

*DIRECTIONS IN EDUCATIONAL PLANNING: SYMPOSIUM TO HONOUR
THE WORK OF FRANÇOISE CAILLODS*

*LES ORIENTATIONS DE LA PLANIFICATION DE L'ÉDUCATION: SYMPOSIUM
EN L'HONNEUR DU TRAVAIL ACCOMPLI PAR FRANÇOISE CAILLODS*

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Gwang-Chol CHANG¹

Abstract

In the context of national education development, the term of strategic planning is increasingly referred to. Countries and agencies have been engaged in planning and managing the development of education systems more and more strategically, due to various reasons, including the following:

- First, one may wish to plan all the activities deemed needed, but without necessarily achieving the expected results and ultimate goals.
- Secondly, more resources do not necessarily stand for better results. The way one uses these resources also matters.
- Thirdly, it has become difficult to plan everything one would wish to do. One ought to make choices through a balanced decision-making process.

One cannot say that there is a “perfect way” to conduct strategic planning. However, what is generic to strategic planning and management are certain typical stages involving similar activities carried out in a similar sequence. Any management involves four basic stages: analysis, planning, implementation and evaluation. In the education sector, the management operations related to “upstream”, planning work consist of: (i) system analysis; (ii) policy formulation; (iii) action planning.

Sector analysis consists of conducting data collection on and critical analysis of how the education system functions (internal dynamics) and examining various contextual factors (the environment of the system).

Critical analysis of the educational system undertaken during the sector analysis leads to questions about what the education sector must do in order to address the major issues, challenges and opportunities. These questions include what overall results (strategic goals) the system should achieve and the overall methods (or strategies) to implement policies.

Action planning is a process whereby one translates the policy directions into executable, measurable and accountable actions. In a broader sense, action planning includes specifying objectives, outputs, strategies, responsibilities and timelines (what, what for, how, who and when).

Keywords: Education Policies, Strategic Planning, Education Development Plan, Management Cycle, Monitoring and Evaluation, Education Policy Simulation, Resource Projections.

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1. Introduction

This article briefly describes the changing context of education planning at the country level, a few basic concepts and methods of the result-based planning and management, as well as some common steps taken by many countries to carry out strategic planning at national and sub-national level for educational development.

Generally speaking, planning is a process whereby a direction is mapped and then the ways and means for following that direction are specified. There are many forms of planning with several types of activities involved in this process. A plan is the product of the planning process and can be defined as a set of decisions about what to do, why, and how to do it. A plan of action implies that:

- It has to serve as a *reference for action*, built on the consensus, agreed upon by all those concerned as well as by those contributing to its implementation;
- It is designed as an *indicative, living framework*, in such a way that allows for adjustments in light of new developments during implementation;
- It includes not only policy directions, but also *information on the implementation strategies*, actions and benchmarks for implementation, monitoring and evaluation, as well as the *expenditure frameworks*.

More and more, education managers are “constrained” to think and plan more strategically, due to the reasons including:

- First, one may wish to plan and carry out all the activities that people deem necessary, but without achieving the ultimate goals and results.
- Furthermore, more resources do not necessarily stand for the best results. The way one uses these resources can lead to different levels of benefits and results.
- Thirdly, it has become more and more difficult to plan everything one would wish to do. One ought to make choices, often tough ones, through a balanced decision-making, trade-offs across the education system and through a consensus building process.

Over the recent years, the contexts in which education planning is conducted have evolved, some of which include:

- All education systems, in varying degree, are subject to rapid changes, most often driven by globalization, the marketization of some educational services, IT development, competitions, shift of traditional values and paradigms. The planning cycle has become shorter and more frequent. This involves the need for planning to be flexible and continuously adjusted to the changing demands of the society and individuals.
- There is a plethora of plans and programmes in many countries. Frequent changes of governments with differing agendas, numerous international and regional initiatives (e.g. MDG, EFA, ESD, etc.), the search for resources and results, and the multiplicity of partnerships, to name a few, lead to a diversity of the planning processes and subsequently numerous, and often fragmented development programmes.
- The high mobility of national cadres has often been at the expense of the education sector. In countries under difficult economic situations, the teaching and financial conditions offered to the education sector have become more and more unattractive, often resulting in national cadres espousing the education profession as a last resort.

