

## CONTROLLED COMPOSITION OUTSIDE THE ENGLISH CLASS

Grover Hudson

### The Problem

A long-standing issue in English language teaching is going to reappear and be re-examined next Easter here in Ethiopia. The English language section of the Ethiopian School Leaving Certificate Examination will, hopefully, be almost totally objective for the first time in history. A controlled composition will be set. Many of the examinations in other subjects, however, will continue to have essay-type questions. Students will find themselves having to write free English prose in, say, their chemistry examination, but not in their English examination. The English examiners claim, of course, that by careful writing of objective questions they can test nearly all aspects of English language use, and make their new objective examination a better test of general achievement in English than ever before<sup>1</sup>

Almost everybody else will strongly object. It will be charged that the English examiners have failed their responsibility. How can students be expected to write readable and expressive prose on their history and science exams if even the English exam doesn't require it of them? How, the English examiners will ask, can the history examiners mark fairly those reams and reams of history papers where mistakes in history can't be separated from mistakes in English grammar and vocabulary, not to mention spelling and handwriting? But if student writing is so bad, the non-English examiners will question, shouldn't something be done about it? And is taking free writing from the English examination a good first step?

The opinion of the English examiners is that the new English exam will be not only more objective than ever before, but it will also be more efficiently, quickly and cheaply marked than before, and will test a broader range of English ability. Whether it will be able to test all the aspects of English use that should be tested on a school leaving examination — specifically, composition skills — is another question which will not be discussed here. I, for one, think it will in every way be a more thorough test than ever before. But it might be of use to briefly summarize the arguments of the English language examiners as they go about objectivizing their examination. The English teacher is concerned primarily with the need for **control**. He believes that the language student should not be put into the position of making and therefore practicing mistakes. If anything were proved by it, he could happily make an exception to this postulate for the examination situation. But experience in Ethiopia has taught him that nothing is. More than half of the compositions from last year's English ESLC's were failures. Previous years were no different. The point is not that twelfth grade students should not be able to write compositions, or that we should give up on teaching composition. Rather, the simple truth is that too many students simply can't write compositions, and 15 years of compositions in the ESLC haven't helped any. Certainly, the idea is that gradual **decontrol** in the writing situations

1. Harold Madsen's article, "English Language Testing in Ethiopia: The ESLC Examination," in the previous issue of the *Ethiopian Journal of Education* (June 1967) is the best summary of this issue as it relates to Ethiopia.

which students face in the English class will eventually lead to moderately free writing. But we need time to raise the standard of English and English teaching here generally, and composition is only one index along which this improvement must come about. And there is little sense in asking students to write "compositions" before they can write correct sentences and paragraphs.

Rather than debating the merits of the new ESLC English exam, a better use of our time might be to consider how the teachers of the other subjects can be brought into our efforts to bring Ethiopian students up to the composition writing level. The teachers of the other subjects, who are now claiming their subject matter can be neither taught nor tested without composition skills in English, seem to have something to gain in this effort too. What I would like to do is propose a way by which the science, history and geography teachers can become teachers of composition and of English language generally. At the same time, in a sense, I will propose the possibility of the end of secondary-school English language classes in Ethiopia.

In that the teachers of the other subjects have clearly recognized a fundamental truth about language, we begin with some advantage. That is, these teachers, as evidenced by their insistence on having essay questions in their tests, understand that it is not possible to separate ability in a subject from ability to receive and transmit information about the subject. This means using language, and more specifically, writing English. The problem remains to show these teachers how these two matters should be related in the classroom so that students arrive at a level of sufficient competence in English to complement their subject matter knowledge, and make them therefore capable of illustrating in writing their competence in history, geography, or science.

Moreover, it is undoubtedly true that the sum of the sentence patterns, vocabulary and structures necessarily used in several of the non-English classes would virtually cover the items taught in an English curriculum. The point is this: if the teachers of other subjects could do a good job of teaching those portions of English that they find necessary for handling the students' understanding and expression of their own subject matter, the English teacher's job would be greatly reduced. Perhaps it would even become redundant. Notice that this is even more likely to be true in countries like Ethiopia where English will probably never be anything more (generally speaking, and for all practical purposes) than merely a medium of instruction — a tool for learning everything else in the schools. Surely the English teachers would be doing their job superbly if the only things they taught were the things which the students could carry into and use in their other classes. This is not to say that things like tag questions and other conversational idioms and structures should not be taught. Who is to say that these items are not essential to an adequate expression of knowledge in the natural, physical and social sciences? And these items can be easily integrated into the other curricula. For example, in testing, any true/false question might just as well be expressed with a tag question: "Mercury is a metal, isn't it?"; rather than **true** or **false**, the student would learn to answer, "Yes, it is," or "No, it isn't."?

