

EXAMINATIONS COUNCILS

Summary of Papers

T.S. Wyatt: The Development of Regional Examining Bodies, traces the developments in the Commonwealth since 1945 and outlines the progressive local take-over of responsibility for the School Certificate and GCE examinations. The author, who played a significant role throughout this process, detects certain common elements in the diversity of organizations which have emerged. An advisory body, linked to an English Examination Board, initially modifies syllabuses and subsequently organizes a regional examining body which appoints staff and initiates their training in cooperation with the English Board. Local examiners are recruited and trained and the handing-over process is largely completed although cooperative efforts may go on for a long period thereafter. Massive efforts have been required on both sides and the processes have been evolved "partly from first principles and partly through trial and error." A number of problems of mutual interest are highlighted and cooperation for their solution is urged.

J. Deakin: Trends and Problems, describes the process and some of the problems associated with the establishment of a local or regional examinations council. The author, who was the last British Registrar of the West African Examinations Council, has probably consulted with the founders of more examining bodies in the Commonwealth than any other individual and brings a unique perspective to their problems. His paper touches on a variety of common difficulties and renders succinct advice on what needs to be done.

T. Boatin: The Role of a Regional Examinations Council, describes some of the factors which are important to an examinations council from the perspective of the West African Examinations Council. He refutes some of the oft-heard criticisms of regional examination bodies and points out that the WAEC has "transcended political, economic, cultural and other boundaries because the Council has kept its eyes on its role in the building of a nation. That role is purely and simply educational."

The West African Examinations Council Illustrated by Diagrams, describes the structure and function of the Council and its committees. Operating procedures in the administration and conduct of an examination are outlined and some figures on examinations are given to illustrate the scale of operations in Ghana.

West African Examinations Council: Milestones in the Council's History, gives details of some of the significant developments that took place over the twenty-one years of the Council's existence. The nature of the milestones gives some flavour of the priority of interests in West Africa in the evolution of the WAEC.

B.P. Kiwanuke: The East African Examinations Council and The Development of the East African Examinations Council, traces, in a pair of papers, how three Commonwealth countries have moved to assume greater control of their examinations. The first paper reviews the first couple of years of the Council's work and the second covers the past five years of operation. The EAEC aims to develop examinations appropriate to East Africa and has structured its organization to encourage representative opinion to be voiced at all levels. The administrative and committee structure is described and illustrated and a number of expanding responsibilities and administrative problems are discussed.

B. Somade: The Role of a Regional Examinations Council, reports the need for examining bodies to review their role and function to satisfy the needs of the future. The purpose and function of current syllabuses and examinations is questioned and suggestions are made for modernizing the assessment processes.

V. Chukwuemeka Ike: A Survey of Training Needs Related to the Effective Operation of an Examinations Council, describes the large variety of activities in which examinations council staff become engaged, and for which they should be trained. These functions include syllabus development, production of examination papers, introduction of different methods of examining, guidance test production, conduct and administration of examinations, test evaluation and fixing of standards, educational and examinations research, training and other related activities. Professionalism needs to be fostered by training permanent staff in techniques of educational measurement and in techniques of management. Temporary staff such as examiners, markers and others would also benefit from training in new methods of examining, test construction and marking. Colleges of education should make all of their students acquainted with basic examining techniques. Most examinations councils would benefit from assistance in the provision of training.

The World Confederation of Organisations of the Teaching Profession: The Actual and Potential Role of Teachers' Organisations in the Development of Examination Techniques and the Administration of Examinations, says that examination techniques and administration belong to teachers. It is argued that since the majority of examiners are practising teachers and the administrators and planners enjoy a background in education, teacher organisations should have greater participation in examinations councils.

G.M. Forrest: The Contribution of a Research Unit to the Effective Functioning of an Examinations Council derives from its supplying information, based on evidence, upon which decisions can be made. Research projects must be relevant to the needs of the examining body and the report of results must be lucid. It is argued that the research unit should be based within the examinations council and subject to its overall control, yet independent in the technical and research aspects of its work. The functions of the research unit are to provide the council with research evidence which may contribute to: policy decisions, committee work, improvement in examining activities and long-term effects of examinations. Research staff should be professionally trained in research techniques and have had some teaching experience. Although data processing equipment is helpful, a great deal of useful work can be accomplished with the minimum of equipment.

S.A. Akeju: The Place of Research and Evaluation in Public Examinations, notes the scale of examinations in West Africa and the ambivalent attitude of the consumer - belief in their importance coupled with suspicion of their fallibility. Examinations serve to maintain standards, stimulate educational efforts, assist in administration and promote social mobility. Examinations should be evaluated in terms of their purpose, objectivity, reliability and validity; judgements which are best accomplished through research and evaluation. Research can assist in: solving problems of measurement in the non-cognitive domain, devising improved tests of problem-solving, translating broad policies of education into examinable terms, assessing the influence of public examinations on teaching and curriculum measuring educational change and growth, investigating the influence of cultural

background on a candidate's performance, and improving the validity of examinations.

B. Premaratne: The Examinations Scene in Sri Lanka (Ceylon), is one of central control which was started during World War Two and was effectively completed about ten years ago. The Department of Examinations organizes more than one hundred examinations annually, the bulk of which are arranged on behalf of schools. The Curriculum Development Department of the Ministry of Education cooperates with the Examinations Department in effecting radical changes in the educational system. The reforms are being carried out as part of a national programme of socio-economic development. A National Certificate of General Education (NCGE) has been developed to replace the GCE-O level examinations. The syllabus for the NCGE will include a substantial element of pre-vocational studies. Substantial changes in examining arrangements are anticipated and with progressive decentralization of the NCGE new procedures for testing and large-scale training of teachers and administrators will have to be developed to introduce the new system.

A.B. Junid: The Development of an Examinations System in Malaysia, occurred during the past twenty years, largely for the primary and lower secondary school level. (Upper and post-secondary examining is conducted in collaboration with external bodies). The local examinations are designed to improve the quality of education in the schools and results are used for the guidance of pupils, teachers and education authorities. Selection and streaming has been discontinued and the emphasis has shifted to providing a comprehensive education to every school child.

G.K. Iyer: Guidance and Counselling in Maylasiian Secondary Schools, describes the aims and problems of a guidance service in the school system in Maylasiia. A systematic programme of activities is arranged to inform the pupil of the various prospects open to him upon completion of his formal secondary education. Limitations in resources inhibit the effectiveness of the programme.

A. Symonds: Establishment of the Caribbean Examinations Council, reviews the needs of this recently established body which will conduct examinations in fifteen widely separated and different countries. The Council has not had the benefit of large-scale preliminary work and so must undertake basic research concurrently with the administration of examinations. Research will be undertaken by the Council's staff in association with the universities in the region; some research may be commissioned from the universities. The Council's immediate needs are for administrative and professional staff and for training opportunities. Curriculum committees will seek means of developing suitable syllabuses. Security is not expected to present undue difficulties and teachers will be invited to participate in the setting and marking of the examinations. The Council looks forward to cooperation with the longer-established examining bodies in the Commonwealth.

I.W. Taylor: The South Pacific Commission Educational Testing Programme, reports some of the problems encountered in developing a testing programme for a territory which covers about one-third of the world's surface. The difficulty in communications and travel among the scattered island communities adds to the problem of selection of pupils for the restricted number of places in secondary education. A battery of tests is being developed to facilitate selection.

A.D.C. Peterson: The International Baccalaureate, outlines the origins and purpose of the IB: to provide an internationally valid university entrance qualification through a flexible, non-national curriculum and to experiment with curriculum construction and examination techniques. The major problems are reviewed and possible solution suggested. The problems include ensuring a balance between general education and specialization, stimulating good teaching, providing adequate criteria for university selectors, facilitating world-wide administration of the examination. Possible solutions include flexibility in syllabuses, new approaches to language examining, the use of objective tests, using batteries of tests, utilizing new technologies, continuous assessments and balanced teams of examiners.

UNESCO: UNESCO's Activities in the Field of Examinations, have largely been concerned with equivalences. In recent years assistance has been given to facilitate the comparison and recognition of courses and awards. The underlying purpose has been to ease the international mobility of students and qualified personne. Unesco's studies and publications in the field are listed. While Unesco's general policy is towards lifelong education, current educational needs have to be met and the present role of examinations is recognized, especially in areas such as curriculim reform. The function of examinations in enabling each individual to realize his full potential is acknowledged.

THE DEVELOPMENT OF REGIONAL EXAMINING BODIES

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This contribution reflects the experience of a connection of nearly thirty years with the development of regional examining bodies but inevitably it presents events and problems as they have been seen from one standpoint only. Because of this and because the subject is so large that it cannot be covered fully in a relatively short space the picture must be incomplete and it is hoped that the papers presented by the various bodies themselves will fill in the more important gaps. It needs to be mentioned also that only bodies which have been established since 1945 are mentioned here. During the eighty or so years preceding that date India had already instituted its own system of examinations, as had other countries (Australia, Canada, Ceylon, South Africa) where the examinations of English boards had previously been taken.

The story begins then in 1945, when the University of Cambridge Local Examinations Syndicate established its Advisory Committee for Overseas Examinations and issued a statement emphasizing the importance which the Syndicate attached to the appointment in every area in which its examinations were taken of a local organization on which the school teachers would be strongly represented, and expressing the hope that with the institution of such committees the practice of arranging for the setting and marking locally of certain papers would be extended. The next significant steps were taken in 1947-48 when the then Secretary of the Syndicate, Mr. J.L. Brereton, visited West Africa to prepare for the coming adaptation of examinations to new conditions overseas, and in 1949-50 when the late Director of the Institute of Education of London University, Dr. G.B. Jeffery also went to West Africa to advise on a proposal that "there should be instituted a West African Examinations Council", a course which he recommended in his Report of 29 March 1952 to the Secretary of State for the Colonies. Thereafter the Cambridge and London examining boards conferred with a view to harmonizing their policy on overseas examinations and the subsequent course of events in West Africa owed much to the friendly collaboration between Mr. Brereton and Dr. Jeffery and between the boards of their two universities.

In January 1953 Mr. Brereton went to Khartoum for consultations about the foundation of a Sudan Examinations Council and in the following March the West African Examinations Council held its first meeting. With reference to both the Sudan and West Africa the Cambridge Syndicate commented; "The establishment of these local examinations councils should serve a valuable immediate purpose in ensuring that examinations conducted from the United Kingdom suit local needs; in course of time they should enable local examinations to establish themselves without loss of confidence or lowering of standards." The chronological sequence of the more important development of the succeeding years is very briefly as follows:

- 1954-55 Establishment of the Malayan Examinations Board in Singapore under the auspices of the University of Malaya.
- 1955 Introduction of the West African School Certificate (W.A.S.C.) conducted jointly by Cambridge and the West African Examinations Council (W.A.E.C), and of the Sudan School Certificate under the joint control of Cambridge and the Sudan Examinations

Council. This conversion of the Cambridge S.C. examination into examinations for particular areas, conducted in partnership with the local body, was a step entirely without precedent in overseas examinations.

- 1957 Introduction of the Federation of Malaya Certificate of Education, conducted by Cambridge in co-operation with the Ministry of Education of the Federation. This examination was the same as that for the Cambridge School Certificate, but under somewhat different regulations. The title was changed later to Malaysia Certificate of Education (M.C.E.).
- 1958 Establishment of the Council for the Indian School Certificate Examination by Cambridge in co-operation with the Inter-State Board for Anglo-Indian Education in furtherance of the Syndicate's policy" of ensuring that their examinations become adapted to the educational needs of the countries where they are taken, and with a view to the ultimate control of the examinations by bodies within those countries."
- The Higher School Certificate examination in Malaya was conducted jointly by Cambridge and the University of Malaya, by agreement between the two universities.
- 1959 Training of W.A.E.C. examiners by Cambridge commenced in the larger subjects, the papers in African languages having been set and marked locally for some time past.
- 1960 W.A.E.C. introduced its own School Certificate in Ghana, where a change in the dates of the school year had made it impossible to hold the joint W.A.S.C. examination at the same time as in Nigeria.
- 1962 The first residential course for the training of potential W.A.E.C. examiners was held at Ibadan; this was another noteworthy advance, made necessary by the discovery of the deficiencies of "on the job" training on a large scale.
- Introduction of the Federation of Malaya Certificate of Education in the medium of Malay.
- 1963 Dissolution of the Sudan Examinations Council and its replacement by an Examinations Committee of the Ministry of Education which assumed responsibility for the Sudan School Certificate: Cambridge continued to send permanent staff and examiners to attend the awards for some years.
- Introduction of the Indian School Certificate Examination.
- 1964 W.A.E.C. and Cambridge shared joint responsibility for the award of the W.A.S.C. and the award was transferred from Cambridge to Lagos.
- 1965 Commencement of training prospective W.A.E.C. examiners by London in preparation for the takeover by W.A.E.C. of the London G.C.E. Advanced level examination in Ghana, Sierra Leone and the Gambia.

- 1966 Assumption by W.A.E.C. of responsibility for the W.A.S.C. in Nigeria, Cambridge continuing to provide administrative staff and examiners to assist in the award.
- Papers set and answered in the medium of Malay introduced in the H.S.C. examination in Malaysia.
- 1967 Establishment of the East African Examinations Council (E.A.E.C.) following a report by the Deputy Secretary of Cambridge.
- Commencement of training of W.A.E.C. examiners in subjects of the H.S.C. examination in Nigeria.
- Commencement of marking of papers of the Indian School Certificate examination in India by examiners previously trained there.
- 1968 Assumption of responsibility in Malaysia for much of the pre-examination administrative work for the M.C.E. examination in the medium of Malay.
- First examination for the East African Certificate of Education and School Certificate conducted jointly by Cambridge and E.A.E.C. These two bodies also became jointly responsible for the H.S.C. and G.C.E. (Advanced level) examination in East Africa.
- 1969 Commencement of training of examiners for E.A.C.E. and H.S.C./G.C.E. in East Africa, and subsequent marking there of certain papers in both examinations.
- 1970 Introduction of the East African Advanced Certificate of Education controlled jointly by E.A.E.C. and Cambridge.
- 1971 Introduction of joint responsibility by W.A.E.C. and Cambridge for the H.S.C. examination in Nigeria. W.A.E.C. took over responsibility for the issue of results.
- Introduction by the Singapore Ministry of Education and Cambridge of the Singapore - Cambridge G.C.E. Ordinary level examination conducted in four language media - English, Chinese, Malay and Tamil.
- 1972 Assumption of responsibility by the Malaysian Ministry of Education for the Malaysia Certificate of Education in the medium of Malay.
- Establishment of the Caribbean Examinations Council.

The programme for the immediate future includes the takeover by W.A.E.C. of the H.S.C and G.C.E. Advanced level examinations for schools in West Africa in 1973, by E.A.E.C. of the East African examinations at both levels in 1974, and by the Malaysian Ministry of Education of the Malaysia Certificate of Education in the medium of English, also in 1974. It is understood that examinations councils have been or are to be set up in

Botswana, Lesotho and Swaziland, and in the South East Pacific, while the Associated Examining Board is assisting in the establishment of local examinations in Malawi and has undertaken to do so also in Rhodesia.

The examining bodies referred to above show considerable variety and diversity in their size, their constitutions, their functions and the circumstances in which they operate. Some are large and others are small; some are organs of Ministries, others are independent statutory bodies; some are international in character while some others operate only within one country. Some may be concerned only with school examinations at what may conveniently be termed Ordinary and Advanced levels while others conduct, or will conduct, also examinations at lower levels than these as well as technical examinations and other non-school examinations. Most have a monopoly of school examinations in the area of their jurisdiction but one is a single body among many others in the same country.

Whatever the diversity which has emerged, however, certain features have, very broadly speaking, been common in the development of those bodies which have taken over, or will be taking over, the examinations of an English board. The first step has usually been the establishment of an advisory body representing the various educational interests in the country or area concerned, to advise the English board on any modifications which may be necessary to meet the local needs, whether in general regulations or in syllabuses. In the first instance the initiative in syllabus reform was taken in England but later the local bodies began to draft their own schemes. The syllabuses which were first modified in this way were those in which the local needs differed between the various areas, e.g. in History and Geography.

The second development has been the institution of the regional examining body and the appointment of the nucleus of its permanent staff, followed by the training of this nucleus in the complex administrative routines of an examination; this training has been carried out with the assistance of the English board either in Cambridge or in London or by advisers sent out from Cambridge for the purpose and it has continued over a period of years as the regional body has expanded. When the initial staff has been trained, the regional body has begun to take over administrative work, usually in the pre-examination routines and in the distribution of results, which had previously been carried out by Ministries of Education or other local authorities. At a suitable point the examination has been re-named in order to indicate the partnership between the regional body and Cambridge and to facilitate further changes which might be desired.

Thereafter has come the recruitment and training of examiners in preparation for the takeover of papers and subjects by the regional body; the first subjects chosen for this purpose have tended to be those in which problems were least likely to arise, e.g. in the field of mathematics and the sciences where there is the least likelihood of divergences of individual judgments between the examiners. The procedure has normally been for experienced examiners to go out from England to conduct courses for selected trainees who, after instruction in the techniques of assessment and in the details of the marking scheme, have marked photographic copies of scripts from a previous examination; the assessments have been studied, discrepancies have been noted and discussed, and at the end of the course the trainees have been graded according to their suitability for employment. This procedure has been built up over the years and alternative methods have been employed to meet particular circumstances. When a panel of suitable

examiners has been established, a senior examiner from Cambridge or London has been sent to take charge of their marking in an actual examination or, where numbers are comparatively small, the examiners have gone to England to mark under a Chief Examiner of the English board. Thereafter, the most suitable members of the panel have been chosen for appointment as Chief Examiners or Team Leaders and these have received further instruction in the techniques of fixing standards and in awarding procedures. The last stage has been the gaining of experience by the regional body's Chief Examiners in the setting of question papers and the making of marking schemes, and the transfer of the fixing of standards and the award to the regional body with the help of administrative staff and/or examiners from the English board.

Concurrently the regional body has increasingly taken over the administration of the examinations and the modification or replacement of syllabuses has continued, the regional body proposing its own initiatives and the English board transmitting its experience of past and present developments in the U.K. Finally when the administrative work and the examining in the majority of the subjects have been handed over to the regional examining body the latter has assumed sole responsibility for the examination although the English board may have continued and in fact has continued to give such assistance as has been desired and found practicable whether in further training, the temporary loan of staff and examiners, or in examining in some subjects on behalf of the regional body.

The processes which have been briefly described above have involved massive efforts from both sides and generous financial assistance from external sources to the regional bodies. Hundreds of visits both ways have been made by examiners and by administrative and executive staff, hundreds more examiners have been trained, and committees at both ends have been continuously employed on syllabus development. These processes have been evolved partly from first principles and partly through trial and error; techniques have been improved over the period and valuable lessons have been learned. So much for the past. But what of the future? Is it likely that the situations and problems of the coming years will be such that the previous patterns will need to be modified either drastically or in part? Certain questions can be asked even if the answers may not be clear at this stage, if the possible answers may be different in different parts of the world, and if the questions may not be equally relevant to all regional bodies.

In the first place, will social and economic pressures make it desirable to introduce a public examination certified by the regional body at a lower level than the present School Certificate/G.C.E. Ordinary level? The present system, taken over from the English boards, has corresponded to educational approaches which are now appearing outmoded in the U.K. Until some fifty years ago the English boards had an examination for the Junior School Certificate which was needed at a time when the School Certificate was the normal school-leaving examination. When sixth forms were commonly developed and the Higher School Certificate was instituted to meet their requirements the élitist conception of education required that once this highest rung on the examination ladder had been added the lowest, in the shape of the Junior Examination, should be dispensed with. A similar development occurred in 1952 when, despite the protests of the examining boards, the minimum requirement for the certification of a subject was raised from the S.C. subject pass to the G.C.E. Ordinary level pass (equivalent to S.C. pass-with-credit) which by definition only some 50% of the population of the selective secondary schools of that time could hope to attain.

In the previous year the H.S.C. subsidiary subjects had been abolished, leaving the new G.C.E. Advanced level pass as the only rewarding examination objective for the sixth-form - another unwise decision which has led to undesirable results. The wheel has now swung full circle and in these more egalitarian days it has been found necessary to establish a new examination, pitched below G.C.E. Ordinary level, for the academically less able pupils and there is at present discussion of a similar examination, below G.C.E. Advanced level, for the sixth form. In their intention these examinations should be different in nature from the more academic G.C.E. Will a similar development occur also, for the same or different reasons, in other countries than the U.K.?

This question leads to another - the optimum size and structure of an examining body. A large body can benefit from the economies of scale. This is not axiomatic since the Council for the Indian School Certificate Examinations, which is among the smallest of those mentioned in this paper, is so far as the author is aware the only one which meets its costs (apart from exceptional expenses such as those arising from training courses for examiners) from the fees paid by schools and candidates, in spite of the fact that its schools are dispersed throughout a very large country. It remains true, however, that in general the larger the body the smaller are the overhead costs of examining per candidate provided that the scheme of examination is not too diversely complicated and that the administration is efficient. A smaller body on the other hand may find it more easy to maintain essential contact with its schools although experience shows that it is difficult for a small organization to maintain examination standards, particularly if its operations are confined to a single country or a single class of schools or candidates. Against this, a larger body may have difficulty in reconciling proper educational objections with the administrative desiderata for examining scores of thousands of candidates. The problems which face each body will be different. Will a time come when for administrative if for no other reasons a very large international body may find it desirable to establish separate organizations in each of its participating countries, with the international body remaining responsible for policy and for co-ordinating the activities of its various divisions? A distant analogy might be the role of the Schools Council in its relations with the U.K. examining boards. A large body operating within a single country might similarly be led to consider whether separate divisions should be established to conduct different ranges of examinations, these divisions still to be responsible to the same overall control.

The constant large increases in the numbers of candidates for the existing examinations seem likely to continue in the future and the problems will be magnified if additional examinations are introduced. The quality of examinations, like that of all other human activities, depends basically on the people who conduct them. It is of the essence of an examining body, with its grave responsibilities, that errors which can lead to the loss of public confidence should not be made. For this reason it is necessary that an expanding body should be able to attract and train well qualified staff and then to retain them, since in an occupation where the same duties generally recur only once or twice in the year ability alone is not a sufficient substitute for experience. The same applies in equal measure to examiners. There is no doubt that the difficulties of supplying an adequate number of efficient examiners were underestimated in the early years after 1950, particularly in relation to the rapidly rising tide of entries. Since then objective tests have been introduced which, apart from their intrinsic merits, reduce the need for traditional tests and examiners and very

substantial progress has been made in the training of examiners of the traditional kind. The task ahead is still very great, however, as may be instanced by the estimated need for some 1,800 additional examiners in E. Africa and 1,500 in Malaysia to complete the takeover programmes scheduled for 1974. Since there are limitations both to the use of objective tests and to the methods hitherto employed in training examiners there is an urgent need to tackle the problem at its root, as has been emphasized on more than one occasion in the past, by including training in methods of assessment in the programme of preparation for the teaching profession. This should include training not only in the principles of assessment but also in the methods appropriate to the subject which the intending teacher is to teach. In-service courses might also be organized for practising teachers. Such training would benefit the service rendered to education by the examining bodies and also that rendered by the teachers; many teachers have testified to the insight which the experience of examining has given them through the need to give objective consideration to the aims and methods of teaching their subjects. Although careful co-ordination with other authorities would be required the examining bodies could play an important part in the organizing of courses and the provision of instruction.

The future role of the research units of examining bodies may also need consideration in relation to that of other organizations. It can be accepted that the first duty of a research unit should be to evaluate the methods of assessment employed by its parent body, to seek means of improving them, and to explore new avenues. In the U.K. the research units also play a leading part in the scrutinies of standards which are continuously under investigation; for various reasons great stress is laid on the maintenance of standards from year to year within the subjects of a board, between the different subjects of the board, and between the subjects of all the boards. At the same time research into examinations is initiated and/or conducted by other organizations including the Schools Council, the National Foundation for Educational Research and universities. A difficulty arises here in that research conducted by boards into their own examinations may sometimes be considered suspect since the boards may be thought to be acting as judges in their own cause. On the other hand, it is only the boards which possess the necessary data and, sometimes, the experience and knowledge necessary for interpreting it. A further question which arises is whether research units should undertake tasks broader than those which have been mentioned, by giving attention to fields which are not being tended by others. These fields may be of great importance for general educational policy as well as for examinations. Examples which may be quoted from the U.K. are the reliability of Mode 3 examining, a method which has been widely recommended but does not appear to have been adequately investigated, and the effect of various methods of teaching and of the comprehensive reorganization of schools on the attainment of the pupils concerned.