2. The Strategic Management Cycle

2.1. An Overview

Like any other systems, education has inputs, processes, outputs and outcomes:

- Inputs to the education system include resources such as teachers, instructional materials, equipment, buildings, etc.
- These inputs go through a process (throughput) whereby they are mixed (input mix), combined and/or moved along to achieve results.
- Educational outputs are tangible results produced by processes in the system, such as enrolments, graduates and learning achievements.
- Another kind of result, which can be called outcome, is the benefits for the students, their families and/or the society as well.

As a way of strategic management, education systems should be analyzed and thought out from the perspective of the input, process and output, as well as in terms of relevance, efficiency, effectiveness, impact and sustainability: for example, one will wonder whether the inputs to the education system are relevant for addressing the needs, to what extent the processes (utilization of resources) are efficiently driven and how well the anticipated outputs are effectively produced. Outcomes should be weighed in terms of their impact and sustainability.

2.2. The Strategic Management Cycle

There are a variety of terminologies used in strategic management and a variety of approaches to carry it out. One cannot say that there is a “single perfect way” to conduct strategic planning. Each institution has its own particular interpretation of the approaches and activities in strategic management. However, what is generic to strategic management are certain typical stages involving similar activities carried out in a similar sequence. Any management involves **four basic stages**: analysis, planning, implementation and evaluation.

More precisely, we can say that strategic management is a continuum of successive stages such as: critical analysis of a system, policy formulation and appraisal, action planning, management and monitoring, review and evaluation. Experience and lessons learnt from implementation, monitoring and evaluation provide feedback for adjusting the current programme or for the next cycle of policy formulation and action planning.

Figure 1 outlines this cyclical pattern of strategic management:

- Any management cycle begins with analysis, whereby the current situation of a system and the critical issues pertaining to its status and functioning are first analysed.
- Findings and remedial options are then formulated and appraised, thus providing policy orientations.
- When the system is analysed and the future directions are traced, one can proceed with planning the necessary actions to correct or improve the situation. A plan can be long range (6 to 10 years), medium term (3 to 5 years) or short term (1 to 2 years).
- Operationalization consists of taking the necessary reform and institutional measures that are conducive to the smooth implementation of plans or programmes and before the actual execution starts, including:

- Designing specific development projects or programmes and/or mobilizing resources required to implement the planned actions and activities.
- Planning and management are subject to feedback-providing operations, i.e. monitoring, review and evaluation.

Figure 1: The strategic management cycle



In the education sector, the management operations related to “upstream”, planning work consist of: (i) system analysis; (ii) policy formulation; (iii) action planning.

In the past, planners usually referred to the term “long-range planning”. More recently, they use the term “strategic planning”. Although many still use these terms interchangeably, strategic planning and long-range planning differ. Long-range planning is generally considered to mean the development of a plan aimed at achieving a policy or set of policies over a period of several years, with the assumption that the projection of (or extrapolation from) the past and current situation is sufficient to ensure the implementation of the future activities. In other words, long-range planning assumes that the environment is stable, while strategic planning assumes that a system must be responsive to a dynamic and changing environment. The term “strategic planning” is meant to capture strategic (comprehensive, holistic, thoughtful or fundamental) nature of this type of planning.

With regard to operational and strategic planning, a narrow definition would be that strategic planning is done with involvement of high levels of management, while operational planning is done at lower levels. A wider, more holistic definition can be illustrated as in the following table.

	<i>Operational planning</i>	<i>Strategic planning</i>
Focus	Routine activities	Achieving goals
Purpose	Achieving the best use of available resources	Planning the best courses of action
Rewards	Efficiency, stability	Effectiveness, impact
Information	Present situation	Future opportunities
Problem solving	Relies on past experience	Finds new ways and alternatives

A strategic plan in the education sector is the physical product of the strategic planning process and embodies the guiding orientations on how to manage an education system within a larger national development perspective, which is evolving by nature and often involves constraints.