2. The true/false question is a good example of what is perhaps part of the problem: violation of the "real language" criterion in language teaching. Even the English teacher uses this type of question. But how often do we answer "true" or "false" to a question put to us in real life? Note especially the blackboard or mimeographed notes of, say, a chemistry teacher. He very seldom uses an article. No wonder students have such an especially difficult time mastering the English articles. It is especially the science teacher, with his inclination for abbreviation, who is most guilty of classroom use of an English language where in most redundancies are eliminated, natural redundancies of the language which are especially necessary for a learner.

To the point of monotony we have repeated the adage that, in a country like Ethiopia where English is the medium of instruction, every teacher in English is a teacher of English. The present problem in Ethiopia as evidenced by the alarming failure of students on past ESLC English compositions is caused partially by the failure of non-English teachers in just this area. To put it simply, the students are having English thrown at them so fast and so carelessly (and are thoughtlessly being asked to simply throw it back), that the result for most students, by the time they sit down to write their ESLC paper, is a hopeless mish-mash of verbiage, wordage and cliché.

How can the teachers of the other subjects be blamed? Rather the teachers of English might be blamed for doing nothing about helping and preparing the other teachers for this very sophisticated task — teaching in a language while at the same time teaching the language itself.

We need to begin to formalize the implications of the assumption that every teacher in English is a teacher of English. There are three aspects to this need. First, we must perform the linguistic research which will tell us exactly what items of the English class and curriculum — structure, vocabulary, idiom, etc. — are required in the teaching of the other subjects. We might take the English curriculum and try to distribute various items from it into the other curricula where they are found necessary. For example, the "so ADJECTIVE that" construction is required in geography to express ideas like "The Sahara Desert is so hot and dry that almost no life can exist on it." In chemistry, certain comparative constructions are necessary: "Iron has a higher melting point than copper."

The second thing we must consider and decide is how the non-English teacher can be best prepared for a greater, conscious role in English teaching. There are two aspects to this. To begin with, which of our current methods are most easily transferred to the non-English classes? These must be methods which are not so sophisticated as to be overly difficult for the non-English teacher to master, and they must be methods which are fairly compatible with methods already proven and being used in the particular non-English class. Then there is also the possibility that this new teaching circumstance, where one of the formal goals of the non-English class becomes to teach English, will require the development of totally new methods. Whether old or new, these methods should be well disguised. Probably the student should not know when the emphasis of a lesson has shifted from the announced subject to the less interesting study (sad but true), English language. More importantly, however, our knowledge about the nature and efficiency of natural, first language learning tells us that language is best learned where practicing it is required by real-life necessities and desires, as when the child asks for something to eat, or when the Ethiopian secondary school student asks if iron has a higher melting point than copper.

Finally, there is a need to develop training methods by which the teachers of other subjects can be prepared for English teaching. This does not now necessarily mean that current textbooks in use in the science, history and other classes need to be rewritten with the goal of English teaching in mind. Nor, hopefully, are long and expensive in-service re-training programs necessary. All that is required as a beginning is small-scale experimentation in training these teachers to use one or two methods currently in use in our English classes — methods which will transfer easily to these non-English classes, and methods which do not require sophisticated knowledge and background in language teaching theory.

For a variety of reasons, this new training for "old" teachers is no easy task. As those who have been involved in teacher training for teachers of English as a second language can testify, generally all teachers taking this up for the first time have quite a difficult time reaching a stage of sophistication where they can do an acceptable job. It is even more difficult for non-<sup>3</sup>TESL specialists. A couple of Peace Corps training programs for teachers in Ethiopia have tried to better prepare history, geography, science and mathematics teachers for their job in teaching in a second language. To some degree this has been successful; mostly it has not.