A final question to which the seminar will no doubt address itself is the extent to which the examining bodies of the Commonwealth can give assistance to each other. For many years there has been close and constant communication and contact between the U.K. boards on both policy and practice, mainly through the monthly meetings of their principal administrative officers. This co-operation has proved to be of the greatest value in many ways; information is exchanged, the experience of one board is put at the service of another, and the burden on individual boards can be lightened since projects can be carried out in common and work of interest to all can be shared out, each board in turn undertaking a particular

responsibility on behalf of all. An organization of this kind can of course be mounted with comparatively little difficulty in the U.K. because of the fundamental similarity between the boards and between their problems, and because of the ease of communications. The idea that an organization of some kind should be provided for mutual aid on a Commonwealth-wide basis is attractive. It will remain to be seen whether the problems are too diverse and the obstacles too great to permit of such a development, or whether there is sufficient community of interest and common ground for the idea to be pursued further. At a minimum there might be justification for the establishment of a centre for the dissemination of information and advice.

TRENDS AND PROBLEMS

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1. The development of local or regional examining boards

The most notable trend in recent years has been the development of local or regional examining boards, established to assume responsibility for the secondary school leaving examinations (i.e. the School Certificate or GCE 'O' and 'A' level examinations). The largest and perhaps best known board is the West African Examinations Council, which has been in existence for twenty years although, in fact, the University of Cambridge Local Examinations Syndicate was engaged in handing over responsibility for the School Certificate Examination to an authority in the Sudan before the West African Examinations Council existed.

The West African Examinations Council has for some years exercised full responsibility for the conduct of the School Certificate/'O' Level Examination. Because that responsibility was taken over from the Cambridge Syndicate on a gradual programme, which involved training a very large number of examiners, and because the Syndicate continues to take an interest in the affairs of the Council, the West African School Certificate/'O' Level Examination is recognised in most countries where the Cambridge certificates are recognized.

The Malaysian Examinations Syndicate, the East African Examinations Council and the Council for the Indian School Certificate Examinations are all at present working in collaboration with the Syndicate to take over responsibility for the School Certificate/'O' Level Examination, and the Caribbean Examinations Council (very long in the process of gestation) has recently been established to undertake a similar responsibility. Malawi is being helped by the Associated Examining Board to assume responsibility for its School Certificate Examination and other areas (e.g. the South Pacific, and Botswana, Lesotho and Swaziland) have aspirations of a similar nature.

The desire for academic independence at the School Certificate level is a natural corollary of political independence and of the establishment in developing countries of universities which award their own degrees. Although the general pattern is that teachers and others engaged in education in developing countries have no serious complaints about the Cambridge examinations which are taken in most of them (apart from the long period which inevitably has to elapse between the examination and the issue of the results) it is usually felt that a locally controlled examination would be more readily adaptable to the local needs. As this feeling grows, even in countries or regions which do not produce a sufficient number of fifth formers to make the establishment of a local or regional examination a sound financial proposition, at fees of the same order of magnitude as those charged by the Syndicate, consideration is given to the possibility of establishing local or regional boards despite the financial and other difficulties. For example, I was recently commissioned by the University of Botswana, Lesotho and Swaziland to carry out a survey of the possibility of establishing a local examination under the aegis of the University of Botswana, Lesotho and Swaziland Examining Board which at present conducts a Form III Examination. At the end

of last year I undertook a similar mission in the South Pacific. In neither of these regions is there, or will there in the immediately foreseeable future be a sufficient number of candidates to spread the overhead costs in a way such that an examining board could be self supporting from the modest fees which can be charged to candidates. Yet it was evident that there was a body of responsible opinion in favour of change and that there was sufficient enthusiasm at the political level to make it likely that government subventions would be forthcoming.

Finance is not the only constraint. When the number of candidates is small it is difficult to establish and maintain sound and stable standards because little reliance can be placed upon statistics. Moreover, even if reliance could be placed on statistics there is always a danger of falling standards when educational systems expand rapidly.

One sometimes wonders how long certain regional boards will last. One knows, for example, that it took a very long time to secure the agreement of all the countries concerned in the establishment of the Caribbean Examinations Council and that although Tanzania still supports the East African Examinations Council it does not use that Council's secondary leaving examinations. I got the impression from many people I met in Botswana and Swaziland that they would prefer, in an ideal world, to run their own national shows, although they recognized that with such small numbers the only way they could dispense with examinations from overseas would be to cooperate on a regional basis.

Although one of the most valid reasons for establishing regional or local boards is that the existence of such boards should make it possible to bring about radical change in the curriculum where environmental factors make such change desirable, it does not always follow - despite the existence of, often elaborate, consultative machinery - that the changes brought about command the support of the majority of the teachers. Possibly the lack of indigenous graduates with long experience in the classroom makes it too easy for university personnel to dominate the subject panels and committees concerned. It may be that the geographical factors make it difficult to establish adequately representative fora. But whatever the reasons, it does happen that local boards sometimes produce syllabuses which are too demanding or too far ahead of their time. For example: the West African Examinations Council has run into difficulty with an advanced level syllabus in chemistry and with the ordinary syllabus in French; and the teachers in Botswana, Lesotho and Swaziland said almost to a man (or woman) that the syllabuses for the Cambridge Overseas Certificate were, in general, much more satisfactory than the local syllabuses for the Form III Examination.

One would think that local or regional boards responsive to the needs of their social and economic environment would introduce new studies such as horticulture, agriculture, animal husbandry, but there is little evidence of this. The general trend seems to be to follow the conventional British elitist academic pattern.

One difficult problem which confronts countries or regions which exist to establish their own secondary leaving examinations is that of securing international recognition; even where local universities exist which have an extensive range of faculties, it is almost always necessary for some students to be sent abroad to study in specialised fields, and in any case professional and general public opinion invariably appears to demand that any local examination shall be so conducted that it enjoys the same prestige as the

metropolitan examination which it replaces. It follows almost inevitably from this that any local examinations must be conducted in collaboration with an experienced overseas body for an initial period and that training must be provided for markers, chief examiners and moderators. There are eight GCE boards in Britain but of these only three (the Cambridge Syndicate, the Associated Examining Board, and the London University School Examinations Department) have any worthwhile experience of examining overseas. In fact London University has confined itself mostly to examining private candidates, who in general have to take whatever syllabuses are provided for British candidates, whilst the Associated Examining Board has not so far had to deal with the problems which arise when very large numbers of candidates in overseas countries are to be examined and a large number of local examiners have to be trained. It follows from these facts that not all areas which wish to receive the assistance of British boards to enable them to develop their own examinations can be helped at any given time. Thus, for example, because of its existing commitments to other areas, the Cambridge Examinations Syndicate was unable to meet a request from Malawi a few years ago for assistance with the development of the Malawi School Certificate Examination and Malawi therefore had to seek the help of the Associated Examining Board. The provision of help of this nature makes very great demands on the host boards. It might be argued that the answer would be for them to recruit more staff so that they could provide help from all developing countries which need it, but work of this nature cannot be entrusted to new members of staff and must fall on old hands, who are limited in number and who have other commitments. The Associated Examining Board, for example, has found that its programme of collaboration with Malawi is exceedingly demanding of senior staff time: so much so that it will be unable to contemplate any further commitments overseas until the commitment to Malawi has been discharged.

Another problem which has arisen in connection with the establishment of local or regional examining boards is the scope of their activities. The West African Examinations Council was often looked upon as one of the wonders of the examining world and it is indeed remarkable that this body has been able to conduct examinations in practically all fields and at all levels short of a university degree in four countries. But this has been achieved at considerable cost in men and money. A prodigious amount of paper circulates among the members of the Council and one wonders whether progress in some fields would not have been quicker had the work-load been less diverse. I understand that the East African Examinations Council was at one time in great difficulty administratively and I wonder whether this was because the Council succumbed to pressure to attempt to assume responsibility for examining in technical subjects at the same time as it was trying to take over responsibility for the 'O' and 'A' level examinations. Since there is a limit to the span of effective management, however competent the top management may be, I think new boards would do well to restrict the scope of their aspirations and not to ramify until they have successfully assumed responsibility for their major commitment, which is generally the secondary school leaving examinations.

2. The introduction of assessment by candidates' teachers as part of or to replace external examinations.

The movement to introduce internal assessment of one kind or another (including continuous assessment) which has been gaining pace in some of the older Commonwealth countries in recent years is beginning to make itself felt in some of the less developed countries. Internal assessment has

replaced secondary school leaving examinations in some states of Australia; in New Zealand it has (under the name of "accreditation") virtually replaced the University Entrance Examination although the external examination is available for those who want it, presumably as a safeguard against arbitrariness on the part of heads; and it is well established in many of the CSE Boards in Britain.

There is considerable interest in Fiji in using internal assessment for part of the Form IV Examination (which is used for the purpose of certification of leavers and for the selection of entrants to Form V). It is understood that in the Bahamas it is intended to introduce a secondary leaving certificate based on school assessment at the Form V level. Considerable interest in internal assessment exists elsewhere in the Commonwealth, although these are the only cases in developing countries known to the writer where internal assessment appears to be on the point of being adopted as part of public examinations.

The introduction of internal assessment, whether by the "continuous assessment" or by the evaluation of course work, of project work or practical work, presents certain problems. These are admirably dealt with in the Fijian context in a report recently prepared by Mr. J.A. Winterbottam, Secretary to the North Regional Examination Board, of which copies are available for perusal during the conference.

The main problems are:

- (a) It is not in every society that there will be a sufficient degree of confidence in the impartiality and expertise of teachers. Where, for example, there are strong racial or tribal divisions within a country, the game could be thought not to be straight even though in reality it might be. In any case even in cohesive communities the public would, very probably, doubt whether certification was on a common standard unless there were careful external moderation of the school assessments.
- (b) In countries where a large proportion of the members of the teaching profession is poorly qualified and of limited experience, the introduction of internal assessment, especially in the upper secondary school, must be tackled with caution and must be preceded by training.
- (c) The use of internal assessment is likely to cost considerably more than the traditional centrally set examinations. It is noteworthy that the fees charged by the CSE Boards in England per subject are roughly double those charged by the GCE Boards; the fact that the CSE Boards are in most cases concerned with fewer candidates than the GCE Boards is, of course, also a factor contributing to their high costs.

3. Examinations at the Form III or Form IV Level

Because of the high cost of secondary education and the lack of graduate teachers, a number of countries have secondary schools which do not go beyond Form III or in some cases Form IV. Those countries find it necessary to provide an examination which leads to the issue of certificates of use to leavers seeking employment and the results of which are used to select those who are to go to the upper secondary school.

The need for such examinations is likely to continue to exist and may increase because although some countries wish more of their pupils to have the benefit of some sort of secondary education they do not all wish to take a high proportion of the age group up to GCE 'O' level and flood the labour market with more or less educated people for whom there is no suitable employment available. It is to be expected that an increasing attempt will be made to provide, on a wide scale, a few years of secondary education of a less academic and of a more "relevant" nature than that found in grammar schools. Where this happens the need for certification will exist and so, presumably, will the need for some selection technique to determine which pupils will go through the full secondary course.

Examinations at the Form III and IV level are generally unpopular as the teachers find that they have an inhibiting effect on the curriculum of the lower secondary school, and it sometimes happens that they are also unpopular because the syllabuses do not lead on in a logical way to those of the school certificate or GCE 'O' level examinations. It is surprising that this should be the case since the syllabuses are under local control, though it is inevitable that there should be some differences between the approach to the curriculum in the lower secondary school and that in the upper. If the need for the certification of leavers did not exist it might be possible to use other means to determine who goes on to the upper secondary school. Tests of scholastic aptitude supplemented by school assessments might be a better means of selection but these approaches bring their own problems: for example, although there is some evidence that it is not (as the purists once thought) impossible to use validly in one country tests of aptitude which have been found suitable in other similar countries, it is necessary to ensure that any imported tests do not present avoidable linguistic difficulties nor alien cultural content and most workers in this field would regard it as essential that material be prepared which of course raises security problems.

4. Examinations for Primary School Leavers

Most countries can provide secondary education only for a rather small proportion of the age group and therefore find it necessary to use examinations to select those pupils who wish to go into the secondary schools, which are almost all of the grammar school type. Many countries still find it necessary to issue a certificate for primary school leavers on the results of a centrally set examination even though the economic value of such documents is rapidly diminishing as opportunities for post-primary education increase. In several cases the same examination is used for both purposes. In a few countries machine-marked objective tests of attainment, and occasionally, of aptitude are used; in others the arrangements are more primitive but even where sophisticated processing techniques are used and where some resource is had to psychometric knowledge in constructing the objective tests, it is not unusual to find rather poor examinations. For example, one particular weakness is the widespread use of history, or geography or so called "general" papers which require a pupil to have a store of snippets of unrelated and mostly useless information. The "back-wash" effects of such tests must be deplorable, yet it is frequently argued that such tests are necessary so that due attention may be given in the classroom to rudimentary geography, history and social studies. The mathematics tests, too, often leave much to be desired because of their undue emphasis on computation and their lack of attention to problem-solving ability.

Examinations for primary leavers are difficult to conduct fairly in developing countries even when expert knowledge is brought to bear because

the tests of attainment are almost as much tests of the child's teachers and home background as they are of the child's innate ability. This unfortunate fact was highlighted some years ago in Ghana where although the government of the day was dedicated to the cause of greater social and economic opportunity a perusal of the results of the secondary entrance examination showed clearly, every year, that the children who had been to certain fee paying preparatory schools, largely staffed by native speakers of English, occupied most of the first two or three hundred places and so they were sure of entry to the elite schools where they would obtain an excellent (and subsidized) secondary education.

The problems in this field are difficult, as one would presumably not wish to devise examinations which would in some way penalise pupils who had good teachers and came from prosperous English-speaking homes. Probably the most that can be done is to ensure that the examinations are reliable and valid and to use for secondary selection purposes only the results of those tests which are known to be reasonably good predictors of success in the secondary school: that is tests of verbal and mathematical ability and attainment. Research in older countries has indicated that teachers' forecasts are the best single predictor but it is unlikely that this will prove to be the case in countries where so many of the primary teachers are uneducated, undertrained and inexperienced. Moreover there is a question of public confidence to consider.

5. Examinations for Selection

The results of all the examinations discussed in the preceding sections are used to select pupils to go on to the next stage of education. The examinations are also used to motivate the teachers and children and as a basis for the issue of certificates. These aims are not necessarily always compatible. For example, it is difficult to compile an examination which is a fair test for the children of average ability and even of somewhat below average ability, to whom it is desired to issue certificates of attendance and of performance at some modest level, and also to select the most able fifteen or twenty per cent who are going on to higher things.

It is often found that there is not a very high correlation between the results of the GCE 'A' level examinations and results at a university, and, of course, not all that elite minority of an age group which enters a secondary school leaves it with distinction. The use of measures additional to conventional essay or objective tests of attainment, and the improvement of such tests, can do something to improve the situation, but it must be recognized that no examination provided for a growing child or a maturing adolescent can ever be a perfect predictor. The subject's personality is changing all the time.

6. The improvement of examining techniques

Where local or regional boards have been established to conduct the School Certificate or 'O' level examinations, the provision of appropriate training for markers and chief examiners results automatically from the links with the Cambridge Syndicate or the AEB. It is apparent, however, that at other levels the examining techniques employed leave much to be desired. There is a great deal of scope for training people to set papers, to draw up marking schemes, and to conduct coordination meetings.

Where objective tests are used or it is proposed that they be used, it is necessary to ensure that those concerned in their construction are trained in item writing and test construction. In some areas this training has been provided by American sources, for example, in West Africa the research unit of the WAEC has for many years received assistance in personnel and money from the USA and the Regional Testing Service which serves Malawi, Botswana, Lesotho and Swaziland is also assisted by USAID.

The possibilities of aid from British sources are discussed in section 9 of this report and will doubtless form an important topic of discussion at the conference.

7. Security

In most developing countries the security of examinations is frequently under attack. In some, it is apparent that there is a lack of attention to this matter, and it is surprising that there are so few irregularities. It is necessary to take strict security precautions at all stages from the drafting of the manuscript to the delivery of the sealed packet of papers to the examination hall. The West African Examinations Council has over the years built up elaborate techniques, although even these cannot prevent certain types of irregularity at centres and the most that can be done to deal with certain aspects of security is to set up moral barriers. The WAEC's security system will repay study by all concerned with examinations.

8. Examinations Branches of Ministries of Education

Most Ministries of Education have an examinations branch, responsible for conducting local examinations such as the secondary entrance and Form III examinations and for making arrangements for the conduct of imported examinations. In many countries which I have visited the post of officer-in-charge of the examinations branch is of far too low a status and the staff at the officer's disposal is inadequate both in number and in seniority. Too often there is a lack of professional knowledge. It is not, therefore, surprising, that certain locally set examinations leave much to be desired. There is a widespread need for training in both the professional and the administrative aspects of examinations. Investment in such training would pay dividends quickly in terms of better examinations and would lay a foundation for the development of local or regional examining boards later on.

9. External aid for the development of examinations

Hitherto, the main British sources of aid in the development of examinations has been the Overseas Development Administration (ODA), CEDO, and the British Council. These between them have not been able to make funds available on a scale adequate to provide for the multifarious needs of all the developing world and it is encouraging to learn that the Commonwealth Secretariat is likely to be able to find the funds for training on a considerable scale. O.D.A. has been concerned mainly with the provision of British chief examiners to conduct courses to train local markers. It first gave assistance in this matter to the West African Examinations Council in 1961 and continues to do so. It has also helped the East African Examinations Council, and the Malawi Examinations Board. It has also provided occasional consultants, e.g. it provided an officer experienced in organising examinations to work in the Caribbean for about a year on the problems involved in establishing a Caribbean Examinations Council and in conducting various examinations in Jamaica, and has provided a number of awards under the Commonwealth

Bursars (now Commonwealth Educational Study Fellowships Scheme) to enable people to study the theory and practice of examining in Britain.

The Council for Technical Education and Training for Overseas Countries (TETOC) has at its disposal funds granted by O.D.A. which can be used to assist the development of technical and commercial examinations. TETOC has assisted several countries by arranging for senior officers of the City and Guilds of London Institute and of the Royal Society of Arts to visit them with a view to modifying the syllabuses for the examinations which those bodies make available overseas to meet local needs.

CEDO has provided assistance for training examiners on a smaller scale and has approved a number of study visits to Britain for administrators and chief examiners. It has also provided consultancy for a number of countries or regions. The British Council has been mainly concerned with study visits.

There is a clear need to define the types of help needed and to consider how best the various potential donors could assist if asked. The conference in Accra provides a most welcome opportunity to plan the way ahead.

THE ROLE OF A REGIONAL EXAMINATIONS COUNCIL

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In preparing a paper on such a subject it would be wise to adopt the teacher's dictum of starting with the 'known' and proceeding to the 'unknown', but on this occasion I would not attempt to explore the unknown. Any such attempt would be sheer presumption on my part for two reasons: first, because I know very little about what is going on in other regional examinations councils; and secondly, because there will be amongst us authorities who are well qualified to reveal to us what I refer to as the 'unknown'.

We in West Africa know of a few regional examinations councils in other parts of the world. We know, for example, of the East African Examinations Council, - our counterparts from that area having visited us on two occasions to study our procedure and compare notes on the many and diverse problems facing us -, an examinations council in the Carribean, the writer having corresponded with one of the officers involved in it, a delegation from there also having paid us a visit in Accra. From the list of invited participants I find that a South Pacific Examinations Council is either being established or has been established. There may be some such other bodies in the Commonwealth operating either as we of the West African Examinations Council are operating or doing so with some modifications. As we hear very little or nothing about them either directly or indirectly through bulletins or annual reports that one may lay hands on in a library, it would be unwise in dealing with such a serious topic to speculate or assume what is going on without facts and, perhaps, figures to substantiate what one states.

Here I would like to say, if I may, that one of the most important things that a seminar of this sort is sure to achieve is the creation of an avenue for the interchange of ideas and experience in the field of public examinations, either conducted on a regional or international or purely national basis. We shall, I hope, in the course of this seminar, learn a great deal about the efforts and experiences and achievements, and, perhaps, even failures in the experiments that we have been carrying out, and it is hoped that after this planning seminar there will be a steady flow of literature and interchange of ideas among the examining boards of the countries represented so that we may acquaint ourselves with the problems that exist in one another's examinations council and seek solutions to them in a concerted and co-ordinated way and not in isolation. The subject of examinations is so paramount in the educational world that no one country, whether developed or developing, can grapple with it alone and hope to achieve entirely satisfying results.

After this rather long preamble, perhaps I should restate the topic of this paper, namely, the "Role of a Regional Examinations Council" and I would add, "with special reference to the West African Examinations Council".

One would, first of all, like to know the circumstances that led to the setting up of this Council, and what role it was intended to play in the educational development of the former British Territories of West Africa. Then, one would go on to examine the role it has played, and it is still playing, how far it may have succeeded or failed, and whether it is in the

best interest of the countries that the Council serves to continue to play the role either in its present form or in a modified form or whether, in fact, it has outlived the function it was originally meant to perform, having fulfilled the aspirations of those whose vision led to its establishment and, if so, whether there is any justification in perpetuating it in its present or in a modified form. The West African Examinations Council is 21 years old this month and questions such as those I have only touched upon have been in the minds of many educationists who hold divergent views on all forms of examinations, whether they be "external" or "school" or for selection to jobs or higher institutions or for mere certification.

Here, one must introduce the name of the late Dr. G.B. Jeffery who was, in October 1949, invited by the British Secretary of State for the Colonies to visit West Africa to study and advise on "a proposal that there should be instituted A West African Schools Examinations Council". After a three months' tour, visiting the Gambia, Sierra Leone, the Gold Coast and Nigeria, he submitted a report, since known as the Jeffery Report, strongly supporting the proposal for a West African Examinations Council. The report published in March 1950 was adopted by the four West African Governments and an Ordinance establishing the Council as a Corporate Body was drafted by the West African Inter-Territorial Secretariat in consultation with the Governments and was first passed by the Legislative Assembly of the Gold Coast in December 1951 as the West African Examinations Council Ordinance No.40 of 1951, and later made effective by enactments by the Governments of Nigeria, Sierra Leone and the Gambia.

Functions of the West African Examinations Council

The Act spelt out what the Council was appointed or expected to do. Parts of the functions which have a direct bearing on the topic under discussion are as follows:-

- (a) "to review and consider annually the examinations to be held in West Africa, for the purpose of furthering the public interest in West Africa;"
- (b)(i) "to conduct such examinations as the Council may think appropriate to the purpose of the Act and to award certificates and diplomas on the results of the examinations conducted;"
- (ii) ".....that no examination shall be conducted in West Africa having a lower standard than any examination of equal status conducted under the provisions of the Act;"

The Council has conducted two categories of examinations; namely, National and International examinations. The National ones include the Middle School Leaving Certificate Examination (Ghana) or the First School Leaving Certificate (Nigeria), the Form 111 Examination in Sierra Leone, Civil Service examinations, Teachers' examinations for entry into Training Colleges and for certification at the end of the final year course, and the Common or Selective Entrance examination. These examinations are based on syllabuses prepared by the appropriate bodies in the different territories in line with the policy of education or recruitment in those territories. Nevertheless, for the Common Entrance examination in Ghana, like its counterparts in Nigeria, Sierra Leone and the Gambia, though serving a national purpose, the Council has always aimed at a common standard, a standard which is acceptable in the four countries for selection to secondary

schools. Thus, a candidate who qualifies to be considered for selection into a secondary school in Ghana is deemed to have qualified for entry into any of the secondary schools in the other territories.

The international examinations, which in fact determine more than anything else the inter-nationality or regionality of the Council's activities, are the School Certificate/G.C.E. and the H.S.C./G.C.E. 'A' Level examinations. The same syllabuses, prepared by international panels comprising specialists in their fields from the four territories, and approved by the Council are used for setting question papers for the examinations which are taken by candidates in those territories. Certification is an international exercise and the certificates awarded are recognised and accepted without question as minimum requirements for entrance to the higher institutions not only at home but also abroad.

