education systems is an area of concern for various world governments. The organisations studied compile indicators on rates of access to education, participation and progression, and on the number of early school leavers. The OECD has produced an indicator to measure estimates of schooling and the percentage of pupils enrolled. In terms of access to education, participation and progression, the OECD evaluates the working population's participation by level of education, and rates of access to education, participation and completion in secondary education. It also evaluates the level of education of the adult population.

UNESCO brings together a huge number of indicators enabling rates of access to the various levels of education to be compared to the school-age population, and indicators to evaluate the gross and net enrolment rate in the various levels of education.

The World Bank considers gross and net enrolment rates in the various levels of education, school life expectancy and progression to secondary education. It also considers the number of enrolments in tertiary education, and the number of enrolments in private education at primary and secondary level.

The EU analyses the situation of 22-year-olds who have completed secondary education. It also has an indicator to monitor the percentage of enrolments in primary private education.

The UNDP has compiled indicators to measure universal primary education (one of the principal development goals), presenting indicators on the number of children who reach the fifth year and net primary and secondary education enrolment rates.

To monitor progress in education in terms of the millennium development goals, the United Nations also shares the goal of universal access to primary education, defining indicators to evaluate the proportion of pupils who reach the fifth year and the net school enrolment rate in primary education.

## **Equal opportunities**

The first clarification in the area of equal opportunities shows that the international organisations do not present any indicators evaluating the extent to which education respects sociocultural and religious diversity, i.e. evaluating ethnic and religious minority access to education and training. There are also no indicators on the recognition of skills and learning acquired in non-formal contexts. This could indicate a strong tendency towards social exclusion in relation to people who have not had access to formal education for various reasons.

All the international organisations show considerable concern for gender issues, though some attach more weight than others to this aspect. The OECD evaluates gender differences in relation to student performance alone. UNESCO examines permanent teaching staff and the percentages of female pupils in each ISCED level. It also evaluates the percentage of female pupils for each area of study, and the percentage of female teachers in pre-primary, primary and secondary education. In terms of the gender balance among pupils, UNESCO only analyses tertiary education. The World Bank compiles indicators that 'measure' the percentage of girls in total primary and secondary education enrolments. In evaluating progress in relation to the millennium development goals, the United Nations also shows a concern for gender inequality in education. The indicators defined identify the ratio between girls and boys in primary, secondary and higher education. They also identify the ratio between male and female literacy. The gender balance is also evaluated by the United Nations in other areas, such as political participation and professional activities, but this has been disregarded since it is not connected to education. The Human Development Reports bear witness to considerable concern for gender inequalities, evaluating them in

various areas of human activity, though this research only covers those relating to education. The UNDP presents indicators on the adult female literacy rate, the young female literacy rate, the net female primary and secondary education enrolment rate, and the gross female higher education enrolment rate.

Also within the area of equal opportunities, the international organisations' evaluation of opportunities for access to lifelong learning has also been analysed. Indicators in this area are only available from the EU, which evaluates the percentage of adults who take part in education or training of some sort for each level of education. This indicator is useful for 'measuring' the number of people who take advantage of lifelong learning. The EU also has indicators for monitoring rates of participation in education and training by age and level of education, and for evaluating the proportion of young people who have only completed secondary education and who do not take part in the education system.

## **Resource optimisation**

Political and ideological theory considers the equitable use of resources in education to be essential for ensuring an acceptable level of quality. An analysis of the resource indicators as a whole shows that the international institutions focus mainly on evaluating whether the best use is made of financial resources, probably due to the increasing need for societies to account for the use of budget appropriations (accountability).

Virtually all the institutions evaluate the percentage of public expenditure allotted to education and training, establishing comparisons between the latter and total public expenditure.

The OECD evaluates the proportions of public and private investment in educational institutions, and total public expenditure on education. It also evaluates expenditure on institutions by resource category, comparing such expenditure to GDP. In terms of financial resources in education, UNESCO focuses on public expenditure on education in relation to GNP, and as a percentage of state expenditure. UNESCO has an indicator for tracking the average annual growth of public expenditure on education. It also establishes indicators to evaluate current expenditure as a percentage of total public expenditure on education, and the division of current expenditure by level of education. The World Bank only defines one indicator, which shows the percentage of public expenditure on education in relation to GDP. The EU is not very different from the other organisations. It compiles indicators that evaluate public expenditure on education as a percentage of GDP, and private expenditure

on educational institutions as a percentage of GDP. The UNDP makes the same type of evaluation, but distinguishes between public expenditure by level of education.

In terms of human resources, a decrease is evident in the number of monitoring indicators. Once again the primary concern is to evaluate the allocation of financial resources to pupils and teachers – the human component of education. The OECD defines an indicator for monitoring public expenditure on students and families. UNESCO evaluates teaching staff remuneration as a percentage of current expenditure, expenditure per pupil as a percentage of per capita GNP, and the number of staff in private education as a percentage of the total number of staff. The EU measures total expenditure per pupil and per level of education, relating this expenditure to per capita GDP.

In conclusion, most international organisations appear to evaluate resources invested in education, favouring the financial component to the detriment of the human component.

# Conclusions

This empirical study on the evaluation international organisations carry out through their major statistical reports confirms the discrepancy that exists between the objectives defined for education and training in terms of millennium development goals and the respective monitoring indicators.

The evaluation carried out in these reports primarily reflects a positivist and technological view of education, formulated on the basis of measurable descriptors and indicators. The findings of these international comparative studies are limited in relation to the notion of education underlying the millennium development goals which is needed to ensure autonomy and citizenship.

The factors linked to the context in which education is processed, the development of that process and the respective social interdependencies, which have a huge influence on educational processes and outcomes, have therefore been avoided.

The vast majority of the indicators focus on results, access, resources and organisational and administrative aspects, overlooking significant dimensions that determine the quality of education and training, learning processes and personal development. In this way they contribute to linear and restrictive interpretations of highly complex formal and non-formal education processes (Ambrósio, 2003, p. 23-32).

It is therefore postulated that the evaluation models applied by these international organisations may not help to improve the quality of education or promote policies designed to achieve equity and economic and social justice, or citizenship for democratic accountability, and may actually lead towards a loss of critical thinking within a performance culture.

It is, however, important to contribute to the effort being made (van Zanten, 2004) to improve the construction of these indicators and the modelling of education processes and systems (Le Moigne, 1999).

What is at issue is neither the desirable culture of evaluation nor the establishment of benchmarks for coordinating policies, but the development of a framework of comprehensibility enabling evaluation procedures to be developed by connecting *policy* (reference frameworks, aims, objectives) to *politics* (implementation of programmes with a view to achieving time-bound goals).

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