It is perhaps possible to isolate three reasons for this relative failure. First of all, there is insufficient knowledge on the part of the TESL specialists about the subject matter and the current methodology in the other subject areas. This is compounded by the failure of the TESL specialists to seek cooperation with the specialists in the other areas. Secondly, the main emphases of the typical teacher training program in TESL, the primacy of spoken language, and the oral ("drill") methods, have apparently quite poor transfer to the situation where the training is for teaching in a second language. I am not sure whether this is a truth, or whether we have simply failed to make appropriate adjustments in the presentation of this idea and methodology. Many non-English teachers in Ethiopia have told me they have successfully "used TESL" in their classes. After questioning, it is usually determined that this means that they have found some success and usefulness in nothing more than having students repeat things after them in unison. This is perhaps not to be taken lightly, and may have real significance in the non-English class. It is surely, however, far short of what we should hope for and expect from the non-English teachers.

A basic problem in training all teachers for Ethiopia seems to be that the necessary theoretical sophistication really required for success as either a teacher of or in English as a second language is a matter not easily taught in "training programs". It requires too much time, and apparently a very subtle combination of study and practice-teaching experience. Another problem that has never been successfully solved in the Peace Corps' TESL training programs is the difficulty of presenting lessons in theory in situation where exigencies of time require full preparation and therefore emphasis on **practice** rather than **theory**. This is compounded by the difficulty of presenting theory to people who, since they are, in the jargon of the Peace Corps, BA-generalists (typically graduates in political science, sociology, economics, etc.), are without scholastic interest in language and language teaching. This general problem in training teachers of English as a second language may be presumed to be magnified in training teachers to teach other subjects in a second language. It is difficult enough to obtain the necessary amount of time, and to put over this subtlety in the specialist TESL programs, let alone in programs for all teachers in English. Probably, rather than the theoretical emphasis on the primacy of spoken language and the methodological emphasis on the oral or drill techniques, other emphases are needed. I would suggest the idea of control and decontrol as the theoretical emphasis. This means that the students' degree of freedom to use English, and thus to express their own ideas, is at first limited, but later, and gradually, expanded. Professor C.F. Prator has referred to this as the "manipulation-communication scale", a term which I will use hereafter. Methodological emphases should be in line with this theoretical emphasis.

3. TESL is the standard abbreviation for Teaching English as a Second Language.

Finally, the training program to prepare non-English teachers for teaching in a second language has failed to find those of the specialist methods which do have good transfer, and which can successfully be presented to the non-specialists. Assuming that the teacher of other subjects recognizes his role in teaching English, we have till now failed to show him the methods that most readily prepare him to take it up. Clearly, we cannot take much of his time in teaching him to prepare and present pattern drills. The methods we teach him must not be so remote from his primary job — the teaching of subject matter. Ideally these methods would not, as well, require time out from the subject matter lesson, but would complement it ideally. The language content should teach itself, somewhat as it did for the child learning to speak his native language.

#### **First Steps Toward an Answer**

The technique of controlled composition is perhaps the best example of a method that we might most efficiently train the teacher of other subjects to use. This is true for a variety of reasons. First of all, it is in composition where, it has already been noted, the English teacher and, for example, the chemistry teacher, find common ground. The chemistry teacher has recognized his need to teach composition. He may never recognize a need to teach vowel contrast or even oral fluency. But he weekly, almost daily, would like to ask his students to compose written English. This means that controlled composition is a method of language instruction which meets the requirement of naturally complementing the chemistry lesson. We might say that it is well camouflaged in the chemistry lesson. Perhaps most of all, controlled composition is a method which can be learned by the chemistry teacher because it offers a clear and broad illustration of the manipulation-communication scale, the suggested emphasis in training the teachers of subjects other than English for teaching English as they teach their speciality. To make this clear, a partial list of the various techniques or frameworks of controlled composition may be listed along a manipulation-communication scale:

#### **Manipulation (Most Controlled)**

1. Simple copying.
2. Copying with blank filling.
4. Rewriting a paragraph making changes: as in tense, subject, setting, etc.
5. Answering arranged, detailed questions such that full sentence answers make a paragraph.
6. Linking short sentence of a paragraph to form a paragraph with longer, complex sentences.
7. Filling longer blanks and completing sentences of a given paragraph.
8. Writing from a sentence outline.
9. Writing from a topic outline.
- ↓ 10. Writing after class discussion and with notes on the blackboard.