This has not only meant a continuous, tireless and painstaking exercise, involving school-masters and university lecturers, in the modification of syllabuses prepared by the Cambridge Syndicate and the School Examinations Department of the University of London for examinations meant for candidates in Britain, and in some cases drawing up new syllabuses to suit the needs and in conformity with the aspirations of the peoples in this vast West African region, but it has also meant that the scrutiny of the administration, the content of the syllabuses and the qualifications and experiences of those who do the actual examining for the West African Examinations Council, by overseas examining bodies and higher institutions has yielded good results. On the condition for recognition Dr. Jeffery has this to say: "Recognition is accorded to examinations on their established record over a period of years for efficient and scrupulously impartial administration, for the quality and standing of the examiners, and for the standard maintained in practice". Having fulfilled those conditions the West African Examinations Council has played its role very well indeed.

With the achievement of a common and acceptable standard of certification at the pre-university level in English-speaking West Africa (except Liberia) the West African Examinations Council has also achieved one of its immediate, though indirect objects; namely, to help and encourage West African Schools, by means of examinations, to improve and consolidate their work up to the School Certificate/G.C.E. level, and to go on beyond that to the H.S.C./G.C.E. 'A' level. It is heartening to observe that during this period of 21 years the number of secondary schools presenting candidates for SC/G.C.E. and H.S.C./G.C.E. 'A' Level in Ghana, for example, has increased from 24 to 214 and 6 to 52 respectively. As a result, a student who holds the H.S.C. or G.C.E. 'A' Level certificate with the requisite number of passes and quality of grades awarded by the West African Examinations Council has no difficulty in securing a place overseas where there is a vacancy. This is by no means achievement within a space of twenty-one years. One wonders whether, working in isolation, each of the four territories in question would have attained so much in so short a time.

Having, without doubt, achieved the desired measure of recognition outside West Africa, through dint of hard and devoted work by all who have had a hand in this gigantic and, in many ways, unique educational experiment, and granted the assurance that there will be no sliding back or even relenting of effort in maintaining the standard reached, the question that some educationists now pose is - Is it any longer necessary or desirable to continue to work under the huge umbrella of a regional council, as the West African Examinations Council? Some even doubt whether what they spitefully term

a colonialist or neo-colonialist organisation was necessary. These questions obviously need careful and serious examination and will undoubtedly be given due attention during the seminar.

However, whether a regional examinations council is the best instrument or not for achieving the objectives referred to above, some factors will need consideration, as they will determine how broadly or narrowly the concept of a regional grouping can be accepted and implemented. These are:

1. The Stage of Development

The stage of development that a region has reached in its objective, assuming that the objective is as stated in the preceding paragraph, can be a determining factor. Obviously, there is a great advantage in a group of countries joining together during the early stages of such an experiment to achieve its goal. There certainly is a lot to gain in the exchange of ideas internationally. Equally important, where owing to the paucity of higher institutions in an area, students who desire or are fitted to enter upon university studies abroad have a better chance of gaining admission overseas with a certificate signed by a responsible regional body. But where the standard in the universities in a country is recognised and respected, and those universities can accommodate the deserving students from the secondary schools, then the fear that unless examinations are administered and conducted on a regional scale the products of the secondary schools may not gain entrance to higher institutions does not arise. As an adjoint one may ask, "What is the percentage of those who leave secondary schools to go to universities, in any year, any way?"

II. Size of the Region

The size of the region or countries in the region should be an important factor. Whereas Nigeria, for example, with its huge population, its facilities, and experience in examining, and its universities keeping an eye on the standards achieved in schools and insisting on the minimum entry requirements, can say that it no longer needs the West African Examinations Council umbrella to pursue its objectives, our sister country, The Gambia, could not for various reasons take that stand. A regional examinations council is essential in this case if The Gambia is not to go back to the Cambridge Local Examinations Syndicate for its examinations, and at the same time lose the knowledge and experience it has gained, by association with its sister countries, in the drawing up of syllabuses, and examining, to mention only two of the benefits.

III. Communications

Communications can plague the work of a regional examinations council to such an extent as to disrupt its administration completely. Means of communication leave much to be desired in many developing countries, and where communications are bad over a large region they affect the programme of work, and in the final analysis, the timing of the issue of results and certificates goes out of gear. With the discontinuation of the despatch of scripts from West Africa to London and Cambridge a great deal of time and money has been saved. One might go a step further to say also that time and money would be saved if scripts had not to be sent from one country to another in West Africa for marking. Obviously there is a time when such movements of scripts are inevitable, but the time should surely come when these should no longer be necessary.

IV. Finance

The cost of examining on a regional basis and financial implications have engaged the thoughts of many critics of the present set-up in West Africa. It must be admitted that the cost of drawing up syllabuses, involving transportation of specialists from one country to another in the region, the cost of international meetings of the various committees of the Council, the cost of transporting large numbers of examiners from one country to another and the movement of staff - all these have been a great drain on the resources of the Council but one has got to weigh this expenditure against the great benefits that the four countries in the West African set-up have derived through this association.

Financial implications resulting from different currencies in the region must be carefully considered in any regional set-up. Devaluations can cause havoc. At the moment Ghanaian members of the international staff of the West African Examinations Council serving in Accra are paid salaries at the exchange rate of C2.86 to £N, the Nigerian pound being used as a basis for the payment of salaries, whereas their counterparts (including non-Ghanaians in Ghana) serving in the other territories enjoy a conversion rate of C3.90 to £N. Such a situation is untenable and cannot make for that contentment and harmony which should characterise work in a regional organisation, such as a regional examinations council.

V. Terms and Conditions of Service

It is most important that the Terms and Conditions of Service of the international staff or staff appointed by a committee representing the countries that form a regional examinations council should be identical as far as practicable in the participating countries. In short, a regional examinations council should have for its staff Terms and Conditions of Service which are not particularly geared to the government of any one country or to what obtains in an institution in any one country. Although what obtains in the various governments or institutions may be used as a basis for that purpose the Terms and Conditions of Service should reflect the international or 'regional' nature of the organisation in such a way as not to be disturbed by changes, financial or otherwise, in any member country.

VI. National Aspirations

It is argued in some quarters that a regional examinations council makes it difficult for each country to pursue its own policy in education and can therefore stifle its objectives. Nothing could be farther from the truth. The West African Examinations Council does not impose its will on any of the four countries it serves. As has been mentioned earlier, the syllabuses for the international examinations are prepared by working parties and panels on which sit representatives of the various Ministries of Education. The government of any of the four territories can request the West African Examinations Council to conduct an examination based on its own syllabus with a bias on any aspect of its educational policy. The question as to whether a certificate awarded for such an examination will be recognised beyond the frontier of that country is another matter.

Finally, in advocating the setting up of a regional examinations council or pursuing an organisation of such a nature it must be made quite clear what its role is, or should be. A lot has already been said regarding what it is expected to do. Perhaps one should also say one thing that it is not expected to do. It is not expected to play the role of a political instrument bridging any gaps that there may be between the countries it serves, nor is it to play the part of a conciliator. This must be made quite clear at the very beginning. That is the only way to keep it clear of political manoeuvres and other interruptions. Often, reference is made by high-ranking politicians at inauguration meetings to the fact that in West Africa where fragmentation in many fields has taken place the West African Examinations Council is the only body that has stood the test of time in spite of national aspirations after the independence of the four former colonial territories. It is gratifying to hear that, but it must be stated that the Council's activities have transcended political, economic, cultural and other boundaries because the Council has kept its eyes on its role in the building of a nation. That role is purely and simply educational.

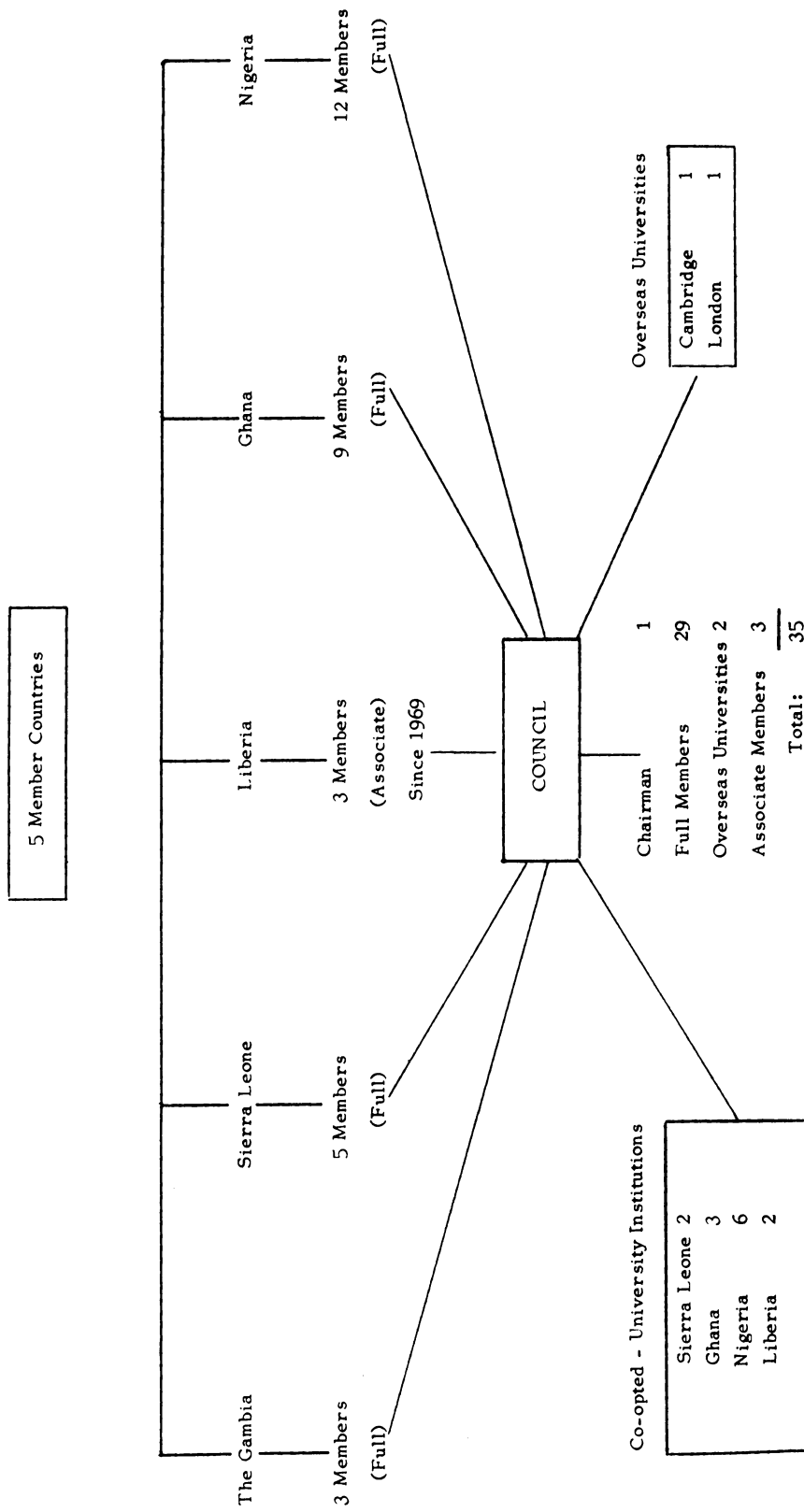
THE WEST AFRICAN EXAMINATIONS COUNCIL

ILLUSTRATED BY DIAGRAMS

- Diagram 1. The West African Examinations Council:
 How Constituted
- Diagram 2. The Committee Structure of the Council
- Diagram 3. The Council's Administrative Structure
- Diagram 4. W.A.E.C. Examinations:
 School Examinations Committee
- Diagram 5. W.A.E.C. Examinations:
 Test Development and Research Office
- Diagram 6. W.A.E.C. Examinations:
 Administrative Network for Examinations
- Diagram 7. W.A.E.C. Examinations:
 Administration and Conduct of Examinations
- Diagram 8. Examinations Conducted on W.A.E.C. Syllabuses
 in Ghana

THE WEST AFRICAN EXAMINATIONS COUNCIL:

HOW CONSTITUTED



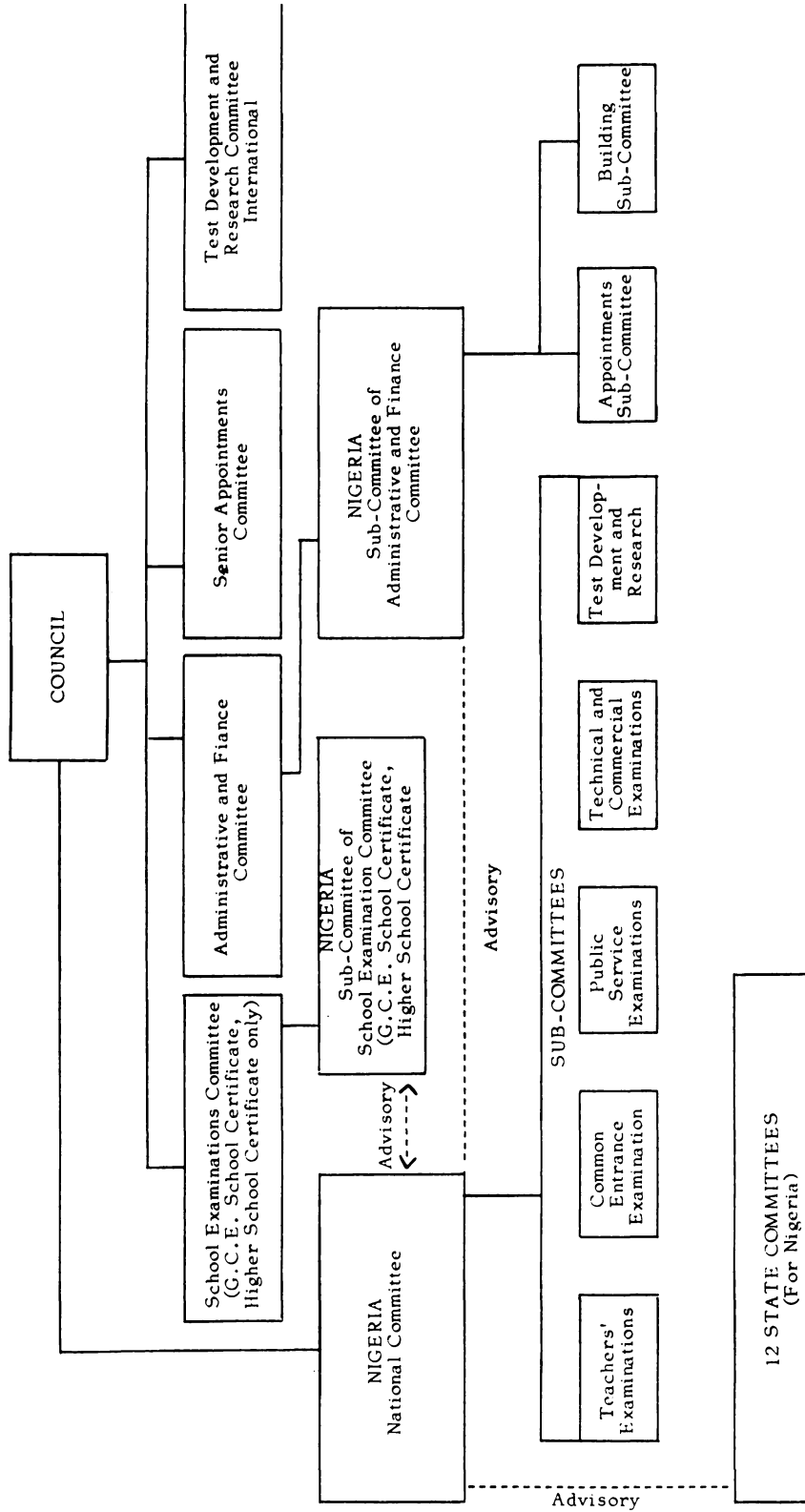
NOTE:

Revised constitution when enacted provides direct representation for University Institutions of member countries and for participation by other West African countries.

DIAGRAM 2

APPENDIX A

THE COMMITTEE STRUCTURE OF THE COUNCIL*



*The arrangements for The Gambia, Ghana and Sierra Leone follow this pattern except that there are no State Committees in those countries.

THE COUNCIL'S ADMINISTRATIVE STRUCTURE

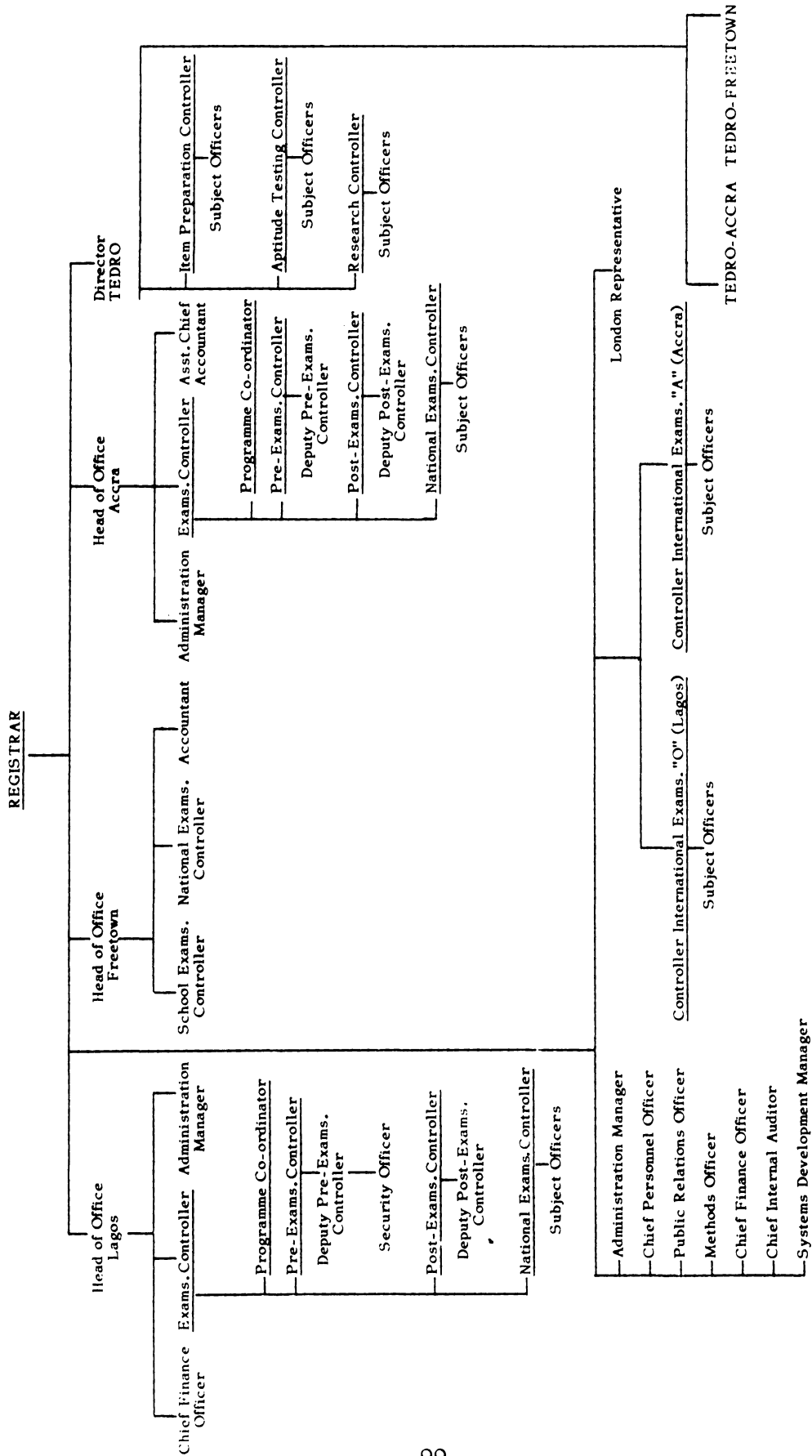
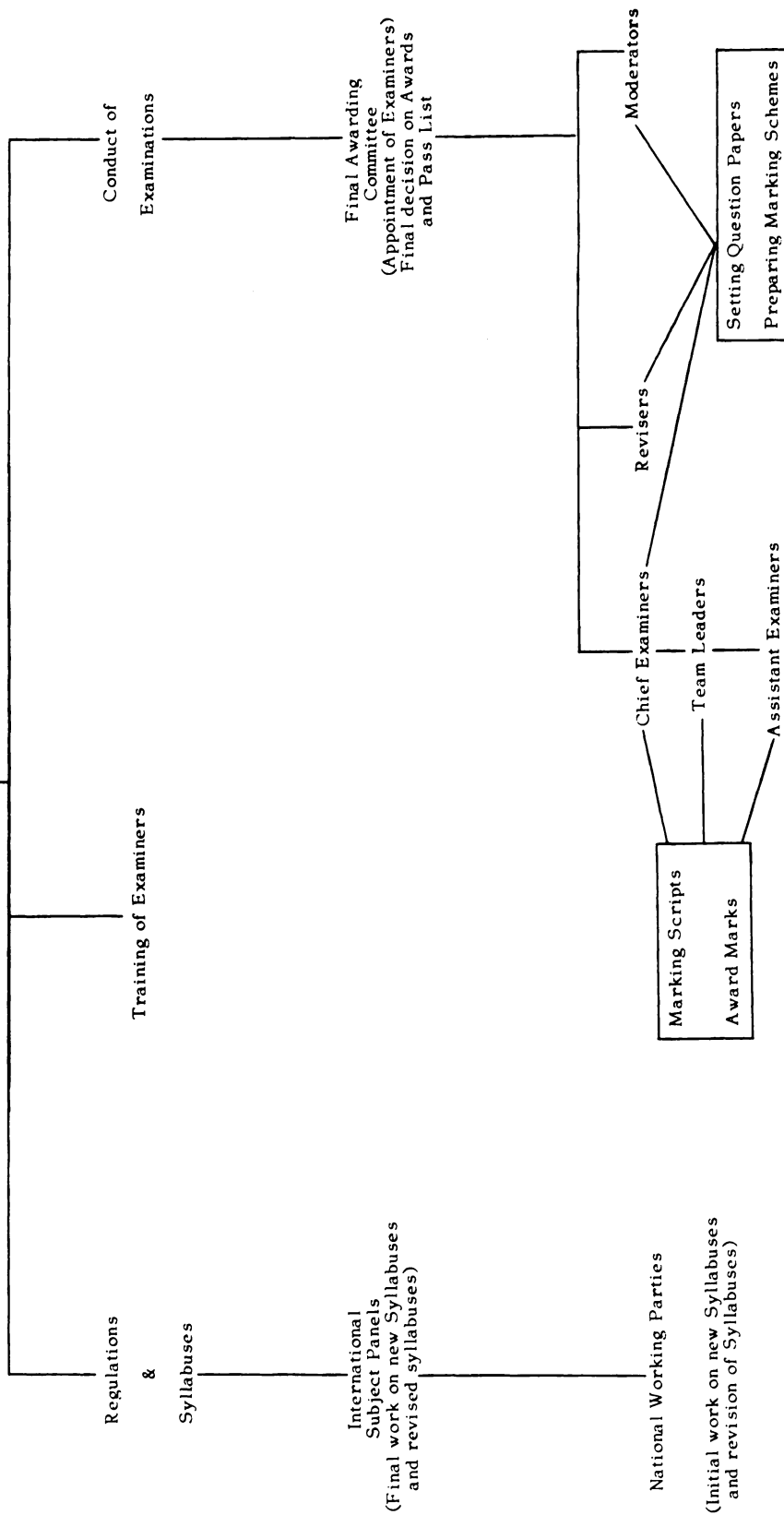
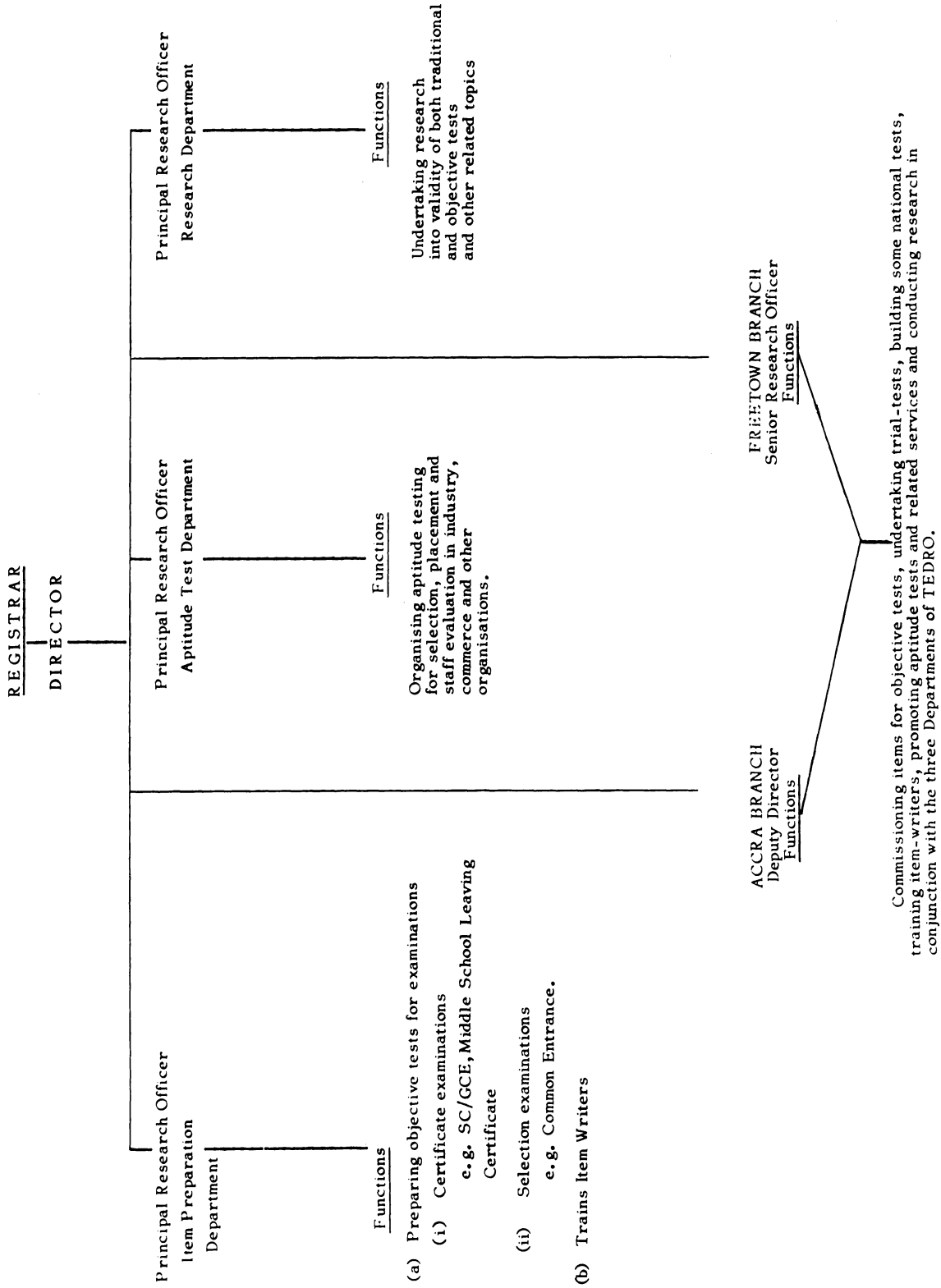


