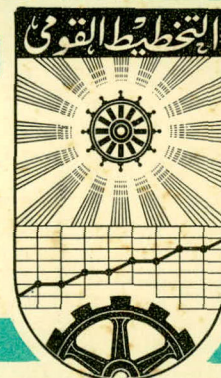


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Educational Programme to be in-
corporated in the Next Medium
Term Plan

Background Note
CONCEPTS

by

Klaus BAHR

August 1964

I. D. E. P.
CENTRE
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Lecture 13.1: Educational Programme
to be incorporated in the Next Medium
Term Plan

Background Note on Part I

CONCEPTS

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Context

1. Throughout the Course one has so far been speaking of educational planning as if there was only one kind of plan with respect to any given time period. This broad and simplifying assumption will have to be differentiated. As a matter of fact, planning, or rather the continuous implementation of plans means that a long-term planning period (10 years and more) has to be broken up in several consecutive medium term plans (3 to 7 years) which in turn may have to be split into consecutive short-term plans (normally one (budget) year). It is the necessity for and the main characteristics of this differentiation, that will be discussed in Part I of this lecture.

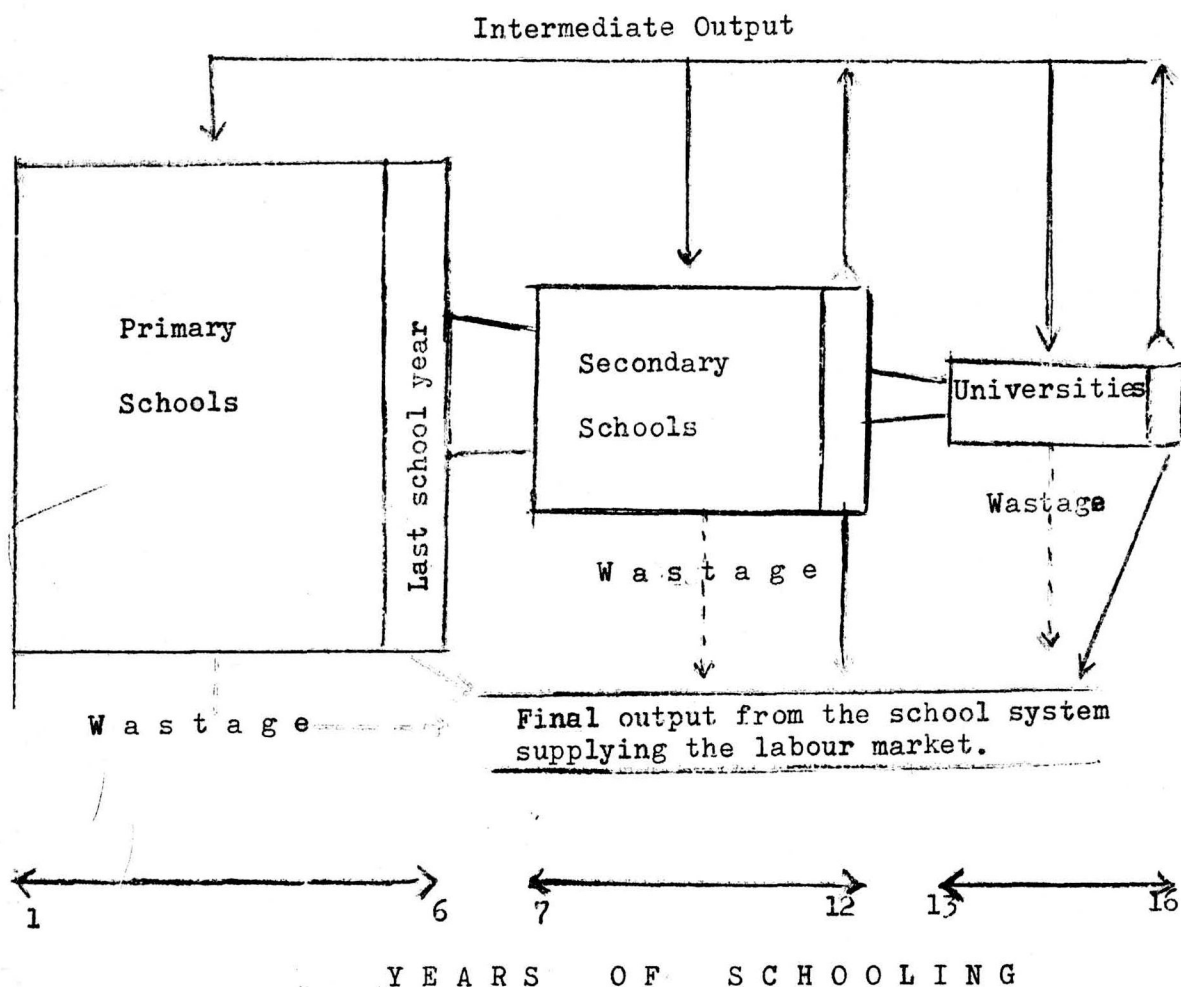
2. We presuppose the existence of a long-term educational plan (take as an example the 20-year Adis-Ababa - Plan, 1960/61 - 1980, and assume an adaptation to particular conditions of a given country has taken place) which is linked to the long-term perspective development plan of the national economy. In the long-term educational plan target figures (for enrolments, educational output, educational standards as reflected e.g. in pupil-teacher ratios, etc.) have been set which are forecast to be attained at the end of the long-term plan period. The long-term plan does not contain any specific or detailed reference to policy and administrative decisions to be taken in the course of the plan period, i.e. as from to-day.