#### **Communication (Least Controlled)**

These ten frameworks don't even begin, of course, to exhaust the possibilities for controlling the students' use of language in composition — the possibilities of structuring out mistakes and of giving practice in correct usage in extended writing. Within each of these ten frames suggested, there is a wide range of control and decontrol possible depending on the teacher's selection of vocabulary, structure, subject matter, etc. Or the various techniques of control may be used in conjunction with each other, as where extensive class discussion precedes use of the topic outline, or the rewriting with changes technique is combined with blank filling. It is a method with broad applicability, is utterly practical, and is relatively unsophisticated. It is such a clear and extensive illustration of the manipulation-communication scale that it self-teaches this proposed theoretical emphasis of the training program.

Rather than assigning uncontrolled writing as many of the other-subject teacher now do, a mastery of the manipulation-communication scale in composition techniques would enable a teacher to focus on teaching the subject matter by assigning a frame which supplies students with the necessary structure and vocabulary; it would enable him to teach the structures and vocabulary which he sees as integral to the mastery of his subject material; it would enable him to test one or the other or both while preventing a test composition from being confused and garbled by interference caused by the students' lack of knowledge of inessential language structure and vocabulary. Trial and error can lead the teacher eventually to an understanding of how much control is needed by his students at a given stage of progress in the lesson or at a given grade. All he would need to know are the various (infinite) techniques for controlling the students' opportunity for error. When the teacher found himself having to correct too many errors in language, he would know that control needed to be tightened, and presumably he would know how to do it.

Obviously, mastery and use of the techniques of controlled composition is not the only way that the non-English teacher might be made a successful teacher of English. It was suggested earlier that pattern drills may not be of great use outside the English class. But there may be exceptions to this. For example, suppose the geography teacher wants to review or give practice in the relative size of African countries. Beginning with a large map of Africa hanging before the class, the teacher sets up the pattern:

Nigeria - Ghana

Nigeria is bigger than Ghana.

Algeria - Nigeria

Algeria is bigger than Nigeria.

And then continues to cue the class as a group, and later as individuals.

Cue: Kenya - Uganda

Response: Kenya is bigger than Uganda.

Cue: Egypt - Algeria

Response: Egypt is smaller than Algeria.

Later he would take down the map and continue the drill; he would be teaching geography and English at the same time.

In the area of teaching vocabulary, we have long known of the desirability of coordinating the English curriculum in vocabulary with needs in other subjects. It is about time that some coordination was attempted. Again, it could probably be shown that if the structures and sentence patterns necessary in the non-

English classes are considered, and the function words necessary in their use are added to the vocabulary which the teachers of other subjects should or could teach, the resulting word list would virtually duplicate the English curriculum in vocabulary.

It is especially in the seventh grade, where English is supposed to become the medium of instruction, and where some teachers teach their lessons twice — once in English for form, and once in Amharic for the students — that the task of teaching English in the English classes seems most hopeless. Until the quality of instructor in the elementary grades is greatly improved, or until the seventh grade teachers become capable of limiting and controlling their use of English, this grade will remain the point at which the future of the typical Ethiopian student is decided. If he is talented in language learning, a student will absorb enough of the English language in his seventh grade science, social studies and mathematics classes to gain a crucial advantage over his merely average classmates. The average student, because of his weak background in English, begins falling back in his other studies in the seventh grade, his capacity for learning English is overwhelmed by the flood of new words, structures and sentences, and his attitude as a student is crippled by the hopelessness of his situation. Experimentation in making English teachers of the non-English teachers should begin in the seventh grades.

#### **Implications for Teaching English in Ethiopia**

The implications of this should be clear. It is possible that if the TESL specialists' efforts and time were directed to preparing the history, science, geography and math teachers for an expanded role in English teaching, the time used for English classes in the secondary schools might be proved redundant.