DIAGRAM 4

W.A.E.C. EXAMINATIONS
SCHOOL EXAMINATIONS COMMITTEE
(DELEGATED AUTHORITY)

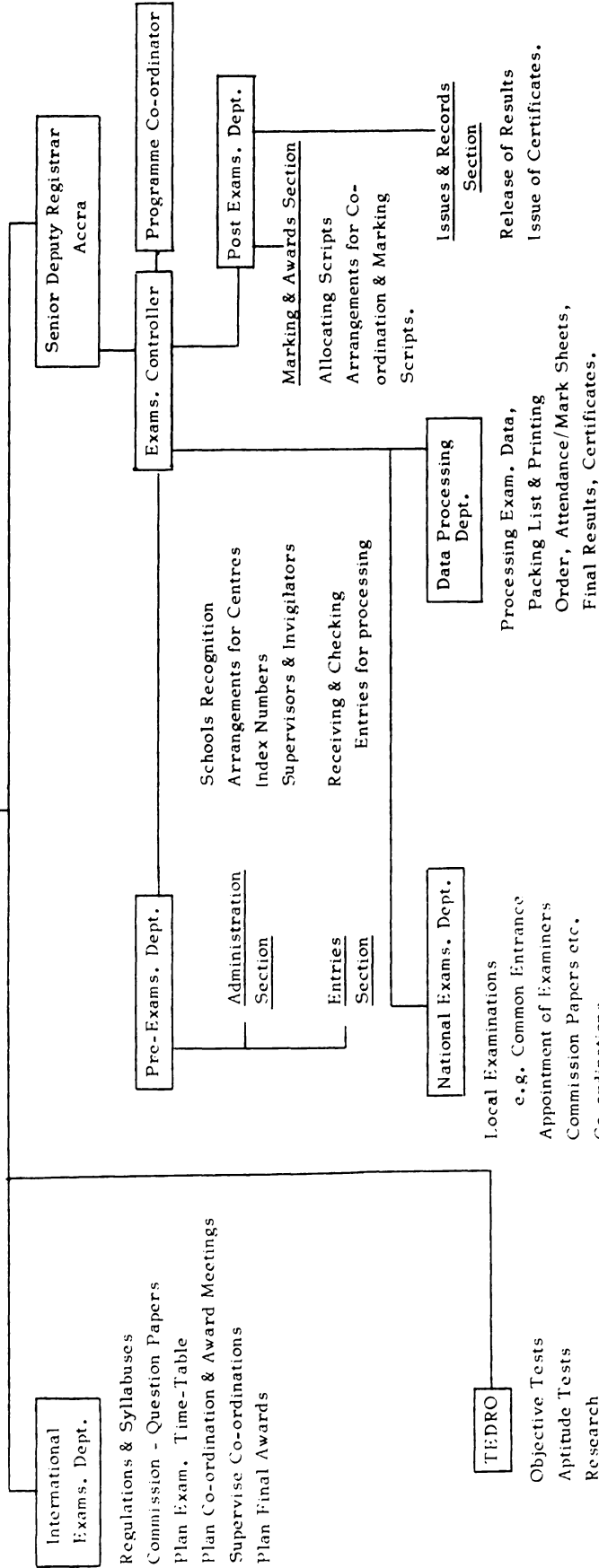


W.A.E.C. EXAMINATIONS
TEST DEVELOPMENT AND RESEARCH OFFICE



ADMINISTRATIVE NET-WORK FOR EXAMINATIONS

REGISTRAR



ADMINISTRATION AND CONDUCT OF EXAMINATIONS

PHASES OF OPERATIONS

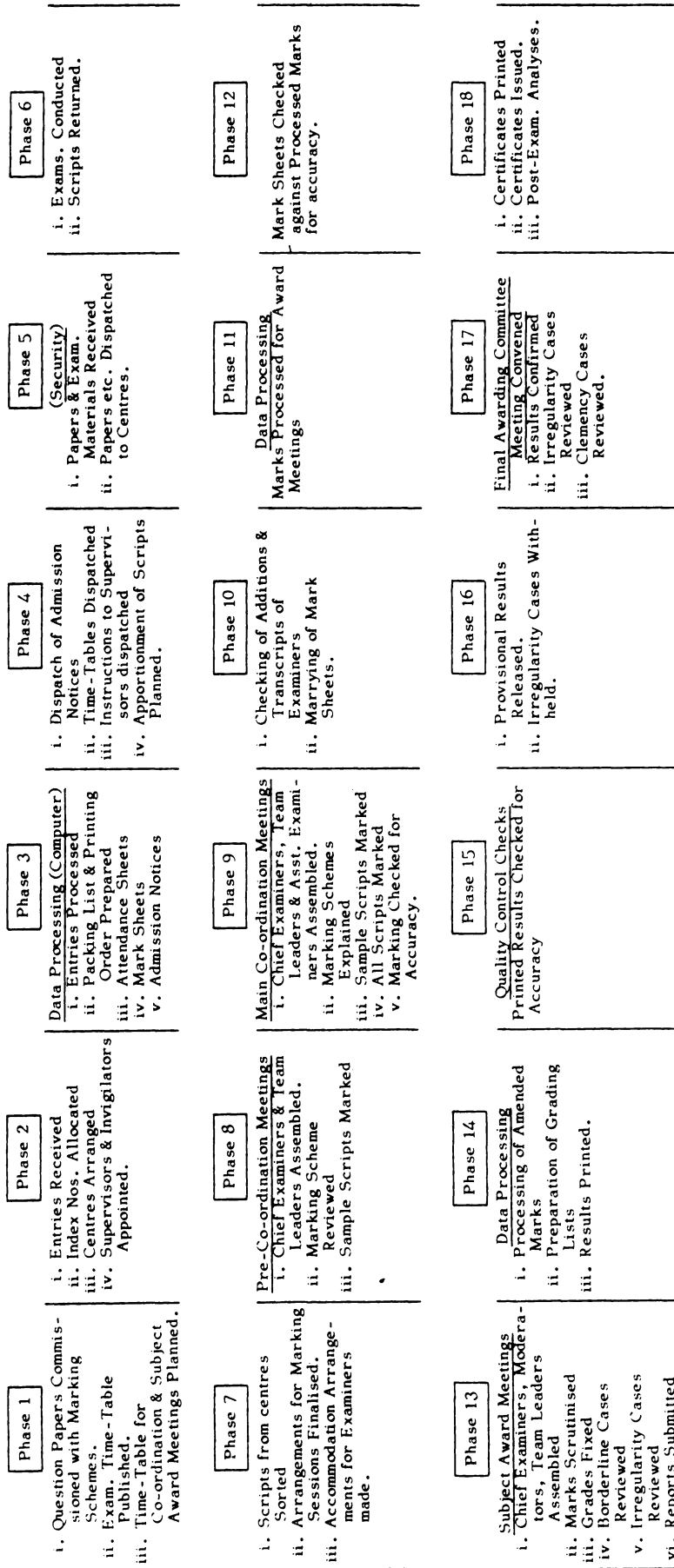


DIAGRAM 8

EXAMINATIONS CONDUCTED ON W.A.E.C. SYLLABUSES IN GHANA

<u>Title</u>		<u>No. of Candidates</u>		
		GHANA		
A.	<u>National Examinations</u>			
1.	Common Entrance Examination for Secondary School Selection ..	74,531	(1971)	
2.	Middle School Leaving Certificate	90,238	(1971)	
3.	Teachers' Entrance Examination for Teacher Training Colleges Selection	40,069	(1971)	
4.	Teachers' Final Examinations	9,390	(1971)	
5.	Principal Teachers' Promotion Examination	590	(1971)	
6.	Senior Teachers' Promotion Examinations	3,390	(1971)	
7.	Public Service Examinations (All Grades)	562	(1970)	
8.	Ghana Business Certificate Examinations		(0-Level)	(A-Level Part 1)
	(School Certificate and Sixth-Form Level)	224	29	27
9.	Graduates Selection Examination	118		
10.	TEDRO Aptitude Tests	8,512		
B.	<u>International Examinations</u>			
1.	School Certificate/G.C.E. Examination	17,539	(June 1971)	
2.	G.C.E. Advanced Level Examination	3,273	(June 1971)	

WEST AFRICAN EXAMINATIONS COUNCIL:
MILESTONES IN THE COUNCIL'S HISTORY

At the invitation of the British Secretary of State for the Colonies, Dr. G.B. Jeffery, F.R.S., Director of the Institute of Education, University of London, visited West Africa from December 1949 to March 1950 to study and advise on a proposal that there should be instituted a West African Schools Examinations Council to conduct such examinations as would be best suited to the needs of West Africa.

Set out Below in chronological order are Milestones in the Council's history since that visit which later led to the formation of the West African Examinations Council:

- 1950: March Dr. G.B. Jeffrey's Report recommending the establishment of a West African Examinations Council was published.
- 1951: December The Ordinance establishing the Council was first enacted by the Government of Ghana (then Gold Coast). This was followed by similar enactments by the Government of Nigeria, Sierra Leone and The Gambia in 1952.
- 1952: March The first Registrar of the Council, Mr. Kenneth Humphreys, appointed by the Secretary of State for the Colonies, arrived in Accra to take up his appointment.
- 1953: February The Accra Office moved from the buildings of the West African Inter-Territorial Secretariat to temporary buildings on Rowe Road near the former Department of Education.
- March The First Annual Meeting of the Council was held in Accra under the Chairmanship of Mr. A.N. Galsworthy, CMG, Chief Secretary of the West African Inter-Territorial Council.
- May The Council conducted its first examination, namely the Public Service Executive Competitive examination in May and in September. A third examination for promotion of executive officers to the Administrative Class was held in December.
- September The Lagos Office was opened in Yaba.

- October/November .. (i) The Council took over in Ghana the Common Entrance Examination for the selection of pupils into Secondary schools.
- (ii) The Council also conducted its first Sixth-Form Bursary Examination in Ghana.
- 1954: March (i) The Nigerian Qualifying Test in English Language was introduced for private candidates in Nigeria, to ensure that they attained a certain minimum standard of expression in English before attempting the Ordinary Level examination of the University of London.
- (ii) Subject panels were set up in the following subjects:-
- African Languages, Domestic Subjects, English, Geography and Science.
- 1955: The Council instituted experimental tests in Oral English for the School Certificate examination.
- December (i) The Council in special relationship with the University of Cambridge Local Examinations Syndicate conducted in December for the first time the West African School Certificate Examination (WASC) in all four member countries. This marked the beginning of collaboration between the Council and the Cambridge Syndicate.
- (ii) The Council conducted the Nigerian Teachers' Certificate Grade II Examination.
- 1956: November Objective type questions in English, Arithmetic, Geography and History were tried out in a pilot scheme in Nigeria in November in selected primary schools. Objective tests with machine scoring of candidates' scripts were seen at that time as a solution to the problem of finding qualified examiners in sufficiently large numbers for an anticipated sharp rise in pupil population following expanding primary school programmes being pursued by the Governments of member countries.

- 1957: The first stage of the Council's mechanisation programme was completed by the installation of a Hollerith equipment in Accra comprising punches, verifiers, a tabulator, a reproducer, a sorter and an interpreter. A Punching Section was established in Lagos.
- November The first Ghana Middle School Leaving Certificate examination was held by the Council.
- 1958: July The Freetown Office in Freetown, Sierra Leone and the London Office in the United Kingdom were opened.
- 1959: November Experimental trial tests in objective testing were carried out on a limited scale in Nigeria in the following subjects:
- English Language, Mathematics,
Geography and Biology.
- December The Council's Ordinance was amended by the Governments of the four member countries to make the Council an autonomous body with power to appoint its Chairman and the Registrar and to delegate certain powers to appropriate committees in member countries. Up to this time the Secretary of State for the Colonies had exercised the right of appointing the Chairman and the Registrar of the Council.
- 1960: March Mr. John Deakin was appointed Registrar in place of Mr. Kenneth Humphreys when the latter retired from the Council's service in March.
- June Following the change to a September-August School year in Ghana and Sierra Leone, the Council introduced its own School Certificate Examination (WAEC/SC) which was taken in June for the first time in the two countries.
- Nigeria continued with the December School Certificate examination as also did The Gambia for a year.
- Work began on the Council's permanent office buildings in Accra and in Lagos.
- 1961: March The Council gave approval to a scheme proposed by the Registrar to conduct investigations into the use of Objective Tests in

the School Certificate examination as supplementary to traditional essay type questions.

- December The Permanent building of the Accra Office behind the Ridge Hospital was completed and was officially opened by the Minister of Education, Mr. Dowuona Hammond on 7 December.
- 1962: March The Council organised its first direct training course for 56 trainee examiners in English Language at Ibadan, Nigeria, in March. Hitherto examiners had been trained on the job.
- June The University of London G.C.E. Advanced Level June examination replaced the Cambridge Syndicate H.S.C. December examination in Ghana, Sierra Leone and a year later in The Gambia.
- The new Lagos Office building was officially opened by the Federal Minister of Education.
- 1963: January It was decided to set up an Objective Testing Unit in Nigeria to improve the tests used for selection purposes and to develop Objective Tests to be used as part of the School Certificate Examination.
- March Examiners' training courses were held in March for 134 trainees in English Language, English Literature, History and Bible Knowledge.
- 1964: March (i) Dr. Davidson Nicol, CMG., Principal of Fourah Bay College, Freetown, Sierra Leone, became the first West African to be elected Chairman of the Council.
- (ii) Discussions were begun on establishing the Council's own Advanced Level Examinations.
- June The Nigeria Technical and Commercial Examinations Committee was inaugurated to commence planning syllabuses for the eventual take-over of technical and commercial examinations in Nigeria from overseas examining bodies such as the City and Guilds of London Institute and the Royal Society of Arts.

- September The Nigeria Aptitude Testing Unit was set up in Nigeria with an autonomous governing body to continue development of work in aptitude testing which was started by Dr. Paul Schwarz, of USAID/AIR in 1960.
- 1965: March (i) In March the Council approved its revised Draft Constitution for submission to the Governments of the four member countries.
- Proposed changes sought:
- (a) direct representation on the Council of each University or University College in Member countries;
 - (b) admission to membership of any other West African country which wanted to join;
 - (c) establishment of the Administrative and Finance Committee as a statutory body;
 - (d) establishment of the office of Vice-Chairman.
- (ii) The Council decided to introduce its own Advanced Level examination.
- (iii) The Committee structure of the Council was reviewed and National Committees were set up to replace Local Committees which hitherto had represented local or national interests.
- (iv) Mr. John Ayite Cronje was appointed Registrar to succeed Mr. John Deakin after the latter's retirement in September. Mr. Cronje was the first West African to hold the post.
- June The Council's G.C.E. Ordinary Level examination on a single subject basis was taken for the first time in The Gambia, Ghana and Sierra Leone.
- 1966: March The Test Development and Research Office (TEDRO) was established by merging the Objective Testing Unit (OTU) and the Nigeria Aptitude Testing Unit (NATU) to undertake objective test development, establish aptitude testing services and carry out research into the Council's testing procedures.

- June Multiple choice objective tests were introduced for the first time in the Council's School Certificate and G.C.E. Ordinary Level examinations in Biology, Chemistry, English Language, Mathematics and Physics as additions to the traditional essay type questions.
- December The Council became fully responsible for the November/December West African School Certificate examinations. This brought to an end the collaboration with the Cambridge Syndicate which began in 1955. Collaboration for the H.S.C. examination however, continued.
- 1967: April A representative of the Government of the Republic of Liberia attended the 15th Annual Meeting of the Council as an observer.
- June The Council began its own Advanced Level examining in the subjects Economics, Economic History and Government based on syllabuses developed by its International Panels.
- The permanent building of the Freetown Office on Tower Hill was officially opened.
- July Work commenced on the third phase of the extensions to the Lagos Office which included a twelve-storey office block.
- 1968: April At the 16th Annual Meeting held in Bathurst, The Gambia, the Council decided to commission a survey of its organisational structure.
- 1969: January Implementation of the recommendations for re-organising the Council's administrative structure was commenced.
- April At the 17th Annual Meeting of the Council held in Lagos Dr. T. Adeoye Lambo, Vice-Chancellor of the University of Ibadan was unanimously elected Chairman of the Council to succeed Dr. Davidson Nicol who completed his term of office.
- 1970: March Liberia was formally represented at the 18th Annual Meeting of the Council held in Freetown as an associated member country by Hon. S.F. Dennis, Under-Secretary of Education for Instruction and Mrs. Bertha B. Azango, Director of Evaluation, Department of Education.

- June The Council's Joint Examination for the School Certificate/General Certificate of Education was re-introduced in June for candidates in The Gambia, Ghana and Sierra Leone. The examination was re-named The Joint Examination for the School Certificate and General Certificate of Education of the West African Examinations Council in all member countries.
- The Council's revised Constitution was enacted by the Ghana Government.
- 1971: March (i) The 19th Annual Meeting of the Council was held in Liberia. This was the first time the Annual Meeting was held outside any of the original four member countries.
- (ii) Mr. V. Chukwuemeka Ike, Registrar of the University of Nigeria, Nsukka, was appointed Registrar of the Council to succeed Mr. J.A. Cronje following the latter's retirement.
- August Mr. Ike assumed office at Headquarters, Accra.
- August/October In Nigeria branch offices of the Council were opened in Kana, Kaduna and Enugu.
- September Dr. T.A. Lambo resigned as Chairman of the Council on 30th September.
- November/December In the November/December H.S.C./G.C.E. (Advanced Level) examination, the following papers were set by the Council: Chemistry, Economics, Economic History, Government, Mathematics, Biology and Physics. Other subjects were examined by the Cambridge Syndicate. The Certificates were issued by the Council in collaboration with the Syndicate.
- 1972: January Dr. S.A. Akeju, Principal Research Officer (TEDRO) became the first West African to hold the post of Director of TEDRO.
- March Dr. S.T. Matturi, C.M.G., Principal of Njala University College and Pro Vice-Chancellor of the University of Sierra Leone, was unanimously elected Chairman of the Council for the unexpired period of Dr. Lambo's term i.e. until March 1973.
- August The Bathurst Office of the Council in The Gambia was set up and began to function

independently of the Department of Education which had managed the affairs of the Council in The Gambia during the previous twenty years.

1973: January The Council assumed full responsibility for the Higher School Certificate Examination, ending the period of collaboration with Cambridge.

The Bathurst Office was formally opened by the Minister of Education, Youth and Social Welfare, Alhaji Hon. M.C. Cham on January 18.

THE EAST AFRICAN EXAMINATIONS COUNCIL

B.P. Kiwanuka

Registrar, East African Examinations Council, Kampala, Uganda.

Historical Background

The East African Examinations Council was established towards the end of 1967 by an Act of the East African Legislative Assembly. The Act is generally referred to as the East African Examinations Council Act, 1967. It was enacted on behalf of the East African Common Services Organisation which later became the East African Community. The Community includes the three States of East Africa, namely Kenya, Uganda and Tanzania. It is responsible for running services that are common to the three States, e.g. Railways, Airways, the Posts and Telecommunications, School Examinations, etc.

Up to 1967 all the major school leaving examinations were conducted by examining bodies based in Britain. These included the University of Cambridge Local Examinations Syndicate, the University of London School Examinations Council, the Associated Examinations Board, the City and Guilds of London Institute, the Royal Society of Arts and a few others which concentrated on specialised fields. The Council Act of 1967 was a climax of a move which started in the early sixties. In 1964 the Creaser Committee, which was appointed to look into University Entry Requirements, reported, among other things, that

"Over the last two years the Academic Committee of the Provisional Council of the University of East Africa and its successor, the Senate, has been concerned that entrance to degree courses within the University should relate to national needs There is strong pressure for the early establishment of an East African Examinations Council to take over from the Cambridge Syndicate the external school examining at the form 4 and the form 6 levels. Such a step can be justified on both educational and political grounds."

In 1965 the Vice-Chancellor of the University of East Africa invited the Cambridge Syndicate to send an adviser to East Africa to consult with the Governments and the University on the possibility of setting up an examinations Council. As a result of this invitation Mr. A.V. Hardy, Deputy Secretary of the Cambridge Syndicate, came to East Africa and held discussions with representatives of the Governments and the University. He then prepared a report outlining ways in which an Examinations Council could be formed. It was on the basis of this report that the Council was established by the Act referred to above.

The Act provides for the representation of the main bodies concerned with education in East Africa on the Council, namely the Governments of the partner States (Kenya, Uganda and Tanzania), the East African Community, the University of East Africa and its constituent Colleges, the Heads of Schools and the Teachers. It specifies that "The objects of the Council shall be to conduct within East Africa such academic, technical and other

examinations as the Council may consider necessary or desirable in the public interest."

The Committee Structure of the Council:

The steering body of the Council is called the Finance and General Purposes Committee. This is, in effect, the Executive Body which supervises the implementation of the Council decisions. As in the case of the Council, the Finance and General Purposes Committee membership reflects the interests of the Partner States, the East African Community and the University.