3. The production process within the educational system is such that the final output is turned out only after relatively long gestion periods - in any case much longer than most periods of production of physical goods, Chart I illustrates the time-lags inherent in the educational process. Given the universal teacher bottle-neck substantial increases in the number of graduates of secondary and university - level education can only be obtained after 12 and 16 years respectively, depending upon the degree of quantitative and qualitative development of preceeding levels of the educational system. As a rule, the same goes for changes of the education pattern

N.B.: In preparing this note I have felt free to draw on a note prepared on the subject by my colleague Dr. Gérard Bell from the Organisation for Economic Co-operation and Development (O.E.C.D.)

by field of study (substantial increase in number of technical, natural science and engineering pupils) and by region (substantial increase of enrolments in rural and/or remote areas). - Increases in the efficiency of the educational system, i.e. reduction of wastage (drop-out and repeating) are apt to counter-balance the retardation effect of the long production-lags on the educational output. Intermediate output in the chart refers to teachers, supporting, administrative, supervisory staff.

Chart I



Medium-term educational plan

4. Given these circumstances it is clear that the long-term plan is not operational. It outlines perspectives, it highlights possible alternatives, it suggests very broad lines or directions to follow. But in the way it has been conceived and it is formulated it does not provide a ready basis for day-to-day decisions expressed in figures and related to the detailed overall plan or to sectoral plans. Thus, the medium-term plans have to prepare the attainment of the long-term targets. They provide the intermediate frame within which the necessary adjustments can be made. They constitute the link between present and the immediate future on the one side and the far-ahead future on the other. They take into account now prevailing conditions and not only average tendencies as expressed by the long-term plan.

5. All that the long-term targets permit is a distribution of average figures, e.g. increase rates, over the entire plan period, with more or less equal rates for each sub-period. Would the various sectors of the economy try to implement these averages right from the beginning of the long-term plan period, they would find themselves in the awkward situation not to be able to do anything co-ordinated and useful at all. This for mainly two reasons: (i) the resources available now are very limited and become more readily available only as one moves towards the end of the long-term plan period; (ii) the structure of the production process, administration, legal frame, now available resources etc. are to a large extent predetermined by decisions and events that have taken place in periods preceding the plan period and can only gradually be changed, the rate of change being very likely not in line with the average increase rates deducted from the long-term plan. Chart II illustrates this for the educational system. For reasons of simplification just one 4 years school cycle is shown. The effect of predetermined conditions, together with deliberate actions (increase of first year enrolments, i. e. intake, and decrease of wastage) in the plan-period are shown in parts (a) and (b) respectively of the Chart. It can easily be seen that substantial

Chart II

(a) With drop outs; with deliberate increase of intake during the medium-term plan period.