Notice that what an English teacher can do in 7-8 periods a week to prepare a student for another 22 periods of learning chemistry and all the rest in English is probably not enough. The need for English language use in the other classes in Ethiopian secondary schools is probably somewhat greater than the ability of the English class to prepare students to meet that need. The only alternative to making the teachers of the other subjects real teachers of English is to subjugate the language needs of the other classes to the prescriptions established by the sequence of the teaching of these items in the English curriculum. This undoubtedly means, in fact, that the teaching of content, since it depends absolutely on certain language structures, sentence patterns and vocabulary, would have to be as well subjugated to the pace of the English curriculum. But, again, in countries like Ethiopia, English is nothing but a tool, a skill which is supposed to make possible learning in the other subjects, learning at a pace which will enable students to equal what is learned by their student counterparts in the developed countries. Obviously the tail cannot be allowed to wag the dog. This alternative is unrealistic. The teachers of other subjects must be made real teachers of English, and the need to teach English as a separate subject may be eliminated, or at least drastically revised in goals and concepts, with perhaps teaching of speed-reading, rhetoric and logic appearing as primary goals in a reduced English curriculum.

It is hardly necessary to enumerate the advantages this possibility offers to countries like Ethiopia. The system of education is plagued by various problems, all of which are possibly alleviated by directing the teaching of English in the secondary schools into the other classes, and doing away with or limiting the English periods. First of all, the standard in the other classes is low, and

obviously, additional periods a week, provided the teacher of these subjects learns well his job as a language teacher, can raise the standard in these classes. Note that increasing the number of periods for English would be counter-productive since periods given to English necessarily mean periods taken from the other subjects. Secondly, the teaching and learning of English that would take place in the non-English classes would be more appropriate because it would occur in a natural setting, in the students' need for and interest in learning the other subjects. Real language would be learned in a real way, in meeting the needs of communication in real life.<sup>4</sup> Note in this context that the English teacher has always recognized the truth of this since he often bases his lessons on reading or comprehension passages dealing with the subject matter of the students' other classes. He knows that the students' interest and therefore their willingness and apparent ability to learn are thus enhanced. A third item to consider is that there is a serious shortage of TESL specialists, and the previously cited impossibility of adequate English teaching, given the very heavy need for use of English in the other classes, suggests that a better expenditure of their time might be training the other teachers in English teaching. Many of the TESL specialists now spend large amounts of their time teaching in training programs of various sorts. Finally, some of the class time gained from the reduction or elimination of the English periods could be used to increase the time given to teaching some of the things which are recognized as being applicable to current developmental needs — personal hygiene, public health and sanitation, rural studies, local history, civics and certain practical studies such as agriculture and woodwork. The availability of some or all of the 7-8 periods now given to teaching English in the secondary schools would make time for these subjects possible without the necessity of presently impossible decisions cutting down time for the typical "western" curriculum, which, while universally maligned by African educators, cannot be easily replaced or adapted to the particular needs of a developing country.

#### BIBLIOGRAPHY

Chomsky, Noam, *Aspects of the Theory of Syntax*, The M.I.T. Press, Cambridge, Massachusetts, 1965.

Madsen, Harold, "English Language Testing in Ethiopia: The ESLC Examination," *Ethiopian Journal of Education*, Vol. 1, No. 1, June, 1967.

4. This may well be the most significant gain of all, and a large one if the implications of theories that language learning involves activating an innate grammar device are correct. Note especially Noam Chomsky, *Aspects of the Theory of Syntax*: "A condition for innate mechanisms to become activated is that appropriate stimulation be presented." (p.48); "... the general form of a system of knowledge is fixed in advance as a disposition of the mind, and the function of experience is to cause this general schematic structure to be realized and more fully differentiated." (pp.51-52).



## EDUCATIONAL PLANNING

In recent years educational planning has assumed a first importance, particularly in developing countries. To many who have been concerned for a number of years in educational administration, there is sometimes puzzlement and wonder that what used to be done almost as a matter of course is being raised into a high speciality, not unlike a university discipline. It is true that a *mystique* is attaching itself to educational planning, and this is unnecessary. The old methods of foresight and common sense are still the bases of educational planning; if it has enlarged itself, it because all countries have come to understand that the planning of education is not an isolated exercise, but an integral part of the planned economic and social system of a country. In other words, the kind of education and the amount of education are matters which the government of a country has to decide. The educational planner will have two duties; first to see that all the facts are known to the government before decisions are made; second, to draw up a plan which implements these decisions. In practice, the educational planner, having informed himself concerning the trends of the economy, and concerning the broad intentions of the government, will submit a draft plan, containing all relevant facts and suggestions; government decisions are usually based on such plans as are submitted to it. In theory, plans come after decisions. In practice, decisions cannot be made until a draft plan has been submitted.