In addition to this Committee, the Council is empowered to appoint, and has actually appointed, other Committees for specific purposes. There are, for instance, National Sub-Committees (one in each Partner State) whose function is to consider the work of the Council in relation to the specific requirements of their respective countries. They advise their respective Governments on the subjects that should be examined by the Council and they comment on the examinations and examination papers taken each year by candidates in their respective countries. There is a School Examinations Committee whose main function is to advise the Council on the suitability of new syllabuses, the suitability of examiners to be appointed and the regulations to be used. There are also various International and National Subject Panels covering all subjects examined. The purpose of these panels is to study existing syllabuses and improve on them as necessary, develop new syllabuses, delete unnecessary ones and then present all these to the School Examinations Committee for approval on behalf of the Council. They also make recommendations on suitable examination setters.

The Committee structure of the Council emphasizes the need for considerable consultation and involvement by all concerned in this venture. Action can, for instance, be initiated by an individual teacher and is passed upwards through the National Subject Panels, the National Committee or the International Subject Panel to the School Examinations Committee or the Council itself. Proposals initiated at the Council level or the School Examinations Committee level have a way of reaching the teacher in the school in each of the participating countries. In this way it is hoped that the East African Examinations Council will be a people's Council and will not be looked at as a mysterious body that imposes syllabuses or examinations on countries and schools without their active participation.

Council Activities:

The scope of Council's activities, as set out in the Council Act, is fairly wide. The Council has therefore decided to be a little cautious in its approach to its task in order to ensure that the foundation is well done. Initially it was decided to concentrate on the secondary leaving examinations. As reported above there already existed a demand for participation in these examinations.

In 1968 the Council and the Cambridge Syndicate agreed on a programme whereby the Council would gradually take over the examining activities for both the O-level and the A-level secondary school leaving examinations. The Syndicate would gradually phase out. It was decided that a first step in this exercise would be the joint awarding of certificates by the two bodies. Hence the former Cambridge School Certificate/G.C.E. and the Higher School Certificate have been replaced by the East African Certificate of Education/East African School Certificate and the East African Advanced Certificate of Education awarded jointly by the Council and Syndicate.

This joint operation, in the transitional period, is also reflected in the actual setting and marking of examination papers. For the next five years or so papers for the O-level and A-level examinations will be set and marked partly in East Africa and partly in Cambridge. The take over programme includes the training of East African examiners by Cambridge Examiners. The East African Examiners are recruited by the Council through the Ministries of Education of the three countries. They are trained in East Africa by Instructors recruited by Cambridge and those who are considered suitable are appointed as Examiners in their respective subjects.

The recruitment of suitable examiners is one of the major challenges to the Council. Obviously large numbers of examiners are required if the Council is to take over responsibility for all subjects. There are now about 35,000 candidates at the O-level and 4,000 to 5,000 candidates at the A-level. There is always the big problem of the wastage of trained examiners and this is aggravated in East Africa by the fact that a large number of teachers are still expatriates. The majority of these come to work in East Africa for short contract periods. Their assistance in this exercise can only be of a temporary nature. However, on the lighter side of the problem, there is the determination of each of the participating countries to train its own local teachers and reduce the reliance on teachers from abroad. It is thus hoped that this will not only provide the Council with the examiners required, but will also provide continuity which is essential for an examination system.

Reference has been made above to the establishment of subject panels both at the national level and the international level. The Council considers it its obligation to assist the partner States in their effort to localise syllabuses. Already some of the subject syllabuses have been tailored to suit the requirements of the member countries. Examples of these include syllabuses for History, Geography, Physics, Chemistry, Biology and Literature in English. The moulding of syllabuses is initially done by the National Panels for the particular subject and the final versions are agreed upon at meetings of the International subject panels.

The revision or development of new syllabuses does, of course, bring its own new problems. First, one has to consider not only the relevancy of the matter included in the syllabus, but also its standard in comparison to existing syllabuses. Subject panels must therefore ensure that the revision or replacement of syllabuses does not result in the lowering of standards. Another problem related to that matter is the designing of new examination papers based on the new syllabuses. Problems of this nature have been experienced in connection with the development of School Science Project syllabuses. It was discovered that because of the different rates of development between Chemistry and Physics, it was impossible to set papers of the same standard for all candidates in the three countries. The solution to the problem was to set papers including alternatives of the new and old syllabuses - the so-called hybrids. This is, of course, an interim measure which will disappear when all syllabuses have been fully developed.

This paper is being written shortly after the first cycle of the examining exercise has been completed. This cycle has been an eye opener to the Council. Reference has been made to the processes of recruiting and training examiners. The exercise has revealed problems of security which, for obvious reasons, cannot be discussed in a paper of this nature. The problems of long distances in a broad region like East Africa have also come to light. Whereas in Britain, and possibly in other countries, marking can be done in the examiners' homes, in East Africa all the marking must be residential. This certainly adds to the cost of the exercise. But it reduces the chances of losing candidates' scripts on one hand, and on the other hand it makes coordination and standardization easy. Despite all the problems that may crop up in such a venture the staff of the Council and the Council itself have been greatly encouraged by the co-operation of people within East Africa and friends outside East Africa.

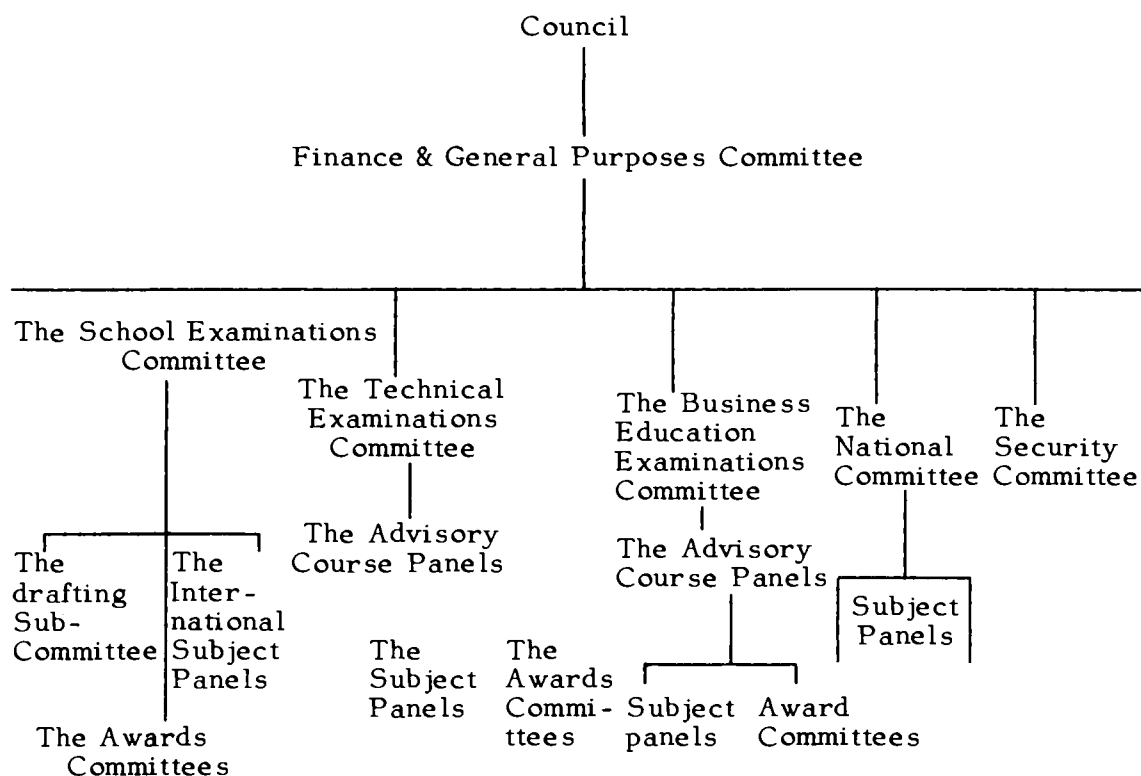
THE DEVELOPMENT OF THE EAST AFRICA EXAMINATIONS COUNCIL

B.P. Kiwanuka
Secretary, East African Examinations Council

Just over 2½ years ago I was asked by the Commonwealth Secretariat to write a paper on the activities of the East African Examinations Council. This paper is on pages 50-53 of the Commonwealth Secretariat's publication Examinations at Secondary Level in the Education in the Commonwealth series, published in 1970. In the last paragraph of that paper I said that at the time of writing the Council had just completed the first cycle of the examining activities. I was then referring to our active participation in the 1969 November/December examining exercises. The Council was then just over two years old. We are now five years old. We have participated in the 1970, the 1971 and the 1972 examining exercises. We are participating in the 1973 examining exercises right now. But, most important of all, as I write this paper, we are busy preparing for 1974, the year when we plan to stand completely on our own.

I might perhaps be repeating what I said already in the paper referred to above. I consider, however, that it is important to emphasise some of the points I made then, in order to appreciate both the rate of our development and the problems we have met and still have to meet and resolve. I said then that purpose of the Council was to conduct within East Africa such academic technical and other examinations as the Council may consider necessary or desirable in the public interest. The Council was set up as a result of strong pressure from within East Africa to take over the functions of conducting examinations from bodies based from outside East Africa. It was considered and it is still considered that it is only a body like this one that can reasonably relate its programmes to the needs and aspirations of the peoples of East Africa.

The Council was thus planned and established in such a way that its governing body and all its Committee structures are very representative. Its activities and decisions were intended to reflect the broad requirements of the region in matters of syllabuses to be adopted for the various examinations it conducts and in matters of standards attained by candidates who take these examinations. The first step then was to decide on the size and representation of the governing body and the number and size of the committees that would implement the various decisions of the Council. The diagram below illustrates the Committee Structure of the Council which has gradually been developed over the five year period.



The governing body of the organisation - the Council has representatives from each of the member States - five from each State. These are appointed by each State to represent the interests of the government, the Heads of teaching institutions (secondary, technical and commercial schools) and the teaching profession as a whole. The Universities and Technical Colleges are also represented on the Council. In addition, the East African Community, which has the responsibility for common services like the Council is also represented. Also during the initial period of Council's existence the University of Cambridge Local Examinations Syndicate has been represented on the Council by one member.

As may be expected Council only meets twice a year. Most of its work is done by its Executive Committee called the Finance and General Purposes Committee. This committee has representatives from Governments and Universities. The chairman of the Council who is also the chairman of the Finance and General Purposes Committee is one of the Vice Chancellors of the Universities of East Africa. The post is held in rotation for a three year period.

The other Committees and sub-Committee are related to specific functions and responsibilities and their names and titles in the diagram indicate their respective duties e.g. the School Examinations Committee, the Technical Examinations Committee, the Business Education Committee etc. etc.

All Committees have one thing in common. They are all fairly representative of national and professional interests.

The diagram of the Committee above reflects the areas of examining in which the Council has become involved over the past five years. The School Examinations Committee is responsible for conducting Secondary School Examinations at the Ordinary and the Advanced levels. This is by far the greatest activity of the Council. Right from the very beginning Council decided to participate in the conducting of Ordinary and Advanced level Secondary School Examinations. These are the areas which were most dominated by examining bodies based outside East Africa, Secondary school courses, more than any other courses, required urgent revision in order to make them relevant to the needs of East Africa. It was realised however that in order to do the work well, a period of gradual transition was necessary. It was therefore decided to conduct the O and A level examinations jointly with the University of Cambridge Local Examinations Syndicate. The joint operations in this area started in 1969 and will come to an end this year. In 1974 the Council will conduct both the O and A level examinations alone.

The preparations for the final take over of O and A level examinations has involved Council in urgent and often difficult exercises. First Council had to ensure that it had well qualified staff to do the job both on a permanent and temporary basis. Permanent staff (senior and junior) have been recruited over the period to man the various departments of the Council. Reference will be made to the administrative structure below. Ad hoc courses have been arranged for some of our staff abroad to acquaint them with examination procedures in well established organisations. Staff have been attached to the Syndicate offices, the Joint Matriculation offices and the West African Examinations Council in Accra and Lagos. Study visits have also been made to the London University School Examinations Council and similar bodies in Britain. Temporary staff include the large numbers of examiners that have been trained every year. Council has been assisted in this exercise by the University of Cambridge Local Examinations Syndicate who have provided most of the Instructors every year and by the British Ministry of Overseas Development who have provided large sums of money to finance the training programmes. It is estimated that by the time of taking over of all school examinations Council will have about 2,500 examiners to mark scripts from some 60,000 candidates.

The marking of scripts, in a broad, developing area like East Africa, has had to be done residentially. This will continue to be the pattern for some years to come. Residential marking inevitably raises the cost of the exercise and no doubt it is the price which Council and the countries involved have to pay for achieving their aim. Council has had to consider seriously as to whether other methods of examining and marking can be adopted if they are reliable and practicable. It is for this reason that investigations are now being made into the validity and reliability of objective tests in the East African setting and environment. Already objective test papers have been introduced in a few subject papers. The idea is that if the experiments are successful both traditional testing and objective testing will be used simultaneously in school examinations at both O and A levels.

The take-over of O and A level examinations has involved Council in the re-writing of most syllabuses. As indicated above Council, and indeed all parties involved in this work, consider that the conducting of examinations alone is not enough. It is most important that the courses on which examinations are based are relevant. Council has therefore set up subject panels for practically all subjects examined. Each of these panels is charged with the duty of ensuring that the syllabus for its particular subject is relevant. New or revised syllabuses are therefore being introduced in

schools as they become available and as other factors such as books, equipment, teachers etc. allow for their smooth adoption.

The Committee structure shows two other important areas of examining in which Council is involved. These are the technical examinations and the Business Education (Commercial) Examinations.

Two years after its establishment Council was asked to extend its activities into these particular fields. Previously examinations in these two areas were conducted largely by the City & Guilds of London Institute and by the Royal Society of Arts. Here again the first step to take was to form special committees and make them responsible for these examinations. Secondly Council had to prepare out working arrangements with the existing examining bodies to facilitate the take over. Thirdly Council had to appoint permanent staff at the Secretariat and train examiners. In actual fact all these activities were undertaken almost simultaneously. Staff have been appointed and some of them have been trained overseas by the attachment arrangement. Training courses have been conducted; and the take over has begun. In these two cases the take over is done subject by subject. There are no joint arrangements. Council takes over a subject and awards a certificate in it as it feels capable of doing so. It is estimated that in two years time most of the technical subjects and the commercial subjects will be taken over.

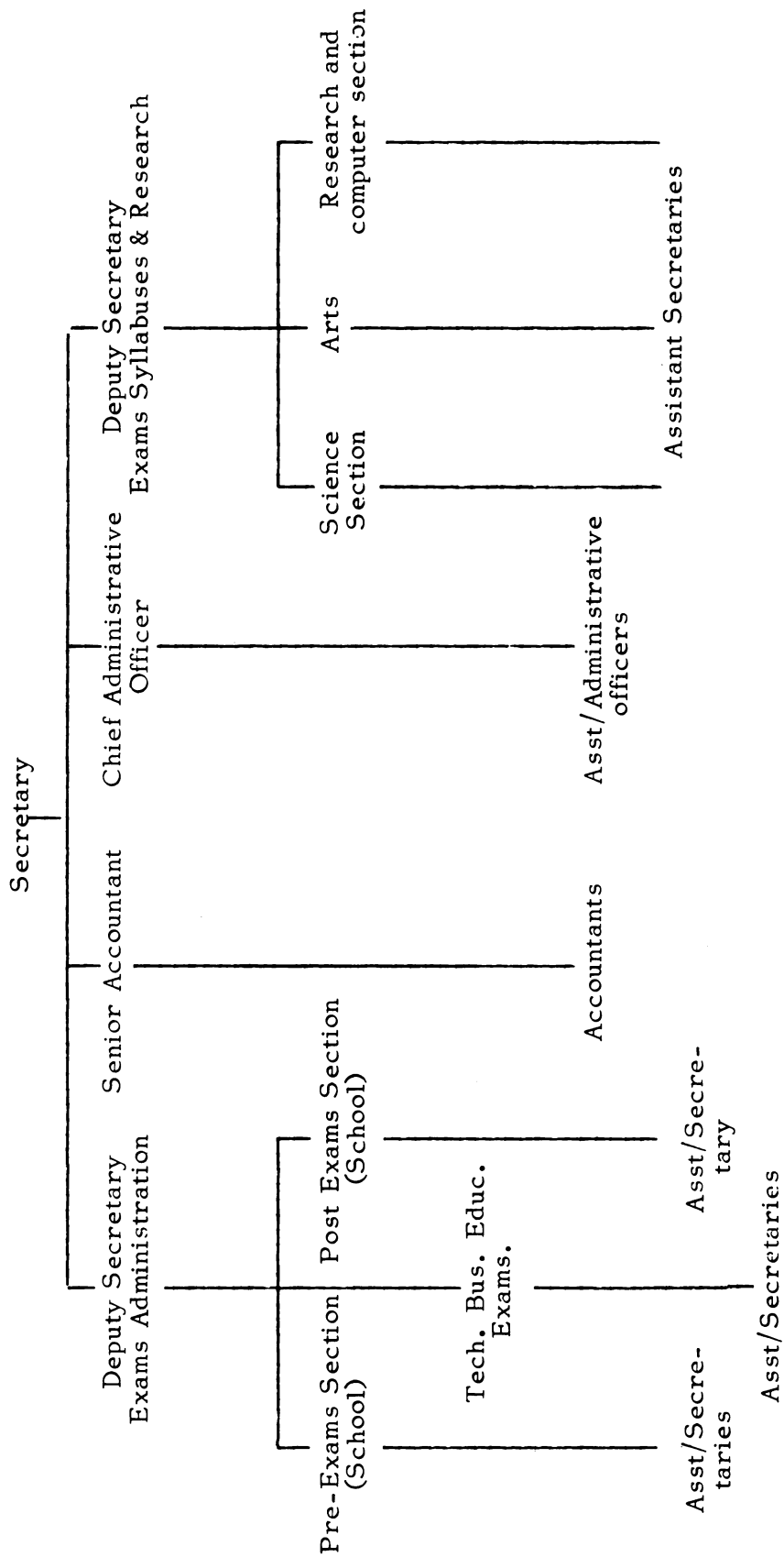
The problem of qualified examiners does indeed exist in these two areas particularly in the technical field. The plan here is to start with the most popular subject or courses, and finish off with subjects or courses that are taken by small numbers of candidates. This arrangement will give Council time to recruit and train all examiners required.

I must now turn to the Administrative structure of the Council. At the time of writing this paper, the Administrative Structure has evolved as shown opposite.

The constitution of the Council provides for the appointment of a Secretary as executive head of the organisation. The growth of the Council has gradually led to the establishment of departments and/or sections each charged with specific functions and headed by a senior officer. The Department of Examinations Administration, headed by a Deputy Secretary, is responsible for the annual administration of examinations. These include the registration of candidates and collection of examination fees; the issuing of examination instructions; the preparation of examination timetables; the distribution of examination papers and the collection of worked scripts; the marking of examination scripts; the processing of marks and the issuing of results and certificates; and a number of other related duties.

The Department of Examinations Syllabuses and Research, headed by another Deputy Secretary, is responsible for the drafting of syllabuses and regulations; the preparation of draft and final examination papers; the preparation and storage of objective tests; the training of setters and item writers; research into and development of examination techniques; all computer operations; and all other matters related to these functions.

The Department of Accounts headed by the Senior Accountant needs no extra comment. It is responsible for all financial and accounting matters. And lastly the Department of General Administration headed by the Chief Administrative Officer is responsible for the general administration of the organisation.



Both the Committee and the administrative structure are still in their experimental stages. We are still looking for better ways of running an examination organisation. In the process of experimentation and research we have consulted older organisations in the field; Cambridge, the JMB, London, West Africa, etc. We have also in the past received technical advisers from the Centre for Curriculum Development, the American Institute for Research (AIR) through the USAID; TEDRO through the West African Examinations Council. We have received financial assistance from the Ford Foundation for the training of senior staff. We have established contacts with the Ethiopian examining authorities and examining authorities in Malawi and Zambia. The aim in all this is to try to widen our experience and knowledge of examining practices elsewhere, particularly on the African continent. In this way we hope to provide the best service for the people of East Africa.

THE ROLE OF A REGIONAL EXAMINATIONS COUNCIL

B. Somade

Director, CESAR, University of Lagos

A survey of examining bodies throughout the world reveals the fact that there is hardly any regional examining body of the type well-known in the developing countries of the Commonwealth in any of the advanced countries. There are almost as many different types of examining bodies, where they exist, as the number of countries. The slight differences in the functions and roles are a reflection of the national philosophies of education of the countries and, in particular, their school systems. The type of examining bodies in the developing countries of the Commonwealth were the only realistic types at the time each was established in the different countries, because there were comparatively very few trained personnel in the countries, the number of candidates were too few to maintain national examining bodies at reasonable cost, and since there were very few universities - not more than one in each country - a body had to be set up which would command respect and whose certificates would be acceptable to overseas universities.

Quite a few of the developing countries have been devoting some time to a formulation of their national philosophies of education and in particular, their systems of education. This exercise leads to a consideration of their examination systems. It will be correct to assume that the present examining bodies, however successful they might have been in the past will, without far-reaching modifications in organisation and objective, not serve the future. Countries which some of these regional examination bodies serve are evolving different educational systems and national philosophies. Even where the national philosophies of education appear to be similar, emphasis and sometimes connotations differ. It follows that the examining bodies have to review their roles and functions. Some member countries may find it difficult to accept the views of other countries in respect of syllabuses, and criteria for award of certificates or even methods of examination. As against this, opinions have been expressed that standards will be affected and acceptance by overseas University of the certificates issued by a national examining body may be difficult. One would like to see a definition of standards with respect to secondary schools. Many feel that the question of standards is relative, subjective, and even illusionary. What is the purpose of these "standards"? If entry into Universities, then is it right to subject 95% or more of the pupils who will not proceed to the universities to this type of examination? The Universities in some countries have said that they prefer to set up a Joint Matriculation Board and thereafter a 4-year undergraduate course after school certificate course. Or are the standards for the benefit of employers? Whichever it may be, it is bound to vary in different areas of knowledge depending on national needs and aspirations - an example was the upsurge of curriculum development in U.S.A. just before and after Sputnik and also the fundamental changes in France in the late sixties.

Many examining bodies also prepare syllabuses in the different subject areas. This may be inevitable where there are no curriculum research bodies or similar institutions in the country but with the establishment of these institutions, should not preparation of syllabuses be left to them?

Where practising teachers through their professional associations are available together with university teachers whose role is to see that facts and theories are up-to-date and to indicate future trends, it seems that these institutions would be more competent than any examining body to draw up, criticize, try out, and evaluate syllabuses before they are imposed on the pupils. The examining body may call on the teachers for help but it is doubtful if it could undertake the research development necessary to produce a really new syllabus which will not be just a revised syllabus with the usual deletions and additions of topics. I would like to emphasize that good syllabuses no longer consist of a list of topics but also include methodology indicating new approaches which have revolutionized teaching and testing, not so much by the number of new theories and facts involved but by the methodology and objectives. There is now a blurring of the line of demarcation between a teaching syllabus and an examining syllabus. The former helps teachers while the latter leaves the pupils at the mercy of the teachers. The pupils suffer if the knowledge or competence of the teacher is low. This aspect of syllabuses has greater relevance to the developing countries where the competence of the few qualified teachers may not be as high as one would wish.

The examining bodies have a greater role to play in testing, through their TEDRO type of organisation to improve on the predictive value of their tests and improve the tests to include tests of the affective domain. How does one test attitudes?

Would not a new type of test which will test not only achievement but also aptitude be more useful and predictive? These require much research. Highly qualified professional staff of examining bodies should be released to take part in curriculum research and preparation of syllabuses. Ad hoc committees to revise syllabuses never produce worthwhile syllabuses and it is regrettable that the teaching profession accepts these revisions, though grumbling, without official protests as a professional body.

The greater the rate of development in education in any country the greater will be the demand for change irrespective of what other members of the regional or international group may say and it is more diplomatic to structure the examining bodies in such a way that each member nation will not feel that he has to proceed at the speed of the slowest or offend the susceptibilities of other nations. It is suggested that greater attention should be paid to the administrative structure of the examining bodies to allow for such an eventuality. TEDRO will always be a unifying factor.