Calendar years →

Classes of a 4 years school cycle ↓

	1	2	3	4
1	Intake 50	Intake 60	Intake 70	Intake 80
2	30	45	55	65
3	20	25	40	50
4	Graduates 10	Graduates 15	Graduates 20	Graduates 35

Total Graduations: 80

(b) With drop-outs reduced to 0 by deliberate action within the medium-term plan period.

Calendar years →

Classes of a 4 years school cycle ↓

	1	2	3	4
1	Intake 50	Intake 60	Intake 70	Intake 80
2	30	50	60	70
3	20	30	50	60
4	Graduates 10	Graduates 20	Graduates 30	Graduates 50

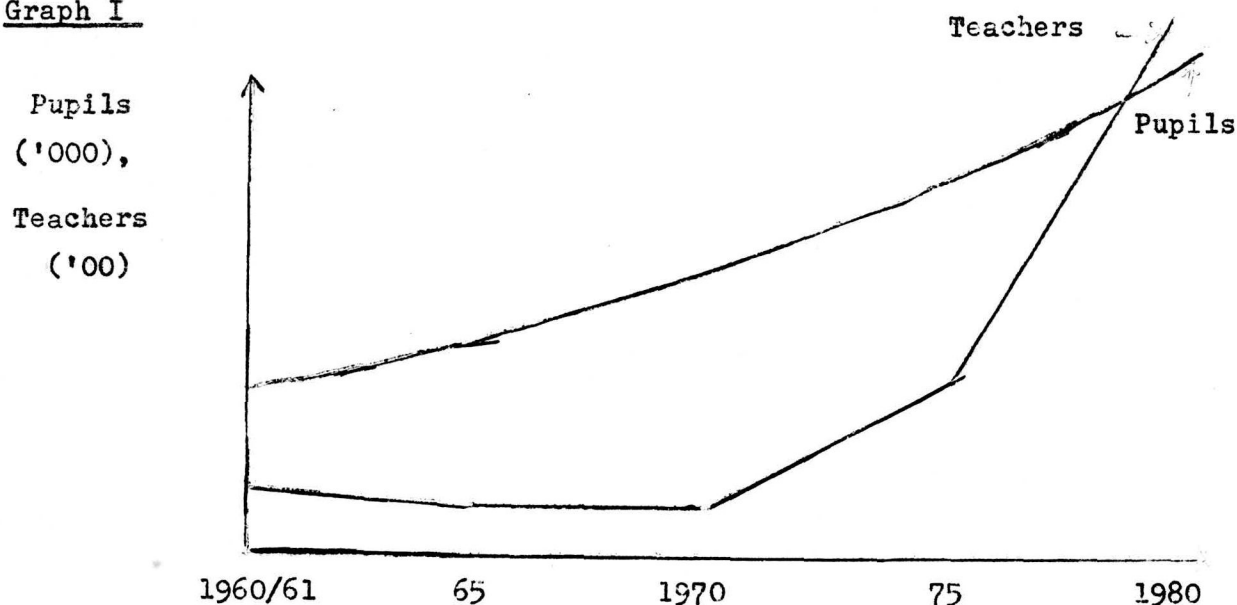
Total Graduations : 110

increases in graduations can normally not be obtained within one medium-term plan. - It must be borne in mind, however, that the effects of actions in the beginning of a medium-term plan period tend to be cumulative when one considers all stages of the educational system together and when one takes the next medium-term plan period into account. Chart II (a) shows that with a medium-term plan period equal to the length of the school cycle the intake of a 4 calendar years (of the plan period) can be influenced. This again influences the output of only one year (or class). This would mean the results of the first medium-term plan are meager; and they are so by definition, by the logistics of the educational system. Numbers in squares at the left hand side of the diagonal line (arrows) are predetermined. - It can easily be seen that the possibilities for deliberate actions resulting from a plan diminish to the extent the plan period is shorter than the school cycle (which is normally the case). - Chart II (b) illustrates the effect on situation (a) of deliberate, planned actions to reduce drop-outs. The total of graduations increases substantially.

6. Point (i) in paragraph 5 above implies that in the medium-term planning stage the educational planner (as well as the educational policy maker and administrator) has to bargain with his colleagues from other sectors of the economy so that the contradictory exigencies resulting from the average data of the long term plan (because of very strict resource limitations at the beginning of the long-term period) can be rationally reconciled. One will have to decide whether proportionate, unqualified cuts are suitable or whether - which a priori would seem to be more adequate for attaining the long-term targets - the resource distribution should be selective and according to pre-established priorities. - And then again: for the same reasons the accelerated development of the educational system itself cannot take place uniformly with equal stress on each element of the system. Very likely the choice will have to be in favour of (a) the crucial bottle-neck factors and (b) those elements

which have the highest multiplier effect. For example: if financial resources in a first period permit either an increase of primary school enrolments by say 50 per cent but with a deterioration of the pupil teacher ratio because of lack of teachers, or an increase of teacher training enrolments by 10 per cent, choosing the latter alternative would prepare for a much greater enrolment increase in the second and first period taken together. Choosing the first alternative might bring down enrolment increase in the second period relative to the first substantially. This again has effects on secondary school enrolments (including primary school teacher training) in subsequent periods.