3. Three Stages of Strategic Planning

3.1. Sector Analysis

Sector analysis is the first stage of sector development planning. Sector review, situation analysis, diagnosis, etc. are sometimes used interchangeably. Basically, sector analysis consists in conducting data collection on and critical analysis of the aspects relating to (and surrounding) the education sector. Planners and managers carefully examine both internal and external aspects of the education system. In other words, they:

- review how the system functions (internal dynamics) to meet people's needs and economic demand;
- examine various driving forces behind the education system and external conditions (the environment of which education is a part), e.g. macro-economic and socio-demographic situations and developments.

Planners and managers can look at the above aspects from the perspective of the system's strengths, weaknesses, lessons and opportunities regarding educational development. They also examine the relevance, efficiency and effectiveness of the inputs, processes and outputs of the system in its current setting. This helps to identify critical issues, challenges and construct remedial actions and policy provisions.

The main categories of aspects to be considered when conducting an education sector analysis (ESA) and/or when describing the diagnostic part of an education sector development plan are: (i) macro-economic and socio-demographic frameworks; (ii) access to and participation in education; (iii) equity; (iv) quality and relevance of education; (v) external efficiency; (vi) costs and financing of education; and (vii) managerial and institutional aspects. The aspects (ii), (iii), (iv), (v), (vi) and (vii) can be documented by sub-sector (pre-school, primary and secondary education, technical and vocational education, higher education, non formal education, etc.)

3.2. Policy Design

Education sector policies represent the government's public commitment to the future orientation of the sector. A clearly formulated policy can play an important "operational" role as a reference for action. It can help to guide decisions and future actions in educational development, including the interventions of international and bilateral cooperation agencies, in a coherent way. It is important that policy promote the coordination and success of programmes and projects. The formulation of a "good policy for education" is a necessary step in promoting the emergence and effective implementation of action plans, programmes and projects.

A policy is a set of the goal and purposes (specific objectives). Often, education policies are defined along the following threefold dimension:

- access (access, participation, including gender and equity issues)
- quality (quality, internal efficiency, relevance and external effectiveness)
- management (governance, decentralization, resource management).

These dimensions are addressed (i) either as a whole, by programme component or by sub-sector, (ii) with target indicators by time-range (medium or long-term) and with a few quantitative indicators. One cannot say that there is a perfect way of writing policies or of listing different policy aspects. An indicative, though not exhaustive, checklist is presented below as a way of providing specification of some of the fields requiring definition in an educational policy and the implementation strategies:

- access to and participation in education;
- equity and the reduction of disparities in terms of genders, regional, rural/urban and social disparities;
- quality and the relevance of education at different levels (basic education, general secondary education, technical and professional education, higher education, adult education, etc.);
- the place that the private sector and local groups occupy in the organization of education;
- regulation of student flows between (i) formal and non-formal education; (ii) public and private education; (iii) general secondary, technical, and professional education; (iv) short and longer higher education; (v) elementary and secondary, secondary and higher education, etc.;
- institutional aspects such as governance, management and planning, including the decentralization, de-concentration and centralization balance;
- partnership and communication between actors and partners, the level and form of participation and communication;
- cost control in recurrent and capital expenditure; and
- policies and strategies to mobilize resources in connection with decentralization, the development of the private sector and partnership development.

Particular emphasis should be placed on formulating quantified objectives such as enrolment, admission, and flow rates, pupils/teacher ratios, the supervision rate, the space utilization and the share of education in the national budget. For this purpose, simulation techniques and models have been used successfully to define policies that can then be quantified for consultation and the negotiation of trade-offs between stakeholders and development partners, on issues related to enrolment objectives, the organization of provision of different levels of education, and public, private, external financial contributions.

3.3. Action Planning

A national policy should establish the framework for its implementation by giving the main goals and priorities, as well as the strategies to achieve them. It should be credible: that human and financial resources are available for carrying out the policy. Action planning is the preparation for implementation. An action plan aims to translate into operational terms the policy directions that education authorities intend to implement in a given time horizon. It is a tool for “clarifying” to some extent the goals and strategies in relation to the education policy, programming the activities required, establishing the timing, indicating the necessary resources, distributing institutional and administrative responsibilities, preparing the budgets, etc. It is important to consult and negotiate with the various development partners throughout the action planning stage if the country is to mobilise their support for plan implementation.