Research, particularly in devising accurate evaluative tools and training of examiners, might feature largely in the schedule of the staff of the examining body.

In conclusion, it appears that in many of the countries the problem of large numbers of candidates for examinations is looming ahead. Should not some time be devoted now to finding either quicker and reliable methods of marking essay-type answers or developing reliable and valid objective tests for these, if possible or feasible? May be, large scale training of examiners will solve the problems or do we need a radically different type of examinations? A study group within the examinations councils may find this topic worth considering.

A SURVEY OF TRAINING NEEDS RELATED TO THE EFFECTIVE OPERATION OF AN EXAMINATIONS COUNCIL

V. Chukwuemeka Ike
Registrar, West African Examinations Council

1. Introduction

The primary function of an Examinations Council, stated very simply, is to examine. To examine this function in greater detail, I shall use as my example the West African Examinations Council (WAEC). That Council was set up by law "For the purposes of holding such examinations in West Africa as may be necessary in the public interest" It has power not only to conduct such examinations but also to award certificates and diplomas on their results.

In the exercise of its powers, WAEC has found itself involved in the following functions among others:-

- (a) Syllabus development - revising existing syllabuses periodically to make them more relevant to present day needs of the member countries, and introducing new syllabuses in subjects not hitherto part of the school curriculum.
- (b) Production of question papers for the various examinations/ tests it conducts.
- (c) Introduction of different methods of examining - e.g. objective multiple - choice type of examination, and tests of aptitude (as distinct from tests of achievement).
- (d) Production of tests for purposes of guidance in comprehensive schools.
- (e) Conduct or administration of examinations, and the pre - and post - examination arrangements associated with it.
- (f) Test evaluation and fixing of standards.
- (g) Research aimed at developing new examination techniques as well as improving the reliability of existing tests.
- (h) Training programmes for staff as well as for Examiners who are not employees of the Council.

2. The Role of Staff

The role of staff in carrying out the functions above may vary from one Examinations Council to another. The tradition which the U.K. Examining Boards (or specifically the Cambridge University Local Examinations Syndicate and the London University Entrance and School Examinations Council) have handed down to us in West Africa is one in which the staff are limited to purely administrative roles. Syllabus development is the responsibility of working parties in the member countries and international panels with members

drawn from the different national work-parties. The role of the subject Officer is to declare the meeting open on behalf of the Registrar, to get the panel to elect a chairman, to provide them with relevant data, and to write the minutes. He need not know anything about the subject. Thus all the expertise required for syllabus development is drawn from outside the staff of the Council.

The same is generally true of the production of question papers. The Chief Examiners who set the papers, the Revisers who revise them and the Moderators who moderate them are drawn from outside the staff of the Council. The role of the staff is again purely administrative; it has been aptly described as that of a postal agency, ensuring that the draft moves from Chief Examiner to Reviser to Chief Examiner to Moderator to Chief Examiner to the printers to Chief Examiner to the printers and so on.

With regard to the marking of scripts (essay-type) and the fixing of standards, the Council relies on Chief Examiners, Team Leaders and Assistant Examiners drawn from outside the Council staff, the role of the staff being to allocate scripts and provide statistical and other data required for fixing the grades. Some members of staff need to understand the award procedures so as to be of maximum assistance to the Chief Examiners.

It is with those facets of examining which are mainly administrative in nature that staff are in full control. The arrangements for the actual conduct of the examination are in staff hands, including the pre-examination arrangements such as the processing of candidates' entries and the appointment of Supervisors and Invigilators for examination centres, as well as the post-examination arrangements such as the collection of candidates' scripts and the issue of certificates.

Responsibility for the introduction of multiple-choice achievement and aptitude tests and for research was first in the hands of Technical Advisers from the American Institutes for Research (through a grant by USAID). However, with the return to our Test Development and Research Office (TEDRO) of staff granted study leave to obtain higher degrees in educational measurement or related disciplines, this responsibility has recently devolved on staff.

From the foregoing it would appear that with the exception of the staff of our Test Development and Research Office (TEDRO), the role of the staff in the Council is entirely administrative. Need this trend continue? I hold the view that it should not, for two reasons. Firstly, its perpetuation means that the Council stakes its reputation on outsiders over whom it has little or no control. In Cambridge and London (which handed down the tradition), the position is ameliorated by the fact that at least some of the 'outsiders' are members of the University staff though not members of the staff of the Syndicate or School Examinations Department. An independent Examinations Council, with no ties to a University, has no such 'external' staff members to call upon.

Secondly, a forward-looking Examinations Council should aim at turning professional at the earliest opportunity. Recognising that educational measurement, particularly when large numbers of

candidates are involved, has become professional, a progressive Examinations Council should not perpetuate a system which places responsibility for the crucial decisions affecting the reliability and validity of its examinations in the hands of well-meaning but freelance Examiners, sound in their subject matter but amateurs in the field of measurement. These 'outsiders' have an important part to play in the examination process, as will be seen below. They should, however, function under the guidance and control of experts on the Council staff.

I therefore envisage a situation in which the role of the staff would change radically in the coming years, from a purely administrative role to one which combines the administrative with the professional role. The staff should increasingly assume professional roles in syllabus development, test development and evaluation, and research, drawing on help from outside the Council as the need arises.

3. Training Needs

(a) Training in Educational Measurement

No matter the role of any senior staff member working for an Examinations Council, it is important that he knows something about educational measurement.

Post-graduate courses in educational measurement, curriculum development and related fields are now available in many universities. As many staff members as possible, holding good degrees in subjects examined by the Council, should be given the opportunity to acquire post-graduate degrees in these fields. This would equip them to play the professional/expert role referred to above.

Shorter non-degree courses on different facets of educational measurement, aimed at imparting specific techniques, would also be helpful. Educational Testing Service, Princeton offers such courses annually. Comparable courses are also organized in the United Kingdom, e.g. a British Council two-week course scheduled for the 1973 summer in Edinburgh on Tests and Measurement in English Language Teaching.

Some of the techniques of educational measurement can be acquired on the job from more experienced colleagues. Where this is not possible and the services of an experienced Officer from another Examinations Council could be obtained on short or long term secondment, he could help to provide the on-the-job training. The West African Examinations Council is currently seeking the services of an expert in Data Processing and Computer Operations to be seconded to the Council for a year or more during which he will help to train local staff to take over from him. This approach is attractive in situations in which the Council cannot afford to release its staff for training elsewhere.

Yet another approach is to send staff of the Council on periods of attachment to other examinations councils, to study

specified examination techniques. WAEC has sent several of its staff to the Cambridge Syndicate, the London University School Examinations Department, the Royal Society of Arts, and City and Guilds of London Institute.

(b) Training in Management

This is an aspect of training which tends to be neglected by organizations such as an Examinations Council. The tendency is to concentrate on the different facets of educational measurement, assuming that administrative competence comes naturally. It probably does for some, but not for all. Judging from past experience, the incidents which have shaken public confidence in the West African Examinations Council might have been avoided if training in management had been placed on the priority list. The need is heightened by the fact that most persons recruited at the level of Assistant Registrar and above have had practically no training or experience in administration or management; they are often classroom teachers. Yet they are promptly entrusted with major administrative responsibilities. One Assistant Registrar who had had a brilliant teaching career admitted soon after joining the Council that there was more in administration than he had imagined. He had had to learn, among other things, how to draft official telegrams!

Management courses are offered in different parts of the world; some of them would be of benefit to Examinations Council staff, depending on the level and nature of their responsibilities. The West African Examinations Council, in recognition of the need for management training, has recently arranged for one of its Examinations Controllers to take a full-time residential management course organised in Ghana by the College of Administration at Greenhill. It is hoped that other senior officers of the Council, including Heads of Offices, will take such courses which are also available in Nigeria under the aegis of the Nigerian Institute of Management.

The Council is also launching its first induction course for new Assistant Registrars, Research Officers, Computer Programmers, etc., in April 1973, aimed at introducing them to the organization which they are to serve as well as to the functions of an Examinations Council in general.

In addition to the exposure of staff to management and induction courses, a large Examinations Council should ultimately aim at recruiting professionals (with the requisite professional qualifications and experience) for those administrative functions which have become or are fast becoming professional, e.g. Accounting, Computer Operations, Personnel Management, Public Relations. Where this is not possible, staff assigned these specialised functions could be sponsored to take short term or long term courses in the appropriate fields. Many such courses are available in the Commonwealth.

(c) Training of Non-Council Personnel

As has been mentioned earlier, an Examinations Council

leans heavily on the services of several people - primarily secondary school teachers and university lecturers - for the production of its examinations or tests as well as the marking of the candidates' scripts, particularly where the examinations are of the essay type. Even when the Council has attained the stage in which the final decisions as to what goes into the final question papers and how candidates' grades are to be determined are taken by experts on its staff, the Council would still require assistance from persons outside its employment. The Council must, for example, ensure that its tests are appropriate to the level of education for which they are intended. One way in which this is done at present with regard to objective tests is by inviting test items from test writers from the various member countries which are then put together (if they are of the right quality) by the staff and trial tested. These writers are not employees of the Council. Also with the marking of essay-type scripts, the Council needs the services of thousands of Assistant Examiners for its major examinations. Again these are not employees of the Council; they are predominantly teachers. The Council's efficiency as an examining authority depends to a considerable extent on the efficiency of each of these outsiders. The Council's training schemes must therefore cater for them, too.

A long-term approach to the problem is to provide for such training in the curricula of University Faculties or Schools of Education and other teacher training institutions in member countries. Educational measurement and evaluation ought to be a crucial part of any curriculum aimed at producing teachers. Unfortunately, experience from marking exercises organized by the Council shows how grossly deficient in this area many practising teachers are. The sooner the institutions responsible for training teachers accept this responsibility, the better it would be for the Council.

The short term approach is to organise special training courses in (a) test construction and (b) the marking of essay-type questions. These courses could be organised on a national or regional basis. The West African Examinations Council has organised such courses for several years, financed by the Council itself, the Ford Foundation and the British Government. The fact that it is constantly having to train more and more examiners illustrates the magnitude of the problem.

4. Conclusion

Public examinations are not new, even to the developing countries. Cambridge and London, the Royal Society of Arts, City and Guilds of London Institute, and other examining bodies extended their examinations to the length and breadth of the erstwhile British Empire decades before the colonial countries attained political sovereignty. The extent of the involvement of the nationals of these countries in the administration of these examinations was, however, severely limited - generally it did not exceed the physical arrangement of centres, the supervision of the candidates while the examinations were in progress, and the return of the scripts to the United Kingdom where the crucial processes took place.

A young Examinations Council in a developing country thus finds that it has to undertake a massive training scheme if it is to operate effectively, a scheme involving not only its own staff but also thousands of school teachers and other outsiders. There is hardly any doubt that its success as an Examinations Council depends on the comprehensiveness of its training schemes as well as on the speed with which the objectives of the scheme are accomplished. If there is one area in which outside assistance to such a Council is greatest, it is in this area.

THE ACTUAL AND POTENTIAL ROLE OF TEACHERS' ORGANISATIONS
IN THE DEVELOPMENT OF EXAMINATION TECHNIQUES
AND THE ADMINISTRATION OF EXAMINATIONS

Paper presented by

The World Confederation of Organisations of the Teaching Profession

When we speak of teacher organisations in the countries served by the West African Examinations Council, what specifically do we mean? Appendix A of this paper gives a composite view of African teacher organisations with such indicators as total teaching force, paid-up members, full-time employees, buildings owned, check-off system, and self sponsored in-service training for members. Thus, in the area under discussion, there is a total teaching force of slightly over one quarter of a million teachers or 260,400. About 65 per cent, or 163,000, are current paid-up members of their associations. If we leave out Nigeria in the above reckoning and count only the other four countries, the ratio of paid-up members to total teaching force is 90 percent.

Like all such figures, there is flux in the total teaching force, but the number of members who pay annual dues is in correct proportion.

What are these and other African teacher organisations trying to achieve? The harried civil servant responsible for education will often say, "Teachers are troublesome." But this is not their objective! Our friends in the civil service, the universities and the subject-matter associations who remain apart should be aware that today a teachers' association must look after both protective and professional interests of members. The challenge is to achieve the correct balance! We feel that the decade of the 1970s will show a distinct swing toward the professional side and along with this an increasing demand to be heard.

An organisation has a right to be heard when it achieves a solid membership base and demonstrates to society the judicious use of privileges guaranteed under international convention and administered by the International Labour Organisation (ILO). More than half of the teacher associations in Africa have reached this take-off point. They have demonstrated to their membership, to society and to government a responsible use of the right (a) to organise, (b) to engage in collective bargaining, (c) to employ full-time officials, (d) to operate the check-off system for dues collection, (e) to represent teachers in employer-employee relations.

But a teachers' association, in addition to enjoying the rights guaranteed to the whole working force as citizens, has a further professional responsibility to its members, to society and to government. This factor is often overlooked. Thus, a strong organisation has as its rationale the service to the whole of society. This is an expanded function for teacher organisations but it is already practised in Africa through: (a) teacher sponsored in-service training courses for members (see appendix B); (b) book development, including writing and publishing journals, materials for new literates and textbooks; (c) the operation of evening schools for the community at large and a permanent training college for branch officers; (d) representation on Ministerial education committees, conducting "education weeks", sponsoring lectures, international travel for members; (e) beginning the operation of self-enforced codes of ethics and profession-regulated qualifications for teaching.

Thus, we feel ready to participate fully in planning meetings such as this. But we are also concerned about the more fundamental questions facing education.

Can an essentially foreign system serve Africa's needs?

Has the planning function sufficiently recuperated from its early failures to be of use?

Is the increasing presence of foreign experts foreshadowing a renewed colonial epoch?

Why are French and English speaking brothers in the teaching profession drifting farther apart each year?

The concern of teachers is broad and deep. We welcome involvement with you. Trust us. Lend a helping hand. Point a new direction. Share your problems with us. We are, after all, in this together.

In light of the above, the World Confederation of Organisations of the Teaching Profession welcomes this Seminar which is being held to define the needs in respect of and perhaps to prepare the ground for a possible conference on the development of examinations techniques and the administration of examinations in the Commonwealth in general, and the West African countries in particular. It is a step in the right direction, a sign of the realization that our whole examination system needs to be improved as well as of the will and determination to undertake the task. We would therefore like, first of all, as observers, to thank the organisers of the Seminar for arranging it, and for inviting the WCOTP to attend.

The whole question of examinations needs to be critically appraised in order to determine whether they are achieving the purpose for which they were designed, and whether they are the best means of achieving that purpose. The time has come to find out whether examinations as we have them, the conventional end-of-the course examinations, are the best means of measuring the potential capabilities and the attainment of students. As some critics of the present system have observed, the most important questions about the present examination techniques is whether they are sufficiently accurate and reproducible for justice to be done to each examinee. This is doubtful. One conclusion is that there is no justification for complacency over present examination techniques. (See, for example, M. Ager and J. Weltrian in Universities Quarterly, June, 1967). Professor H.T. Himmelweit does not seem to us trenchant when he writes, "On the grounds of reliability, sampling of relevant characteristics and the conscious deployment of examinations to achieve given educational objectives, the traditional examination system has hardly anything to recommend it" (Universities Quarterly, June 1967).

Furthermore, the West African Examinations Council inherited its examination system from, and was faithfully tailored on the pattern of, British examination bodies as they existed 20 years ago, and it is necessary to review the system constantly to ensure that it is relevant to the ever-changing situation in the participating countries and meeting their needs. Syllabuses of examinations and methods of examining thrive on constant review; otherwise the former outlive their usefulness and become outmoded, while the latter become obsolete and ineffective.

We may mention here in passing that the need for the reform of our examination system must be seen against the background of the crying need to make our whole educational system more relevant. All over the former colonies in Africa, people are saying that the educational system bequeathed to them by the Colonial Powers does not take sufficient account of their local situation and background, fails to meet their socio-economic needs and leaves their aspirations unsatisfied. The cry for reform appears to be more articulate in West Africa where the need for change is probably more keenly felt. At a recent conference on book development for English-speaking West African countries held in Monrovia, Liberia, participating Governments were urged to initiate action to end "cultural imperialism."

But perhaps the critical review and reappraisal of our educational system in general, and our examinations in particular, belong to workshops or conferences that might follow this Seminar, the main purpose of which is to identify and define our examination needs. We must therefore turn to the immediate concern of this paper which is to draw attention to and seek recognition for what teachers' organisations can do to promote educational planning and reform, with particular reference to examinations, and to determine what use, if any, is being made of teachers' organisations by authorities charged with and engaged in such assignments.

The West African Examinations Council was established to determine the examinations in the public interest in West Africa, and to conduct such examinations and award certificates. During the 20 years or so of its existence, the Council has conducted mostly school examinations. But school pupils, examinations and teachers are a trinity, an interlocking triad, and anything that happens to one vitally affects the others. Any plans to improve examinations which do not take account of the opinion of the corporate body of teachers therefore have not much chance of success, because their successful implementation will depend mainly on teachers.

The West African Examinations Council would seem to appreciate the importance of teachers and teacher organisations for their work, but fails to make enough use of them. A glance through the list of organisations and bodies requested to nominate representatives to the Council and its various Committees, as shown in the Annual Reports of the Council for the years 1970, 1971 and 1972, reveals a serious lack of effective representation from teacher organizations which form the largest body of men who deal with examinations and which constitute the organised articulate voice of teachers. The Council itself has no representation from any teacher organisation as such, from any of the participating countries, namely, The Gambia, Ghana, Nigeria, Sierra Leone and Liberia.

Of the four main Committees of the Council, the Administrative and Finance Committee, the Appointments Committee, the School Examinations Committee and the International Test Development and Research Committee, only the last named has one representation from the Ghana National Association of Teachers; no representation is shown for any of the teacher organisations in The Gambia, Nigeria, Sierra Leone and Liberia

Only the National Committees allow one representative each to the local teachers' organization of each country. It will thus be seen that the vast and almost unique experience of teachers with examinations as concentrated within teachers organizations is not being fully utilised by the West African Examinations Council. In contrast with the very poor

representation given to teachers' organisations, the Ministries of education (the civil service section) and the universities are very heavily represented on most of the committees. It has been said that the National Committees of the participating countries on which serve teacher organisations in the countries concerned nominate members to serve on the main Council. This is so, but the representations of teacher organisations on the National Committees are so inadequate that unless due notice is taken of the need to get teachers' organisations represented on the Council, they have very little chance, under the present procedures, of getting a representation on it.

It may also be argued that some of the Committees of the Council contain members who have either been or are teachers. Our answer here is that these people serve on the council either in their individual capacity, or as representatives of governments or specialised groups, and the views they express are either their individual opinions or the views of their governments or groups. The combined voice of the professional body of teachers must be heard. Members representing teachers' organisations could speak authoritatively for teachers, for they would be briefed after the views of members, especially on important issues, have been sought by the organisations, and they would therefore bring to bear a more representative opinion and experience.

But, it may be asked, what can teacher organizations offer in the matter of the development of examination techniques and administration of examinations? What are they potentially capable of doing? We would answer, "They have a lot more to offer than any other group of people." It was Paul of Tarsus who said, "Salvation is of the Jews", and with apologies to him we would say, examination techniques and administration belong to teachers. Examination is their business, and up to the present time it has been the main method by which they prove and assess their students. The frequency with which teachers conduct examinations for their students differs from area to area and from school to school but at least once a year, and in some cases terminally, teachers deal with examinations. They have thus built up a wealth of experience about examinations which could be exploited through making use of and involving teacher organizations which embody the corporate experience of teachers.

There is also the need to relate examinations conducted by teachers in the classroom to examinations conducted by public examining bodies, and this may best be achieved by involving teachers in the work of the public examining bodies. It is in this way that public examinations can be given a meaningful purpose and made to serve national aspirations and goals. Furthermore, the participation of teachers in the work of public examining bodies will ensure that the Council gets the necessary feedback which teachers can provide because of their close contact with and intimate knowledge of the schools, the students and the community, and which will enable the Council to determine whether the examinations are fulfilling their purpose. If it be said the Examinations Council consults administrators of schools and colleges as well as subject associations, we would reply that these form only a small section of teachers, and their involvement cannot obviate the need to utilize the experience gathered in teacher organisations.

In particular, the experience of teachers could be drawn upon for the improvement of syllabuses, question papers, the conduct of examinations and assessment. No other group of people knows more about these than the

combined body of teachers. In the revision and evaluation of syllabuses the contribution of teachers' organisations as representing the entire body of teachers could not be over-estimated. Teachers use the syllabuses to prepare students for the examinations, and they are the best judges of their validity, appropriateness and value.

Normally, examining bodies seek the opinion of examiners on question papers. Teachers' organizations could be encouraged to comment not only on syllabuses but also on question papers taken. They have the machinery through their branch system, which forms a network covering the whole country, for collecting and collating the opinion of teachers and their suggestions for improvements, from the many thousands of their members. Teachers could provide the best commentary on questions, since they know both the syllabuses and the students. In this way it could be ensured that questions are fair and of the proper type.

Finally, while urging that teacher organisations should be made to participate fully at all levels of the West Africa Examinations Council, we would like to remind all concerned with educational planning and reform that the world of formal education turns at the impulse of teachers, and the organised articulate voice of teachers must be reckoned with if success is to be achieved.

APPENDIX A

Composite View of Teacher Organisations in Middle Africa, 1972, prepared by the staff of WCOTP, African Department, from the latest available data.

Country and Organisation	Total Teaching Force	Paid Members	Full-time Employees	Buildings Owned	Check-Off	In-service Training for Members
Nigeria - NUT	190,000	100,000	91	3	Yes	Yes
Ghana - GNAT	57,000	55,000	22	1	"	"
Kenya - KNUT	46,000	44,000	67	16	"	"
Zambia - ZNUT	16,000	12,000	5	-	"	No
Uganda - UTA	16,000	14,000	23	1	"	Yes
Ethiopia - ETA	13,000	8,000	5	1	"	"
Tanzania - NUTA/T	21,000	7,000	3	-	"	"
Rhodesia - RTA RATA	18,000	6,000	3	-	"	No
Sierra Leone - SLTU	6,500	6,000	6	1	"	Yes
Liberia - NTA	6,000	2,000	-	-	No	No
Swaziland - SNUT	2,000	1,200	-	-	Yes	"
The Gambia - GTU	900	600	-	-	"	Yes
Botswana - BTU	900	300	-	-	No	No
	393,300	256,100	225	23		

APPENDIX A continued

APPENDIX A continued

Country and Organisation	Total Teaching Force	Paid Members	Full-Time Employees	Buildings Owned	Check-Off	In-service Training for Members
Cameroon-FNEPCAM	8,500	4,000	1	-	No	Yes
Congo - SNEC	2,700	2,500	-	-	Yes	No
Cote d'Ivoire-SNEPPCE	12,000	10,000	3	-	Yes	No
Dahomey-SYNPEDA	3,000	1,500	-	-	No	No
Gabon-FNELC	2,000	1,000	-	-	No	No
Guinée-SNTE	5,500	5,300	1	-	Yes	No
Haute-Volta-SNEAHV	5,000	2,500	-	-	No	No
Mali-SNTE	4,300	4,000	1	-	Yes	No
Niger-SNEN	3,200	2,000	-	-	No	No
Rép. Centrafr.-SNEC	2,600	1,000	-	-	No	No
Malgache-FSFAC	7,000	3,000	-	-	No	No
Senegal FNES	8,000	2,500	1	-	No	No
Tchad-SIMEPT	2,000	500	-	-	No	No
Togo-SELT	3,000	2,000	-	-	Yes	Yes
Zaire -FNTZA	100,000	90,000	2	-	Yes	Yes
	168,800	131,800	9			

APPENDIX B

APPENDIX B
SUMMARY OF VOLUNTARY IN-SERVICE TRAINING PROJECTS IN AFRICA - IN CO-OPERATION
WITH THE CANADIAN TEACHERS FEDERATION AND THE SCHWEIZERISCHER LEHRERVEREIN

COUNTRY	YEAR												1971	1972	
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972				
Nigeria	X	+													
Malawi		X	X												
Liberia		X													
Uganda			X	XX	XX	XX	X	XX	X						
Rhodesia				X											
Kenya			X	X	X	X	X	+	+	+	+	+	+	+	+
Tanzania				X	X	XXX	XXX	+	+	+	+	+	+	+	+
Cameroon				OO	X	OO	OO	OO	OO	OO	OO	OO	OO	OO	OO
Ethiopia															
Zaire				O	XOO	O	O	O	O	O	O	O	O	O	O
Gambia															
Ghana															
Somalia															
Sierra Leone															
Togo/Dahomey															
Cent. African Rep. and Lesotho															
No. of locations	1	3	4	8	8	10	13	17	13	12	11	100			
Tutors Sent	2	18	18	29	38	38	40	52	33	40	35	343			

X = Canadian Teams + = Follow-up by WCOPT African Member without outside assistance

O = Swiss Teams

Total number of teachers trained: 7,000 - 7,500

THE CONTRIBUTION OF A RESEARCH UNIT TO THE EFFECTIVE FUNCTIONING OF AN EXAMINATIONS COUNCIL

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Introduction

Two criticisms are frequently levelled at the educational researcher; both are made when he has finished his research project and has produced a report on his work. The first criticism is that the problem he has investigated is irrelevant; the second is that his report is written in terms that cannot be understood by a teacher or a layman.