It was said that educational planning is particularly important in developing countries. The reasons for this are: (a) developing countries are in a hurry, and cannot permit anything irrelevant; (b) there are usually difficulties of finance and staff. These latter are limiting factors which impose a detailed precision on the planner. He is bound by the financial and human resources available to him. These limitations are hard taskmasters. The financial limitation is an obvious one. The limitation in human resources is not so straightforward, and for this reason is often the target for well-meaning solutions which usually rebound on the economy. Thus, it is not unusual in some countries to employ teachers at levels well above those at which they can effectively teach. In most development plans, some dilution of skills will have to be accepted; but there is a limit to this. Below that limit, standards drop so alarmingly that the facilities which are provided become worthless and result only in a throwing away of public money. Dilution may be accepted up to a point, but if it goes beyond that point, the drop in quality will be serious and will negate the intentions of the plan.

To illustrate the need for careful educational planning in developing countries, we may consider secondary education. There are countries which are sufficiently developed to be able to afford universal secondary education. When universal secondary education is provided, it changes its character, in some respects; the word "secondary" more and more comes to refer to the time when primary education has been completed; it refers less and less to what the word "secondary" means in less developed countries, where it is offered to a comparative few. In these latter circumstances, secondary education is highly selective; it is a preparation for university and specialized schools; and because of the serious need for a developing economy, it is usually carefully controlled to prepare young men and women for the kinds of work which the country needs in order to go

ahead. The poorer a country is, the more need there is to select, control and guide. This does not mean that students have to be directed to a particular kind of employment. But it does mean that the number of places in particular kinds of schools has to be carefully considered and decided on in relation to the targets and rates of growth of the national economy. Countries which have neglected to guide their second and third levels of education in this way have found themselves with hundreds of unemployed lawyers and no engineers, to give a rather well-known example.

The frequent shortage of financial and human resources has been mentioned. There are two other difficulties which confront the educational planner. The first concerns the time factor, and the second is the distortion which may arise when an educational system is forced, like a hot-house plant, away from its natural growth. The time factor is one which imposes itself. If you want, for example, to increase the number of children being taught in Grades 5 and 6, you have to train more teachers. These teachers will (let us suppose) have completed Grade 10, and undergone two years' professional training. To meet an expanding enrolment in Grades 5 and 6, you may have to start putting future teachers into Grade 7. In six years they will be ready to teach the increase in Grades 5 and 6. Also, the extra pupils in Grades 7 to 10 will need new teachers, and so on. In theory, years might pass merely preparing for expansion. In fact, popular pressure and government decision will force the situation to be met by various expedients; but even so, large increases in enrolment cannot be achieved overnight. The educational planner must reconcile himself to the need for time, if large expansion is to be achieved with no marked drop in efficiency. For this reason plans usually cover four or five years; and each plan is only a rung on a long and difficult ladder.

Distortion arises when some section of the education system is expanded in preference to a general expansion. Education should be like a tree, whose leaves increase as the boughs grow longer, as the trunk increases, and as the roots swell and go deeper. The planner frequently has to distort the system from its natural growth, but he should remember the need to re-shape it later. Examples of distortion are: the training for, and the absorption by, a particular section of the economy, at the expense of other outlets; concentration on some types of education, to meet special demands; neglect of some subjects, through shortage of money and appropriate staff.

A difficulty in developing countries is the lack of accurate statistics. In Ethiopia this is being overcome, but "intelligent guessing" often has to be used. It is doubtful whether anyone can say with absolute accuracy what the elementary school age population will be in five years' time. There are too few certainties, and too many imponderables.

A further frequent difficulty in developing countries is a rapidly increasing population. For example, in Ethiopia, the elementary school-age population (i.e. those aged 7 to 13) will increase from its present probable figure of 3,500,000 to a probable figure of 4,000,000 by 1973. In other words, you have to make considerable efforts even to maintain enrolment percentages. Like Alice, you have to run as fast as you can, just to stay in the same place.

We have touched on some of the difficulties which face the educational planner in developing countries. It is time to consider the reasons why educational planners are necessary, and what situation they are called on to deal with. As was remarked before, developing countries are short of two things, time and money. In other words, they need to use resources to obtain results as soon as

possible. Clearly, they cannot have everything; therefore difficult, and sometimes painful, decisions have to be made. Shall the country concentrate on universal primary education? Can it afford it? What proportion of those who complete the primary course should go on to secondary education? What kinds of secondary education should be provided? What tap-off points shall there be? What standards of building can be provided? Shall university education be widely diversified, or confined to a small number of badly needed types of training?