It is necessary to differentiate between an action plan/programme and an investment programme which often deals with the infrastructures and equipments to carry out the action plan and the recurrent expenditure incurred by such investments. The duration of an action programme, in general, is five years. One of the criteria of an action plan – in order for a plan to be called action plan - is to go beyond mere policy statements and lists of activities to further define and prioritize the actions, activities, and required resources in a coherent manner. These actions and resource projections should be defined within a given macro-economic framework using appropriate technical tools such as a simulation model.

In general the education policy framework document concerns the whole of the education sector. The action plan, which is linked to this policy framework, should also be sector-wide. Sometimes, a policy statement may concern either a particular sub-sector (secondary technical and professional education, for example) or a cross-cutting theme (improvement of the quality of education, for example), this within an overall, sector-wide development framework.

Different methodologies and techniques of action planning have been designed and used by different countries and agencies. Among them, two instruments are emerging as reference tools in developing action plans in the education sector: the Logical Framework Approach and simulation modelling. In reality, these two and other approaches are used, not in isolation but to complement each other, resulting in the preparation of a credible and coherent action plan for educational development.

4. Planning for Monitoring and Evaluation

4.1. Rationale

We are all accountable for the work we do. We are accountable for the use of the resources that we are given. We are accountable to a variety of people, but foremost to the people and communities we serve, though we are also accountable to those who provide resources.

We also need to learn lessons. We need a system that is reflective and analytical, examining performance both:

- On an on-going day-by-day, month-by-month basis so that we can change direction and improve what we are doing; and
- On an occasional basis, perhaps annually or every three years, when we can examine our effectiveness and the changes that have occurred so that we can build lessons from such experience into our future plans.

In response to these needs for accountability and feedback, three main questions should be addressed when preparing education development plans or programmes:

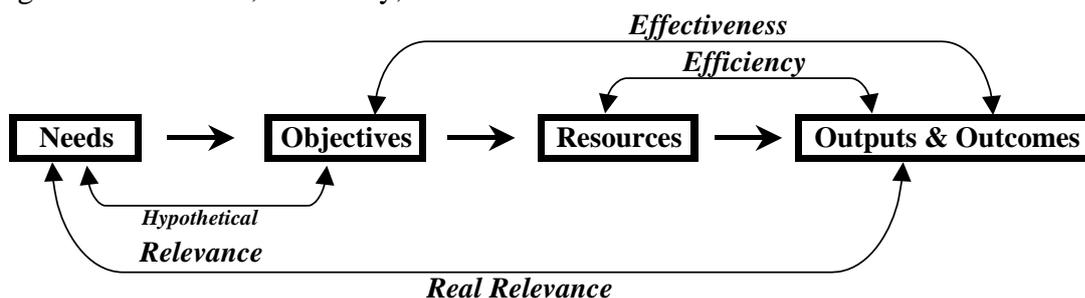
- What can enable us to judge and measure whether an objective or an expected result is achieved and an activity implemented?
- How can we assess the achievement of an activity, an output or an objective?
- What level of result are we going to assess?

In general terms, monitoring and evaluation consists in measuring the status of an objective or activity against an “expected target” that allows judgement or comparison. This target is an indicator. This implies that one has to define at the stage of planning some indicators that can

enable measurement whether and how an output or an activity is delivered in comparison with the initial targets.

Another question concerns how to assess the status of each level of the programme (activity, output, purpose and goal). Your boss might want you to produce results, no matter how you achieve them. However, you ought to care about the use of the means that you are given in order to attain the results expected by your boss. This can be done by regular monitoring of the achievement of your activities. On the other hand, you may need an external and objective point of view to assess the impact of your activities in meeting the purpose of your programme, which can be done by a more formal form of assessment, an evaluation.

Figure 2: Relevance, efficiency, and effectiveness.



It is very important to plan M&E from the outset: e.g. when doing a strategic plan or planning a programme or a project. A system is needed that will help answer the questions of:

- Relevance: does the organization or project address identified needs?
- Efficiency: are we using the available resources wisely and well?
- Effectiveness: are the desired outputs being achieved? Is the organization or project delivering the results it set out to deliver?
- Impact: have the wider goals been achieved? What changes have occurred that have targeted individuals and/or communities?
- Sustainability: will the impact be sustainable? Will any structures and processes so established be sustained?