The first criticism is founded in the suspicion which it is natural for a teacher to feel when his work (and perhaps he himself) is the subject of investigation. It is natural that he should feel that the research represents a threat to him; one way of dealing with the threat, of making it less dangerous, may simply be to categorise it as irrelevant. Thus it is possible to say that the findings relate to some other subject or to some other school or to some other method of teaching. This psychological defence has an important aspect: it illustrates clearly that the teacher is just as human as his pupils. He (or she) has all those same weaknesses and strengths which will be exhibited at some time or other in his (or her) own pupils.

The second criticism is more cogent. Teachers and others often state that research findings are couched in terms of jargon. Perhaps some of these critics do not really know what "jargon" is! As defined by a dictionary "jargon is unintelligible words or gibberish". What the critics mean is that some reports use terms the precise meanings of which are not known to the reader. But it must be recognised that as soon as research breaks away from the descriptive (and some research is entirely descriptive), quantities are involved. As soon as we have to deal with quantities we need to treat them in some way; we need to summarise or combine them. Thus statistics enter. Why should people be quite content to deal with arithmetical operations and yet fight shy of statistical operations? After all, the statistician uses the same operations as the ordinary user of arithmetic; he adds, he subtracts, he multiplies and divides. It is true, however, that there are certain concepts in statistical procedures which are difficult to understand; but it must not be forgotten that the teacher and the general reader have not had the same kind of training as that of the researcher. There is little use in telling a teacher that

"On the basis of the sign-pattern of the unrotated factors, and the results of the graphical rotations, the correlation matrix was re-arranged to group most of the variables in seven clusters, and Burt's method for non-overlapping group factors was applied" (Sultan, 1962),

although there is meaning in it for someone well versed in factor analysis.

It is the duty of the researcher to counter this type of criticism by using every opportunity to educate others so that in every report, article, paper and lecture intended for a non-specialist audience a serious attempt is made to explain the concepts which are being employed. It is impossible to avoid technical terms, difficult concepts and statistical procedures in the majority of research reports; we must explain them in the belief that our audience is willing to learn. Only then will the "jargon" become intelligible.

One frequently hears another kind of comment made about the findings of research. This is that many reports merely confirm widely heeded opinions. The Director of the National Foundation for Educational Research in England and Wales wrote that

"Education is almost the last major field of human endeavour where it is safe for the amateur to pontificate because everyone is possibly (or probably) wrong, even if every one is probably (possibly) right. One does not need to be expert in any real sense to have an opinion which will be listened to". (Wall, 1966).

If some research findings confirm what we thought was the position then surely this is a gain. Opinion is now backed by evidence; there is a great difference between saying "I think I know that " and "There is evidence that".

Research and an examination council

The dangers for a research group in an examinations council are very similar to those for the general educational researcher. The work of the group must be relevant and must be seen to be relevant. Its reporting must be intelligible. This latter condition may only be met by the appointment of staff who appreciate the importance of this aspect of their work and who are willing to play an educative role by never failing to take an opportunity to explain their methods and problems to their colleagues in administration and to the members of the various committees with whom they will come into contact.

The relevance of a research unit's work is likely to be bound up with organisational structure of the examinations council. Experience in England seems to suggest that the most efficient (and therefore relevant) functioning occurs when the unit is part of the council and yet has a degree of independence. The unit must not be so remote and its work so esoteric that there is no interaction between the staff and work of the council. The unit must be independent of the council in terms of the technical and research aspects of its work although the order of priority in which work is to be completed must properly rest with the council. The council must determine the overall strategy whilst allowing the research unit to develop its own tactics in order to achieve the agreed ends.

The function of a research unit

The basic function of a research unit must be to provide the examinations council with information on which proper decisions may be taken in relation to the examinations offered by the council. The unit should have no part in the decisions themselves; its role is to provide the evidence on which the council will base its decisions. Very often the evidence will not be complete; sometimes it will be conflicting; occasionally it will not be helpful. Nevertheless the aim must be to enable the council to come to a decision because of the evidence rather than in spite of the fact that there is no evidence. It must be recognised that on occasion a decision cannot wait until all the evidence has been accumulated; one cannot cancel next year's examination simply because the research findings are inconclusive or are not yet available!

It follows therefore that probably the greatest contribution a research unit can make is the analysis of past examinations especially if the results of the analyses can be made available sufficiently quickly so that change is possible. The research unit has to deal with the simple question "Is the examination doing what it is supposed to be doing?" The question implies that the objectives of the examination have been clearly stated. In general terms the question involves the consideration of the validity and reliability of the examination. In particular such things as the inter-relationships between sections and between questions, the patterns of choice of question (if choice there be), whether better candidates (in terms of overall performance in the subject) attempt particular questions, whether each question spreads candidates to the same degree and how the average marks of questions range will form the basis of the analysis.

A second function of a research unit will be to act in an advisory capacity to the various committees through which the examinations council works. Almost any issue can arise under this heading. The unit must be in a position to be able to call on the knowledge of other workers in the field, either through personal contacts or through published reports. On an occasion when reference to the technical literature or to other researchers is of no avail then a decision has to be taken whether the setting up of a project to attempt to solve the problem is likely to be worthwhile. But such a decision, as has been said, is not that of the research unit.

In addition to the informative role and the educative role, the research unit should be able to set up its own experiments concerned with the newer methods of examining which are possible: the assessment of practical work; the use of teachers' assessments as a component in an external examination; timed and untimed examinations; examinations in which candidates are permitted to use one or more specified text book; the use of projects as an additional component in examinations; as well as the use of objective test items, especially in those subjects where traditionally the essay question holds sway. Regional differences, cultural differences, syllabus differences and subject differences are such that although what happens in one subject in a particular place is of interest the findings of such a research project are likely to mean that for another subject in a different area another research project must be mounted. This replication of projects is necessary if stereotyped examinations are to be avoided.

It is to be hoped that time will be set aside in a research unit's programme to allow for research projects to be set up to investigate matters which will have a long term result on the workings of the council compared with the immediate effect envisaged above. Topics of "pure" research such as alternative methods of item analysis of objective tests (Rasch, 1966), the use of methods of analysing essay questions similar to that suggested by Morrison (1972) or methods of investigating comparability of standards between subjects (Forrest and Smith, 1972) provide examples of research of this type.

Practical considerations

From what has been said it is apparent that an examinations council will need to set up, on the founding of its research unit, some committee whose purpose will be to define the precise terms of reference of the research unit and then to oversee in a general way the unit's work. The committee will determine the order of priority of the work suggested for the unit in terms of the relative importance of the various projects and decide which are the

most important. Suggestions will come from the committee itself, from the councils' other committees as well as from the staff. Ideally the committee should be in a position to deal with research reports, perhaps offering criticism before they are passed to other committees for action. The research committee will act as a funnel through which the input and output of the unit will pass.

It was pointed out (page 1) that both pupils and teachers are human; so are research workers! It is unlikely therefore that the paragons suggested as being necessary for the efficient functioning of a research unit exist. Nevertheless it is possible to suggest that at least the senior staff of the unit should have had some teaching experience, in addition to training and experience in educational research.

Electronic devices are so common today that it is often forgotten that as recently as 15 years ago the use of electronic computers in education was something of a rarity. Desk calculators are readily available. Although the use of an electronic computer can bring about a great saving in time, it must not be thought that the absence of one precludes the possibility of the analysis of examination data. With clerical help and intelligent use of a desk calculator it will still be possible for a research unit to make its contribution to the efficient running of an examinations council.

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THE PLACE OF RESEARCH AND EVALUATION IN PUBLIC EXAMINATIONS

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Last year alone, the number of persons who sat public examinations in anglophone West Africa was 600,000. Projections for the next five years suggest that the number will increase from 320,000 in 1972 to 380,000 in 1976 in Nigeria alone. In 1965 the Secretary of Cambridge University Examinations Syndicate asserted in Lagos that a huge proportion of West Africa's 'gold reserve' is expended on paying overseas examination fees. At that same conference, people wondered if some kind of screening or hurdles should not be devised to ensure that only likely-to-succeed people were allowed to enter. Sir Davidson Nicol, then the Chairman of West African Examinations Council, thought that taking these examinations repeatedly kept many people busy, out of mischief, and hoping that one day they will make it. Considering these teeming and increasing numbers involved, the effects on foreign exchange and the psychological and therapeutic values, one sees that examinations continue to be a factor of considerable force in our culture. And yet, in this same culture, we hear people say "examination is not a true test of one's ability". Nobody has ever been able to give me a better measure, especially if we agree on the broad definition of examination. There is hardly any need to make further case for the importance of examinations here, as I think it is safe to assume that the audience is convinced of it. It is equally safe to remind ourselves that examinations are held in suspicion by several people: users, takers, parents, etc.

The fears are probably justified because examinations are not infallible. They exist in order to serve some purpose, and it is always necessary to make sure they serve their purposes and that very well. Broadly, the purposes are (a) to maintain standards; (b) to stimulate effort; (c) to serve as an administrative device; and (d) to act as an agent of social reconstruction. Of these four purposes, only two need be discussed at least by way of illustration. First, educational administration. The educational administrator in his duty has to economise in staff and other facilities. He divides the school population into groups and sub-groups, homogenous with respect to their abilities and aptitudes, and houses the groups separately for purposes of teaching. Tests and examinations have always been used for these purposes. The social reconstruction use is in terms of employing examinations (and their results) to speed up social mobility, break through social class barriers, etc.

The aims and purposes of examinations may vary, especially in specifics, from system to system but whatever these specifics may be, criticism of examinations ought to be in terms of their achievement of the purposes for which they are meant. By this I mean that an examination system should be criticised only in relation to its objectives. This process of examining an examination in terms of the extent to which it has served its purpose is evaluation. Needless to say the general climate of our age and its increasing cries of dissatisfaction and dismay with many areas of public service call for this kind of evaluation. The process of evaluation often demands that data be collected and analysed to test hypotheses. But this is also research. Research (especially basic research) is undertaken primarily to discover new knowledge and to test theoretical issues in closely controlled situations. Research and evaluation, though taken as two different things in the topic of this paper 'do share many characteristics of methods and approach. Both can contribute to a science of education and perhaps both are required for its (science of education) orderly development.' (Hemphill 1969)

The topic therefore is simply the place of data collection and analysis in public examinations. If research and evaluation in this context are accepted as falling along the same continuum, I shall use them interchangeably from here on.

For public examinations to serve those purposes for which they are designed, they must possess certain characteristics. Some of the characteristics are technical, some administrative. Even with the identification of these characteristics and ensuring that they are present in the examinations, the spite of criticism still persists. There is therefore the need to search and research for more intrinsic characteristics to ensure that examinations do what they are supposed to do in the way they are expected to do it. By the identification of many characteristics, I refer, for example, to the various researches and studies that led to an awareness of the properties of validity, objectivity, reliability, etc. and the subsequent introduction of objective-type tests. There is need for continuous study to ensure the known qualities, and to identify new ones.

A social process (like examinations) employs research and evaluation as an integral part of its operations. Models exist in a number of fields illustrating this. Researches (and results) in Health and Agriculture provide dramatic examples of the impact of new knowledge obtained through research in social processes. It is also true that every field of human endeavour can improve itself by gathering more information about itself. Public examination is one such social process, and as an aspect of the business of education, it can employ research and evaluation to improve, and to operate. Admittedly, the result of research and evaluation in any aspect of the educational field (like public examinations) may not be as dramatic as a successful heart transplant, but surely more needs to be done in gathering information and, more importantly, in feeding back the results of studies into our educational systems. This pride-of-place of research has always been accepted in industrial set-ups, to the extent that any industrial set-up worthy of its name has a virile and progressive research programme. The drug industry is a good example. In fact any industry that spends as little of its resources on research as we do on public examinations would become defunct in no time. I believe that research is no less important in education and examination than in the industrial set-ups. That examinations remain in spite of this paucity of research programmes relative to industry is probably due to their essential role in society. But, if they are so important to society, they require a corresponding level of excellence which can only result from systematic data gathering and analyses to discover new facts and to improve on existing ones. I suppose that this important role is the greatest justification for research. Having made a case for research in public examinations, one only now needs to pose the important question of what needs to be done to establish a research and development programme which has the potential to add to what we know about, and how to practise the business of examining.

Perhaps we should also consider specific examples of the many areas where research and evaluation are important to public examinations vis-à-vis the two important roles of improving and operating it. These are:

Measurement in the non-cognitive domain

Apart from curricular objectives which examinations must satisfy, there are some basic educational objectives or goals that must needs be served. These have been categorised in three domains of Cognitive, Affective and Psychomotor. Further classifications have also been developed

within each of the first two categories. In the Cognitive domain for instance, a test question might be designed to measure acquisition of knowledge or application of knowledge.

The affective domain refers to the objectives of values, attitudes, appreciation, the testing of which has presented obstacles to test constructors, and which factors are supposed to be inculcated in the schools. In a recent meeting of one of the West African Examinations Council committees, a member affirmed that curricular objectives quite often include these affective goals of character, training, attitudes, etc, and added that the public examinations hardly test them. It was the member's opinion that these important objectives in the non-cognitive domain should be examined. Research and evaluation has a significant part to play in raising the level of our public examinations to include the non-cognitive domains.

Problem Solving

Public examinations present problems and tasks for solution by the candidates. A candidate is judged in terms of the proportion of all the problems that has been answered correctly. To answer correctly often means to give pre-determined responses. Answers unforeseen by the tester are penalised. This is, of course, one of Hoffman's objections to multiple-choice tests (Hoffman, 1962). Returning pre-determined answers is often a result of convergent thinking in Guilford's sense. While it is useful to test convergent thinking, it is also desirable that divergent thinking should be tested. There are, of course, a few tests of creativity devised for the American situation but we can use many more in our public examinations. Research and evaluation can produce these changes.

Even when problems are solved to obtain convergent responses, it is only the end result that our present examinations assess. The process of thinking that produces the final answers is perhaps no less important, yet it defies examining by the present form of public examinations. More research is needed to enrich examination programmes in this area.

Translation of broad policies of education to examinable terms

Most policies of education, at least on the West Coast of Africa, are couched in such global and imprecise terms as: "to produce future leaders of the country, to inculcate high moral and ethical standards, etc." These ideals remind one of the cardinal principles of the American Secondary School. But public examinations, having concentrated efforts on the cognitive domains, have not directly measured the attainment of those aims. Research can play a useful role either to bring examination to the doorstep of the principles and ideals, or to ensure that the ideals are couched in more examinable terms.

The influence of public examinations on teaching and curriculum

Education is a very expensive enterprise. It takes, very often, the greatest percentage of any government's budget (apart from defence). The public examination, as the terminal episode of many levels of education, does affect teaching and the operation of the curriculum. The desirable thing is that the curriculum should dictate and lead the examinations, but by its nature the public examination often dictates the pace. It is so, and if it has to, then efforts must be made from time to time to ensure that the pace dictated by the examination is in accord with the huge amounts spent

and is in the right direction. The way and manner to do this can be learnt through research. This is also an area in which examining should lead to new ideas that will serve to explain why individuals behave as they do in a variety of academic settings.

Assessment of change or growth

Public examinations, being terminal, measure end results. It is perhaps also desirable to measure changes, growth and growth rates in persons. This is another area needing research.

Culture in tests

Cultural factors do affect individual behaviour in many direct ways. There is now a mass of evidence to indicate that cultural differentials are present even in motor and discriminative responses, and consequently in performance in examinations. In the public examinations that we conduct questions of this cultural effect have arisen from time to time in terms of whether pupils from urban and rural areas perform equally on same tasks. In other words, is the pupil from from urban area placed at advantage over his counterpart from the village? If this were so, questioners would like to see public examinations that control such cultural differences. It is possible to ask the counter-question of whether the cultural factors will be reflected in the tasks the pupils will subsequently perform, say in higher education. If they will, maybe the effects should be permitted to persist. The optimistic and popular approach is for the public examinations to eliminate (or control) such cultural factors. The state of affairs now is that people are beginning to speak about "culture-fair", rather than "culture-free" tests. But this is not a final answer to the problem. Research must continue to look for answers to the problem of cultural bias in public examinations.

Validity of public examinations

That public examinations should lead to valid results hardly need be emphasised again. A great deal of effort has been expended on validation studies. But during the past 35 years relatively little gain has occurred in the observed magnitudes of validity coefficients of tests or batteries of tests employed in the prediction of success in academic setting, in the civil service and military services or even in business and industry despite the extensive attention that has been given to this and particularly to criterion problem. As long as public examination results are used for the purposes of these various predictions, they fall within the category of tests whose validity has not improved. Research must continue to hunt for this golden fleece.

There are many more areas of concern in public examinations where research and evaluation can and must come to the aid of public examinations.

Summary

This paper has attempted to indicate that research and evaluation are important in examinations. Continuous research and evaluation are necessary to operate and improve examinations. The present state of examinations, like other social processes, results from research and evaluation. The present status however being far from perfect and therefore an

object of continuous criticisms requires more integrated research and evaluation to improve. The paper ends by giving an inclusive list of areas where research and evaluation are necessary, and can play an important role in public examinations.

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THE EXAMINATIONS SCENE IN SRI LANKA (CEYLON)

(with particular reference to the problems connected with the examination of
PRE-VOCATIONAL SUBJECTS)

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Historical Aspect

The public examinations system in Sri Lanka, particularly at Junior and Senior Secondary Schools level, has developed over a period of one hundred and ten years, but for as long as eighty years Sri Lanka depended on the Cambridge Local Syndicate and the University of London for the designing as well as administration of these examinations. It would appear that in the early days two main courses led to the conducting of public examinations in Sri Lanka: one was the urgent need to provide schools with qualified teachers; the other was to raise the standard of instruction imparted in the schools.

The indigenous examinations entered the scene in a significant way during the Second World War and progressively displaced the Cambridge and London University examinations, completing the process by 1964.

Present Set-up - Central Agency for Examinations

At present, the entire system of public examinations is centrally controlled by the Department of Examinations which derives its authority from an Act of Parliament dated 16 June, 1968, and comes within the purview of the Ministry of Education. The overall educational policy of the Ministry is reflected in the administration of the examinations system, and the Department is placed in the charge of a Commissioner who is drawn from the Unified Education Service.

Testing programme of the Department

The testing programme of the Department runs into more than one hundred examinations a year, and these can broadly be categorised as School Examinations, Teacher Education and Technical Education Examinations and Recruitment, Proficiency and Efficiency Bar Examinations conducted to meet the cadre requirements of the various state Departments. In addition to these, the Department also administers several specialized professional examinations on behalf of recognized foreign institutes, such as the City and Guilds of London Institute and the Association of Certified and Corporate Accountants.

The Department's heaviest commitment, however, is in the area of public examinations at Secondary School level. The General Certificate of Education (Ordinary Level) is taken by about 375,000 candidates who have a range of about 55 subjects in the three languages (Sinhala, Tamil and English) to choose from and is held once a year in December; the General Certificate of Education (Advanced Level) is taken by about 40,000 candidates and has a range of about 40 subjects available in all three media. This is held every year in April.

Department's resources

The Department functions in association with other relevant Departments and administrative agencies in the matter of drafting of syllabuses for different categories of examinations, and both in test construction as well as assessment it relies largely on the resource-personnel attached to the Curriculum Development Department of the Ministry of Education, the teaching staffs of the five campuses of the University of Sri Lanka, Technical Colleges and Teachers' Colleges, as well as experienced practising teachers.

The Department has its own specialist staff who have been recruited from among experienced teachers and educational administrators.

It has also its own machinery for printing examination documents and attends centrally to the distribution of question papers, collection and despatch of answer scripts, receiving and recording results and issuing of Certificates in respect of all examinations except those of foreign institutions. Computer services are used for the processing of all data relating to GCE (OL) and (AL) as well as the Technical Colleges Entrance Examination, these being the examinations catering to large population groups.

Consequences of local control of examinations

With national control of the entire examinations system, as expected, notable developments have taken place in the area of curriculum reconstructions. The Education Ministry established a Curriculum Development Department to handle all the programmes that were taken in hand in order to keep pace with the rapid changes in educational reforms.

Educational reforms

The Education System in Sri Lanka at the present moment is going through a rapid process of change. It is important to bear in mind the rationale on which these reforms have been conceived in order to find directions for corresponding reform in the system of educational examinations.

The priorities that have prompted the introduction of these reforms are: re-alignment of the curriculum to ensure that education, even general education, forms an integral part of the national programme of socio-economic development and enables every citizen to effectively participate in the economic and cultural life of the nation, increased equality of educational opportunity, and an increased internal efficiency of the educational system to ensure optimal use of scarce teaching resources.

Innovations effecting radical changes both in content and structure of the system have already been initiated to achieve these objectives.

Under the new scheme which came into effect from 1972 and is being progressively implemented, Primary Education will comprise grades 1 to 5 only, while Junior Secondary Education comprises an integrated 4-year programme common to all pupils and extending from grade 6 to grade 9. This is followed by a 2-year programme of Senior Secondary Education in grades 10 and 11 at which stage there will be specialization into different streams corresponding to the different occupational families.

The advantages in these changes are many. Resource-wise there is a saving in that the years of study required to complete Primary education are reduced

from 10 years to 9 years. Experience has shown that it is not necessary or desirable to assign children to specialised streams during that phase of the education programme in which numbers are unrestricted, to which there is "open access".

Streaming at this stage which was the earlier policy has created the problems of producing large numbers of 'Arts' pupils whose specialisation is essentially non-vocational in character and of producing a number of young pupils qualified in science, commerce etc. without any relevance to the corresponding openings for work or higher studies in these fields.

A manifest reason for the adoption of remedial measures of this nature in the area of National Education System is the very high rate of unemployment among the educated youth of the country. Ninety per cent of those aged 15-19 years and 60 per cent of the age group 20-24 years are unable to find employment of the kind they have been taught to expect.

In view of the fact that education already accounts for 20 per cent of the Government's annual budget or nearly 5 per cent of the GNP it is clear that specialised education needs to be regulated in relation to the requirements of the country for trained manpower.

The kind of Secondary Education which may have been appropriate to an age when all the products of Secondary Schools could be absorbed into middle class occupations has now become glaringly inappropriate. Under a system of education which is free from kindergarten through University in the pupil's mother tongue medium, some 35 to 45 per cent of each group receive ten years or more of schooling and most of them have no alternative but to become farmers and manual workers.

The general criticism levelled at our Secondary Education system was that instead of adapting themselves and becoming instruments of general education, it has continued to retain its single-minded concern with qualifying pupils for white-collar jobs, by pushing as many students as possible as far up the ladder as possible.

The drop-out ratio in Primary education and failure rates at GCE 'O' level and 'A' levels have also been alarmingly high. The passing of the examination assumes such overwhelming importance as the sole raison d'être of schooling. The schools' function to educate has been superseded by the demand that it qualify. The consequence is that the knowledge and skill acquired by the majority who fail these tests which are designed to prepare the successful minority for further education are inappropriate to their needs and those of the nation. The effect on the fortunate ones who succeed is also not quite salutary. Since they have been for many years conditioned to look on learning as a means of gaining not knowledge to do a job but primarily the qualification to get one, it is not surprising that they often consider their job as something which entitles them to status and salary only and not as an opportunity to earn these, much less as an opportunity for self-fulfilment or for public service.