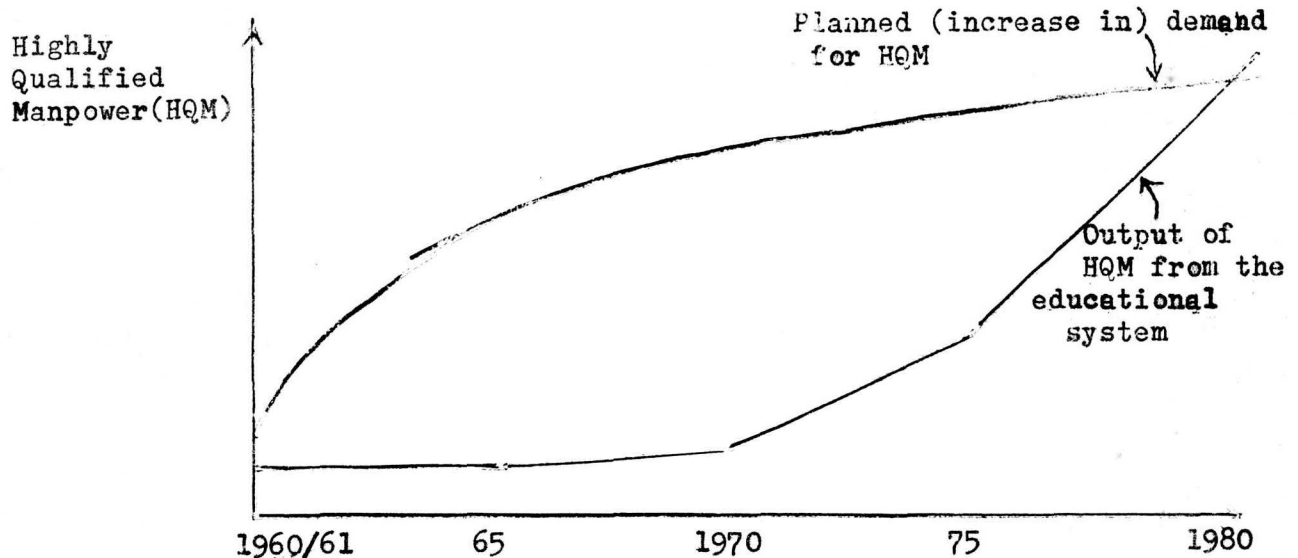
Graph I



The production period of pupils and the demographically possible rate of increase of enrolments is much higher than the production period of teachers. Thus the increase rates differ during the first two medium-term plan periods (1960-65, 1965-70) to such an extent that the pupil/teacher-ratio actually increases (deteriorates). Only towards the end of the long-term plan period do efforts to increase the number of teachers have a result. Although over

the whole period and on the average the targets may thus be attained, the phasing of the expansion of the different elements of the educational system is independent from the long-term plan. Medium term-plans are absolutely essential to attain the set targets.

Graph II



Demands for HQM tend to be relatively higher (the rate of increase of HQM is higher) during the first years of the long-term plan, yet the educational system reveals a reverse tendency. Only on a medium-term plan (or short-term plan) basis can these inconsistencies in the phasing of development be sorted out so that the long-term targets are finally attained. One can easily think of more such situations, for instance if the implementation of school building programmes is largely dependent on the situation of the building industry at large, etc.

7. Graphs I and II illustrate how in principle long-term plan average developments and actually possible developments can differ. In other words, they show the necessity and complexity of translating target values into orders of

magnitude which lie within the limits of physical and financial resources for each sub-period of the long-term plan and which lie within the limits of real possibilities of day-to-day decisions.

8. As is perfectly clear now, it is at the medium-term planning stage that the numerous practical decisions are taken which ultimately ensure the success of the long-term plan. This means that the educational planner has to formulate his plan in such a way that it complies with the legal and administrative rules governing his fields of interest: (a) the educational system and (b) the public finance and budget system. His cost plan will have to comply in form and content with budget rules and practices.- On the other hand it is the educational planner's duty to point out whenever he feels amendments of existing, or introduction of new laws and regulations are needed to ensure the implementation of the plan.