It is important to note that credible indicators cannot be constructed without a reliable information system. Without the production of reliable statistics, the quality of monitoring and evaluation will be questionable at the stage of the plan implementation. In other words, one must start by establishing a reliable information system in order to ensure the quality of the monitoring and evaluation.

4.2. Three Classifications of Evaluation

Depending on the nature of a programme and the purpose of an evaluation, there are different classifications of evaluation.

The **first classification** can be made depending on who's conducting the evaluation:

- internal (when the evaluation concerns a programme implemented entirely within an institution, is carried out by the persons belonging to the same institution as those managing the programme, sometimes in cooperation with the assistance of external evaluators);

- self-evaluation (is a form of internal evaluation done by those who implement the programme); or
- external (when the evaluation concerns a programme whose implementation involves persons from outside the institution, often carried out by evaluators independent of the institution).

The **second classification** is made depending on the use of evaluation. An evaluation can be:

- formative (because its main goal is generally to correct the course taken by a programme and its results are usually intended for those implementing it. Sometimes called mid-term evaluation because it is carried while the programme is still being implemented);
- summative (because it leads to conclusions about the value of the programme so that lessons can be learnt for the future. It is called end-of-programme evaluation); or
- ex-post (because it is conducted some time after the completion of the programme in order to draw conclusions on the impact and sustainability of the programme. It is another form of summative evaluation.)

The following three types of evaluation form the **third classification** that is being widely used in programme evaluation. However, some flexibility is applied when conducting the types of evaluation described below in combination with those mentioned above. These three types are: monitoring, review and evaluation.

Monitoring: It is not an evaluation per se, but is a process whereby the progress of activities is regularly and continuously observed and analysed in order to ensure that the expected result is achieved. It is done by regular collection and analysis of information for checking the performance of the programme activities.

Monitoring is usually done internally by those who are responsible for the execution of activities (programme managers) in order to assess:

- whether and how inputs (resources) are being used;
- whether and how well planned activities are being carried out or completed; and
- whether outputs are being produced as planned.

Monitoring focuses on efficiency, that is the use of resources. Major data and information sources for monitoring are: financial accounts and also internal documents such as mission reports, monthly/quarterly reports, training records, minutes of meetings, etc.

Review, as for monitoring, is a task performed usually by those who are responsible for the activities, but it is a more substantial form of monitoring, carried out less frequently, e.g. annually or at the completion of a phase. Often called mid-term review, its results are designed for those who are implementing the activities as well as the providers of funds. Reviews can be used to adjust, improve or correct the course of programme activities. Review focuses, in particular, on effectiveness and relevance. It assesses whether the activities have delivered the expected outputs and the latter are producing the expected outcomes, in other words whether there is indication that the outputs are contributing to the purpose of the project or programme. Key data and information sources for review are typically both internal and external documents, such as annual status reports, survey reports, national statistics (e.g. statistical yearbooks), consultants' reports, etc.

Evaluation in many organisations is a general term used to include review. Other organisations use it in the more restricted sense of a comprehensive examination of the

outputs of a programme, how it contributes to the purposes and goals of the programme. Evaluations are usually carried out both by insiders (those belonging to the same institution as the programme managers) and outsiders (external evaluators) in order to help decision makers and other stakeholders to learn lessons and apply them in future programmes. Evaluations focus, in particular, on impact and sustainability. Evaluations may take place:

- at the end of a project phase or at the completion of a project (terminal or summative evaluations) to assess immediate impact; and/or
- beyond the end of the project (ex-post evaluations) to assess the longer-term impact of the project and its sustainability.

Key data and information sources for evaluation are both internal and external. They may include annual status reports, review reports, consultants' reports, national and international statistics, impact assessment reports, etc.

5. Policy Simulation in Education Development Planning

In the context of strategic planning, computer-based policy simulation is widely used when preparing education sector development plans, as a tool for policy formulation, planning and resource projections. Since there are too many actors, interests and the interrelations between these in the education sector, it is necessary to have not only a reliable information system, but also an objective forecasting tool to facilitate policy consultations regarding financial constraints and their consequences on education and national development. Simulation is a tool *par excellence* for scenario planning. It is used to test the viability of an education development strategy and to propose alternatives that can help cope with dynamic and changing environments.