But these questions (and many similar ones) are really only parts of the principal question which faces developing countries. In order to 'develop', i.e. to make wealth which itself will provide more social services, a country has to plan an educational system which will provide the trained personnel needed to expand and improve the economy. This does not mean that all students should be in technical and commercial schools. After all, a good basic education is necessary for all kinds of betterment; thus, the small farmer who can read simple agricultural advice will produce more and better crops than one who cannot read. Similarly, teachers will be needed for true basic subjects in elementary and secondary schools. Industry will need recruits at three levels, artisan, technician, graduate (technologist). All kinds and levels of attainment will be needed. The planning consists in the careful inter-locking and inter-dependence of all the many parts of the system; and the size of the parts of the system will be carefully decided on, according to need. Planning also consists in the careful costing of the educational system (usually on a *per capita* basis, for both capital and recurrent expenditure) so that the government knows what money it will have to find. Educational plans are now usually made for four or five years; and it is essential for annual or biennial evaluation and revision to be made, because (i) costs do not remain static; and (ii) a society is always changing; if an alteration in the plan becomes necessary, it is best to know it clearly.

It should not be thought that the educational planner is solely concerned with the economy of the country. Perhaps, when difficult decisions have to be made, this is his main concern, for he thinks of the benefits which an improved economy will bring. But he is also an educationist in a liberal sense. Education is more than training to make money. Therefore, he will not forget that the object of any educational system is to produce the 'whole man' — and woman. He may be concerned with facts and trends, but he always recalls: *mens sana in corpore sano*. Even so, his main objective is always the provision of the **necessary number of correctly trained people** who will ensure a developing social and economic system, which, in its turn, will produce the wealth, in future years, for more education and other social benefits. It is important here to understand that the words "correctly trained people" are used in the widest sense; they should not be interpreted as "vocational education". A developing economy needs educated persons at all levels, from the recently literate farmer to the doctor of medicine. The educational planner tries to answer the questions: how many of each? How shall they be trained? What will costs be, and how shall they be met?

These are general questions; in practice, also the planner has to enter into a great deal of detail, including matters of curriculum, location of schools, standards of building, training of teachers, quality of instruction, text books and equipment, administration, and the interdependence of all levels and types of education. Moreover, when a plan has been approved, it is important that it shall be widely disseminated; in particular, it must be understood, in objective and in detail, by those who will be responsible for carrying it out "on the ground", i.e.

in the provinces and districts. It is also desirable that the people as a whole should know what the government plans to do.

Ethiopia has now carried through two five-year plans; the third five-year plan has been drafted, and will shortly be considered by Government. The Ministry of Education submitted its proposals, which will become, with such modifications as are decided on, an important part of the integrated Third Five-Year Plan for Ethiopia.

It is fully understood that only the Government can decide on the final plan, but it will be of interest to examine, in general terms, the proposals made by the Ministry of Education. The Ministry was, like all others, conscious of the financial difficulties. All ministries would like to have more money, in every country of the world. But if you had all the money you wanted, for everything you thought desirable, you wouldn't need to do any planning. Like most ministries, in most countries, the Ministry of Education has to pursue, not the desirable, but the possible. The aim of planning is to make the possible as effective as you can.

With these criteria in mind, it was decided to base the plan upon four main principles:

- (a) expansion, to the extent that could be afforded and carried through;
- (b) improvement of existing facilities;
- (c) re-inforcement of the formal system of education by literacy campaigns, and by the use of mass media;
- (d) strengthening of administration and personnel management.

The simple word "expansion", used in (a) above, may be used as an example of what is really entailed in educational planning. To double the number of children in elementary schools requires the following:

- (i) New buildings: and decisions on their siting.
- (ii) More teachers: therefore, new training institutes; therefore, more staff for training institutes.
- (iii) More books; therefore arranging for printing and distribution.
- (iv) More money, of course: for salaries and equipment.
- (v) Decisions on the percentage to go forward to secondary education, and how they are to be selected.