9. It is also at the medium-term plan stage that the educational planner has to keep closest contact with representatives from all disciplines engaged in the educational process: educationalists, pedagogues, psychologists, town-planners, agricultural experts, economists, legal experts, etc.

10. The medium-term plan determines the structure, staffing and organisation of the educational planning office.

11. Also from a methodological point of view the medium-term plan differs substantially from the long-term educational plan. The main points of difference would seem to be:

(i) Linear or other inter and extrapolations of orders of magnitude from the long-term plan are not workable for day-to-day decision-taking. This means that annual (or other) averages of long-term targets do only exceptionally provide a calculation basis for the actual implementation of the long-term plan; the implementation taking place in steps, represented by medium-term and short-term plans.

(ii) Very detailed quantitative assessments of the elements of the plan are needed.

(iii) During the first phases of the long-term plan period it is advisable to work "backwards", i.e. starting with the desired or needed development of the elements with the longest production periods (e.g. university level graduates) so that adequate measures can be taken in time.- In addition elimination of bottle-neck factors (e.g. shortage of teachers) will determine the methodological procedures to be adopted.

(iv) Continuous recalculations and adjustments are needed.

12. The long-term educational plan tends more to be a device for, and very often of the politician to mobilize the public for planning, to prepare the public for the manifold personal sacrifices (in habits, traditions, status, etc.) demanded by the implementation of the successive medium-term plans.- The medium-term educational plan is the device of the planner to convince politicians, to point out the disturbing consequences of ad-hoc decisions, and to put before them the necessity for largely rational choices. It is in performing this task and in disputing the best possible allocation of "medium-term" - resources with his colleagues from other sectoral planning offices (industry, manpower, etc.), that the educational planner ceases to be a ~~more~~ technocrate.