Policy simulation makes use of computer modelling techniques to anticipate and assess the consequences of education policies. Since early 1980s, UNESCO's upstream support has given priority to policy analysis through computer simulation in response to countries' increasing financial constraints, and to shifting international cooperation approaches and patterns from project to sector-wide policy support. UNESCO designed various education policy simulation models, with a view to supporting national education administrations in the design of medium and long-term education policy and strategies. These models have been conceived to provide methodological and technical support to education planners and specialists in their efforts for the formulation of credible education development plans and programmes.

The simulation method is increasingly used in developing countries as a strategic planning and management tool allowing for policy-making, informed policy dialogue and resource negotiation for education development. The scenarios, produced through simulation as results of a long process of trial and error by taking into consideration the policy options and the technical feasibilities as well as the financial constraints, can feed into constructive policy and social consultations about the perspective of education development and help design a comprehensive financial framework.

Policy simulation contributes to ensuring coherence in educational planning, a better understanding and consideration of the implications of the policy decisions, and holistic educational development, through the following process:

- First, the simulation serves the formation of educational policies, which is complex by

nature. A simulation model can contribute useful information to evidence-based policy dialogue and consensus building. It is used as a tool for testing the feasibility of reform or development options of the sector. It allows, at the preliminary planning stage, to anticipate the pedagogical, physical and financial implications of the goals and policy options retained for long-term periods, thus contributing to designing feasible and coherent policies.

- Second, the simulation model provides indications on actions, inputs and resources required for educational development. It is used as a forecasting tool following the adoption of sector reform and/or development options. It makes it possible to determine the pedagogical, physical and financial implications of educational objectives. As a systemic forecasting tool, it helps in considering the dynamics of the educational system and the detection of the interrelations of a number of parameters which influence the operation and the improvement of educational services.
- Third, as early as the plan's preparation phase, the simulation can make it possible to establish an upstream forecast of recurrent expenditures and investments for the education sector in accordance with policy orientations. Governments, as a result, can have advance information on the annual costs required to implement the reform and development plans, foresee the budgetary gaps in relation to the possibility of States' financing in a given period, and identify the fields for which additional resources should be sought from the national private sector and/or from external partners.

Conclusions

Compared to other socio-economic sectors, and more than ever, education involves more complex and multidimensional problems. Governments are not able to meet the broad social demands without adopting restrictive measures within the education. In the dynamics of educational management of student flows, as well as that of public finance, they have to make difficult decisions to regulate the utilisation of resources, without in any way leading to serious disruptions and dysfunctions.

Faced with economic and financial difficulties, the ministries of education are under pressure from financial services (be they national or international) to prove that the resources they were provided are being used effectively. These pressures have contributed to the introduction of new approaches to accountability-based programming and management. The bilateral and multilateral agencies are increasingly requiring programming of development actions to be more results-based.

In aid-dependent countries, often in the face of the mitigated results of external support, development partners are going through sector-wide approaches in support of governments' priorities and procedures. The guiding principles and commitments, as encapsulated in the *Paris Declaration on Aid Effectiveness*, include the following:

- Recipient countries to exercise effective leadership over their development policies, strategies, and to coordinate development actions;
- Donor countries to align their support with recipient countries' national development strategies, institutions, and procedures;
- Donor countries to ensure that their actions are more harmonized, transparent, and collectively effective;
- All countries to manage resources for results;

- Donor and developing countries to be mutually accountable for development results.

This overall context changes the way countries and agencies work in the preparation and implementation of development plans and programmes in the education sector. These plans should give the assurances that the educational policy will be achieved.

In sum, planning has become more complex, especially in developing countries, involving much diversified and specialized skills and competences. Education managers are required to acquire not only the necessary technical capacities, but also the political negotiation and communication skills to effectively engage with finance ministries, external partners, and civil society organizations. The work ahead of education planners and managers has been, and is going to be more demanding and challenging. Mastering the concepts and methods of strategic planning is an enabling, though not sufficient, factor in order to cope with the educational demands and challenges faced by education planners and managers.

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