It may be mentioned, in passing, that the opportunity was taken, when these decisions were being made, to initiate changes in the whole elementary school curriculum, to make it more environmental, based on the predominantly rural character of the country; in short to "Ethiopianize" it.

At elementary level, the intended expansion, in government schools, will be 100% by the end of the five-year period. In addition, there will be a smaller expansion in non-government schools. However, there are a number of inequalities in the system, between awraja and awraja, and between urban and rural areas. The detailed plan of distribution of new facilities has been designed to "iron-out" these inequalities, as far as possible. There is also an inequality in enrolment, more especially in the higher classes, between boys and girls. The plan contains provision for the encouragement of girls to remain at school.

These are mainly quantitative measures. The Ministry of Education has been extremely concerned to raise the quality of instruction, and has made a number of proposals with this end in view. They include: the provision of funds for school equipment, the proper distribution of equipment, the increasing competence of the teaching strength, the use of mass media, the building-up of an efficient supervisory service, the introduction of an environmental curriculum. It is felt that the combination of all these measures is the surest way of improving the quality of instruction. They are not separate methods; all interact, and are effective one upon another.

In order to provide the extra teachers that will be necessary, it is proposed to increase the output of existing teacher-training Institutes, and to open two new ones.

In this paper, it is not possible to go into all the detailed work that has to be carried out, in order to prepare and cost the plan; but the following table, which indicates the requirement of elementary teachers during the period of the five-year plan, is an example of the kind of detailed work that has to be done for every aspect and at every level.

#### Requirement of Elementary School Teachers

Year (Ethiopian Calendar)	Total Teachers Needed In Year	New Teachers to be produced for beginning of new year.
1959	7,000	
By beginning of 1960		1,000
1960	8,000	
By beginning of 1961		1,142
1961	9,142	
By beginning of 1962		1,144
1962	10,286	
By beginning of 1963		1,416
1963	11,702	
By beginning of 1964		1,852
1964	13,554	
By beginning of 1965		2,446
1965	16,000	

It is intended that the measures to be adopted will not only increase numbers, but will also improve retention rates, which are not good at the moment. Money spent on children who do not finish the course is money wasted. One effect will be to bring more children up to the Grade 6 level. This is good in itself, but it will also influence secondary education, in that there will be a larger number of children from whom selection can be made for grade 7. This is therefore a convenient point to consider secondary education.

Plans for secondary education include the following: an increase of over 100% at the junior secondary level; this increase will entail the construction of an additional 88 units of building (about 400 places in each unit), properly distributed to eliminate existing inequalities. The increased output from Grade 8 will provide enough material for the demands of a larger senior secondary system, and will

meet the needs of more technical education, of industry, of specialized schools, and of a possible need for teachers with this qualification. At senior secondary level the number of places will increase by 50% during the period of the plan. The increase in Grade 12 enrolment is particularly desirable to provide a better base for the University to build on, and to provide entrants for junior colleges, and for commerce. In technical and vocational education, courses will be diversified, and enrolment will increase by 150%. This increase has been largely guided by the ministries concerned with economic development. In these proposals for secondary education, as for elementary education, details have had to be worked out with care. In particular, the supply of teachers for secondary education has been difficult to plan for; and in this area of education, the number of available teachers has been a limiting factor. Plans have also been made to increase the number of girls in secondary schools, and to raise the quality of instruction.

These examples are perhaps sufficient to show how educational planning has been applied to the special position of Ethiopia. There are many facets which could be added; but it is not the intention of this article to describe the plan in detail, only to use part of the plan to illustrate the practice of educational planning. We may, however, mention that the plan contains a number of administrative measures designed to increase the efficiency of the educational system; and provision has also been made for the expansion of cultural facilities, such as museums. It was said before that your real educational planner is no soul-less producer of efficient automatons. On the contrary, he always tries to remember that the figures in his tables really represent a child at this desk, or a peasant painfully learning to be literate. Anything less than the human approach will take all meaning out of a plan, and render it a failure.

The object of this short paper has not been to explain the new plan in detail; in any case, it is still a matter for Government decision. What has been attempted is an explanation of why educational planning is necessary, the difficulties it faces, and how plans are put together. What is not obvious is the great amount of discussion and consultation which is necessary at all levels. Here again it is seen that the educational planner cannot be a mystic in an ivory tower. He will be a very practical man; but he must also be something of an idealist.