National Certificate of General Education

As part of the strategy to bring about the re-orientation that is desired all pupils at Junior Secondary Level (Grade 6-9) are provided with a common programme of studies with the necessary differentiation for boys and girls. The National Certificate in General Education as a terminal examination will

replace the GCE 'O' level by 1975 providing for the GCE 'O' level to continue as a parallel examination for a further couple of years to meet the needs of those who had skipped the new curricula that was introduced at Grade 6 level in January, 1972.

The National Certificate of General Education will not be a pass/fail examination, instead each pupil will receive a Certificate indicating his performance in the different subject areas. Admission to Grade 10, the first grade at the Senior Secondary level, will be on the basis of the performance at this examination.

The subjects that form the common curriculum and are to be tested for the NCGE are as follows:

- (1) Religion (Buddhism/Hinduism/Islam/Christianity RC/
Christianity Non-RC)
- (2) Medium of Instruction (Sinhala/Tamil/English)
- (3) Second Language (English/Sinhala)
- (4) Mathematics
- (5) Science
- (6) Social Studies
- (7) Aesthetic Studies (Art/Music/Dancing)
- (8) Health and Physical Education
- (9) Pre-vocational studies I
(Comprising (i) Study of National resources
(ii) Geometrical and mechanical drawing and
(iii) One of the following: Elementary
agriculture, woodworks, metalwork,
ceramics, weaving, commerce, home-
science, needle-work, Sinhala as third
language or Tamil as third language)
- (10) Pre-vocational studies II
(One pre-vocational subject selected on the basis of
facilities available in the locality of the school and approved
by the Ministry)

The curricula for the General Education are expected to relate much more closely to the world of life and work, and science and social studies to relate more closely to the application of these in trade, industry and agriculture.

Pre-Vocational programme of studies

The pre-vocational studies will receive a time allocation of nearly 20 per cent of school time and will incorporate teaching sequences dealing with important local occupations and industries such as fisheries, cash crop agriculture, animal husbandry, horticulture, cottage crafts and service occupations such as retail trade etc.

The new programme is expected to contribute in a big way towards the enrichment of education at this level by breaking down the compartmentalisation between school book-learning and real life that has often initiated the educational outcomes and by providing basic skills, knowledge and correctives to attitudes help the coming generation to take up gainful employment in the areas of national need.

Much depends on the sense of commitment which teachers will bring to bear on the implementation of the programme and the quality of guide material that could be made available to them. Since these have been made subjects for a public examination safety of the programme also depends on the methods of evaluation and the prestige value attached to the gradings in the area.

As the Elementary and Junior span has also been reduced from 10 years to 9 years more intensive use of teaching resources have to be made to avoid a fall in standards.

The present period therefore represents a critical phase in the Examination Department's history. It has to retain the aspects of security that ensure impartiality and impersonality of its certifying function while at the same time sharing with the teachers and Regional agencies a good part of its functions. Having to cope with an ever-increasing clientele seeking improved test designs in the face of inevitable ceilings in space, men, money and machinery presents a formidable challenge.

Committee of Inquiry into Public Examinations

It was with this situation in mind that the Honourable Minister of Education appointed a Special Committee to inquire and report on public examinations at Secondary School level in Sri Lanka. This Committee, in their interim report issued in December 1971, have made some very useful recommendations which are now under consideration for implementation.

The committee has based its proposals mainly with a view to developing an educational testing system in which teachers will be increasingly and continuously involved and for using testing procedures to stimulate and develop good classroom practice.

The Committee recommends the redesignation and re-orientation of the Department of Examinations as the Department of Educational Testing. The Department has been called upon to give due emphasis to the academic aspects of testing and to work in closer co-operation with the Department of Curriculum Development.

It also recommends the establishment of a National Council for Educational Testing which will co-ordinate the work of a variety of working committees and Regional Advisers entrusted with the responsibility of continuous revision of different aspects pertaining to educational testing.

Recommendations have also been made for setting up of Syllabus Committees, Examinations Design Committees, Examinations Report Committees and a Research Unit as well as an Information Unit. There will also be Regional Evaluation Assistants who will handle the examination work at Regional Level and provide feed-back information to the centre.

Decentralization of National Certificate of General Education

The Committee has recommended progressive decentralization of the General Certificate of Education or its equivalent National Certificate of General Education on the following lines:

The examination in each subject will consist of 3 parts:

Part I - Objective-type questions designed by a Committee responsible to the Department, and to be administered by the Centre.

Part II - Structural free response type questions to test higher (cognitive) abilities.

This will have three alternative test papers,

- (a) made by the centre,
- (b) made by the region, and
- (c) made by the school.

A school can opt to take any one of the papers giving prior notice to the authorities. The (b) paper for the region will be designed by a panel of teachers responsible to the Regional Director and the (c) school paper will be moderated by a panel under the direction of the Regional Head.

Part III - In-course assessment.

The course assessment which will finally be indicated in the Certificate will be a cumulative assessment over the full period of the course.

Part I, the objective test, will also serve the purpose of screening the candidates. Answer scripts of part II will not be marked in the case of those candidates who constitute the lowest 25 per cent in part I. Grades will be indicated only for part I and III in the Certificates issued to such candidates.

Performance in part I paper will also be used in monitoring the (b) regional and (c) schools part III performances to ensure standards and comparability across the regions.

Examination systems responsibility

The major task ahead of the Examinations system is to adopt itself to the new spirit that must necessarily pervade the classroom with the introduction of the new curricula and new methods of teaching.

Teachers are called upon to learn and teach about new topics, such as occupations of importance in their own locality. They are asked to arrange outings and practical work and to enlist the help of local craftsmen, agriculturists etc. as resource persons visiting the classroom. Even in the teaching of traditional subjects they are expected to bring out the interdisciplinary relationships and make their teaching more meaningful and activity-based.

Under this programme different geographical areas will select different occupations to teach and different occupations will involve different work loads for purposes of study. Each will have to be weighted in terms of its

complexity for children of this age level. The proportionately large block of time allotted to these subject areas is bound to influence the rest of the curriculum.

On the other hand, ours has been a country where good job opportunities have been rigidly linked to schooling, and parents, teachers and pupils have looked upon learning and teaching as primarily designed for examinations which exist for the purpose of grading people for jobs, or for further education. Under such conditions the nature of examinations will determine the nature of teaching. Memorisation is often over-emphasised as against imaginative understanding and other value-forming functions of education. Therefore the function of examining in these vocational subject areas will have to proceed with utmost care and with close co-operation with the teachers.

The examination system's special task will be to develop testing procedures that will stimulate investigational work and project work by pupils and teachers, discussion and activity in the classroom that will foster imagination and understanding; and testing procedures that will pay attention to the affective and psychomotor domains of pupil behaviour and not only to their cognitive behaviour.

The decentralization that will inevitably come with the pre-vocational testing programme is expected to give us some lead in this direction.

In 1975 the GCE 'O' candidates and NCGE candidates will number over 640,000. Practical subjects will be offered by over 220,000 candidates. It will almost be an impossible task to conduct individual practical tests for this population. The subject teachers cumulative in-course assessment will have to be accepted.

The teachers themselves will have to be trained in methods of evaluation and be provided with carefully constructed rating scales and check lists to assess their own pupils. Assessments will vary from subject to subject, in some the concern may be with abilities in psycho-motor domain while in others attitudes may be considered important. The assessments made through observation of student behaviour while **learning** an activity is as important as assessing the quality of a finished product.

In addition to the teachers' own gradings teams of inspecting officers qualified in the various fields of occupational areas will have to be sent round to assess the programme of work on an institutional basis, and also carry out random tests to check on the quality of the total programme and help teachers revise their assessments if necessary.

In this context the scheme of continuous assessment of practical work in science subjects at the Sri Lanka GCE (Advanced Level) Examination could be regarded as a forerunner. Hitherto the examination in the Pure Sciences at the Sri Lanka GCE (Advanced Level) Examination consisted of two theory papers and a practical test in each of the four subjects. In view of the high degree of subjectivity, low reliability and the total inadequacy of the practical test, a more suitable technique of greater educational value was introduced in April 1972. In the new scheme the practical test was replaced by a continuous assessment of practical work done during the two year period. An elaborate scheme with clearly defined objectives has been laid down for the continuous assessment of practical work in schools. Organizational machinery has been set up to consider probable aspects of strength and weakness in the new design and based upon feedback information gathered during the years ahead,

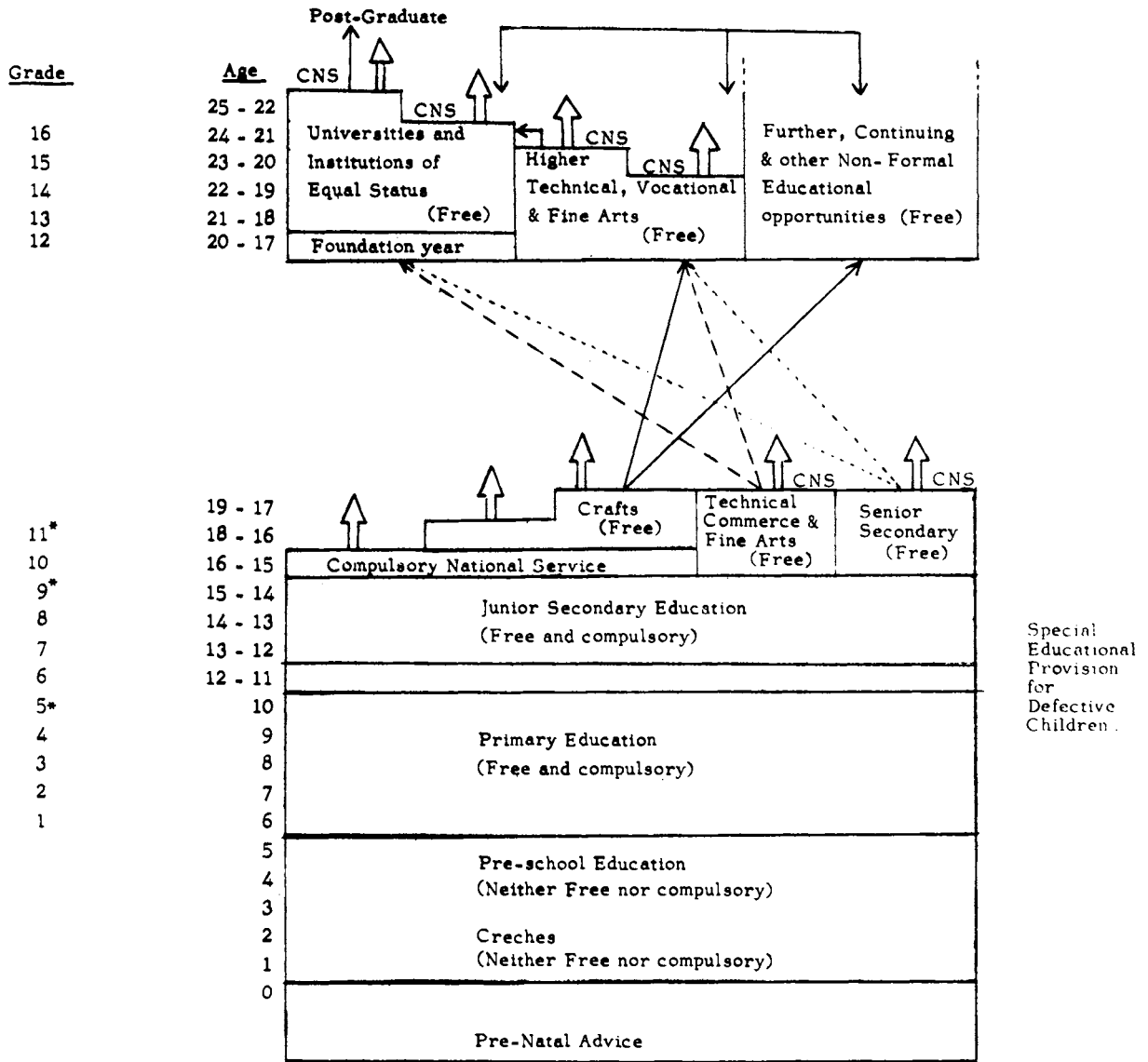
the weaknesses could be identified and progressively eliminated. It is envisaged that this also could provide a suitable background to generate a practicable and realistic scheme for the in-course assessment of Pre-Vocational subjects.

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PROPOSED SYSTEM OF EDUCATION

(SRI LANKA)



THE DEVELOPMENT OF AN EXAMINATIONS SYSTEM IN MALAYSIA,
WITH SOME REFERENCE TO THE DEVELOPMENT OF A PROGRAMME
OF GUIDANCE FOR SCHOOLS

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In the Malaysian context centrally organised and administered examinations are fairly recent developments. In fact, the national body that is entrusted with the task of organising and administering such examinations only came into existence less than two decades ago. This body, known as The Examinations Syndicate, is a set-up within the Ministry of Education and on its own it is only responsible over national examinations up to the level of lower secondary school. At the upper and post-secondary level it is still conducting examinations in collaboration with an external body, though presently definite steps are being undertaken to prepare itself for the complete takeover of such examinations at the earliest possible date. With this very brief background of examinations set-up in Malaysia I now propose to devote the rest of this paper on examinations at the primary school level where the Examinations Syndicate has had considerable involvement and also where the subject of this paper can be more pertinently discussed.

2. One examination centrally conducted by the Ministry of Education in primary schools is the Standard Five Assessment Examination. Another, which incidentally is just being introduced for the first time as from this year, is an assessment of pupil-performances at the Standard Three level.

3. Before discussing these examinations and their functions in detail it is perhaps worthwhile for me to begin by stating a few basic facts pertaining to the state of primary education as existing in Malaysia today:

3.1 Primary education is universal and free.

3.2 It is provided in four language media of instruction - each medium being the mother tongue of one major group in the community.

3.3 It aims at the ideal of a comprehensive education for every child.

3.4 The curriculum is specified by gazetted subject syllabuses and schemes of studies drawn up by the Ministry of Education.

3.5 Irrespective of his performances in the examinations conducted by the Ministry every child is entitled to move up from one grade to another automatically.

4. Having solved the quantitative aspect of providing every child with a minimum of nine years of education - free at the primary school level which covers a span of six years - the Ministry is currently turning its attention

more intently on the qualitative aspect of the education provided. In the last few years many studies have been conducted by the respective divisions of the Ministry which have led to the reexamination of the product and process of primary education with regard to quality and efficiency.

5. The examinations systems for primary schools, i.e. the Standard Five Assessment Examination and the Standard Three Tests were introduced with the specific purpose of improving the qualitative aspect of primary education. No administrative decisions are taken in respect of selection or streaming of pupils based on those examinations or tests, unlike the case of the former Secondary Schools Entrance Examination that ceased to exist as from 1964. The guiding principles behind the examinations for primary schools can be summarised as follows:

5.1 To provide normative information on pupil-performances at critical levels of primary education, viz Standard Three and Standard Five.

5.2 To provide feedback to schools on common weaknesses of pupils in specified areas of learning - feedback to be given with regard to group weaknesses as well as individual weaknesses.

5.3 To provide feedback to the Central Curriculum Committee on the state of the curriculum for the respective subjects as implemented in schools vis-a-vis pupil-learning and pupil-performances, and to single out areas in the curriculum that need study and review and to suggest the directions in which such reviews should move in order to attain desirable outcomes for specified objectives in a curriculum.

6. The two examinations in question meet the guiding principles laid down above in varying degrees and extent. At this stage it would probably be useful to examine the two programmes in detail.

The Standard Five Assessment Examination

7.1 It consists of a battery of objective - tests - one test for each subject in the primary school curricula for a given type of primary school.

7.2 The tests are achievement tests which test mastery of the elements in the curriculum specified for the first five years of primary education. The sixth year of primary education is essentially devoted to remedial education for the weaker group of pupils and extending the experiences of the abler group.

7.3 The results are reported so as to specify a pupil's performance in comparison to the performances of his peers in the nation. The results are graded on a five-point scale which demarcates pupils' achievements as very good, creditable, passable, poor and very poor. This normative information is particularly useful to schools in the outlying areas and schools that are of recent origin where the corresponding local peer group performances are relatively lower than those in urban schools and schools with relatively longer history.

7.4 Test reports are sent out to all schools. These reports are usually general comments on group weaknesses. The schools are grouped in accordance with language media of instruction and their backgrounds.

Although these reports do not match the situation existing in any particular school in all respects they do however come fairly close to the situation existing in a particular group of schools to which they are aimed at.

7.5 Performances of pupils in each subject area are analysed in detail and the findings channelled to the Central Curriculum Committee for study and action. The Central Curriculum Committee in turn would set up a sub-committee to study the findings in detail and to institute curriculum review studies if the situation warrants it. Subject specialists from the Examinations Syndicate normally sit on this sub-committee.

7.6 In the last three years the findings of the Examinations Syndicate have been responsible for initiating curriculum studies and reviews in two main language areas (Bahasa Malaysia and English) and in Mathematics.

8. The most striking finding of the Examinations Syndicate with regard to pupil-performances in different subjects is that these performances could be stratified on the basis of pupils' pre-disposition, their physical environment and their school's medium of instruction. When stratified on the basis of the medium of instruction the group that does show the highest proficiency on Bahasa Malaysia (Malaysian Language) tended to show the least proficiency in mathematics and vice-versa. The rural schools tended to have greater variances in school means than urban schools. These variations in performances are due to variations in (a) physical facilities (b) quality of the teaching staff and (c) the differences in implementing the curriculum in different degrees of enthusiasm and efficiency.

9. The curriculum as it existed then suffers from a lack of clarity and specificity. The immediate task was to review the curriculum and to spell it out so that its objectives are made clear in that they specify for every content in as great a detail as possible the learning situation to be created and the pupil action to be invoked, as well as state the criterion level of acceptable performance appropriate to that stage. This generated two distinct activities. The language group moved in the direction of conducting a word-count to establish the basic vocabulary to be mastered by pupils and work on the study of functional grammar for establishing guidelines in language usage. The mathematics group moved in the direction of identifying terminal objectives at each level of the primary education and specifying them in terms of behavioural objectives. The work done in connection with analysing the tasks/objectives at each level in the curriculum and spelling them out specifying the stimulus situation to be created, pupil responses to be expected, and the level of responses that is required, for everyone of the objectives at a grade level is a recent development in Malaysia. The new syllabuses have been tried out in pilot schools, and evaluated. The syllabuses for language have been implemented, but the mathematics syllabus has to go through another stage of review to accommodate new elements brought in as a result of the recent introduction of modern mathematics in secondary schools.

10. The Standard Five Assessment Examination has fulfilled the guidelines mentioned in 5.1 and 5.3 completely and 5.2 only partially. It fails in providing feedback to schools in respect of individual weaknesses of pupils.

11. Feedback information on individual weaknesses of pupils is useful only if we have the facilities and occasions to organise a programme of remedial education based on the feedback we get from the administration of a battery of diagnostic or semi-diagnostic tests. The situation existing at the end of the fifth year of primary education does not allow for the conduct of a meaningful remedial education. It was therefore decided that the diagnostic programme is best introduced at an earlier stage of primary education - namely at the Standard Three Level.

The Standard Three Tests

12. The primary objectives of the Standard Three Tests can be listed as follows:

12.1 To highlight the importance of pupils acquiring sufficient mastery of the basic language and mathematics skills in lower primary education.

12.2 To identify and study the requisite basic skills and to disseminate information about them to schools.

12.3 To set minimum levels of acceptable performances in these basic skills so that teachers could practice target teaching.

12.4 To report pupil-performances in respect of individual weaknesses in the basic skills so that appropriate remedial learning may be devised for every individual pupil.

12.5 To provide feedback information and critique for ongoing studies connected with compensatory education and curriculum review.

13. The tests will be confined to two principal areas, viz languages and mathematics, and will consist of multiple choice objective questions. Each test is a diagnostic/semi-diagnostic instrument and is built on the following terms of reference:

13.1 The test will identify, specify and also evaluate performances on the minimum number of core skills/tasks that needs to be mastered by a pupil in the first three years of primary education. Mastery of these basic skills/tasks would form the minimum attainments necessary for pupils to profit from future learning experience.

13.2 A pupil's performance in each skill/task will be tracked by a number of natural items built on a logical and developmental sequence. Each item or group of items included in the tests would be characterised by a description of the diagnostic intent of the item when it was formulated.

13.3 Each test will contain sufficient items for each skill/task evaluated and these items will be arranged in an ordered sequence so that the 'dropping-off' effect after a certain point in the sequence would indicate the level of proficiency of the pupil.

14. As the Standard Three Tests would be structured on the concept of basic skills the feedback from the Examinations Syndicate on pupil-performance of each school would therefore specify the weaknesses of the pupils in these basic skills for language and Mathematics. The teachers would thus know what the basic skills are and also what is considered as the

acceptable norm or level of performance in each of the basic skills. The dissemination of this information would help the teacher in organising future instructional programmes to make his pupils attain, as far as possible, the norms of minimum proficiency in the basic skills. After this, the teacher can move on to the teaching of peripheral skills if he has the time and if his pupils have the ability and also show the readiness to move ahead.

15. I have, as indicated at the outset, only confined my discussion to the examinations systems as they exist at primary school level primarily as an attempt to fulfill the subject requirements of this paper for which admittedly not much as yet can be said of the secondary school level, particularly the upper and post-secondary level where curriculum development by necessity has to be geared to the requirements of 'external examinations'. What I have been able to present in this brief paper I hope will provide some basis for discussion in this Seminar.

GUIDANCE AND COUNSELLING IN MALAYSIAN
SECONDARY SCHOOLS

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The educational system operative in West Malaysia provides for six years of free primary education available in the four media of Malay, English, Chinese, and Tamil. A further three years of education is available in Malay and English. These three years of education comprise the comprehensive stage of education; subsequently the pupils are streamed for general, vocational and technical education. Pupils who proceed for post-secondary education are selected on the basis of their academic performance. There is a great demand for education and a consequent need for guidance to help pupils make intelligent choices and adjustments so that in the long term they will benefit from the education provided, choose their own way of life and attain vocational and life goals satisfactory to the individual and of relevance to the country in its present state of development.

Before discussing the programming of the guidance system in secondary schools it is pertinent to view those areas in the life of the Malaysian adolescent which tend to pose problems with which they need help. Some of the problems posed are those common to adolescents the world over, others are peculiar to the youth of the Malaysian cultural milieu.

One major problem area may be termed adjustmental. The adolescent pupil has to adjust himself to being taught in a medium different from that he was used to during his primary stage of education. He has to adjust and integrate himself to the less personal secondary school. He becomes increasingly aware of cultural and social differences amongst his peers. He is posed with the problem of choosing his electives soon after his entrance into the secondary school. All these problems assail him, when he is on the brink of adolescence and when the individual is in a new environment, and in need of help to orient himself to the new roles expected of him.

Another major problem area may be described as developmental. The secondary school adolescent finds that he has to develop his traits in certain directions if he is to be regarded as developing positively in the eyes of critical adults. In West Malaysia, as elsewhere, a horde of influences impinge on the impressionable adolescent. He often perceives a sharp dichotomy between expression and implementation. There is also the generation gap in attitudes and values between the adolescent and his parents, and he finds difficulty in reconciling the preachings of adults to the situation in which he finds himself. Rapid changes in the social, economic and political conditions in the country aggravate this problem area.

As he approaches the end of his formal secondary school-life the problem of choice of career looms large. In an essentially agricultural country with a large youth population, where industrialization is relatively at its infancy, the world of work is highly competitive and selective. In a situation where potential labour is in excess of jobs available, the average adolescent pupil is in dire need of guidance and counselling. The realities of the harsh world of adults are realities which the adolescent has to under-

stand and adjust to in a relatively short time if he is to eke out a satisfactory livelihood.

In summary it might be said that the overall problem of the secondary pupil is this: that of developing from adolescence to adulthood and at the same time overcoming handicaps or adverse conditions simultaneously in a relatively short time.

It will be seen that there is a need for a guidance and counselling service in Malaysian secondary schools. This need has been recognised by the Ministry of Education, and through its direction, guidance is becoming an increasingly important facet of secondary education.

Admittedly guidance is a relatively new approach in secondary schools, but a fair amount of activity is being undertaken by schools in order to alleviate the problem areas in the life of adolescents.

The Ministry of Education has to date undertaken the task of planning and organising Guidance in schools. Some of the preliminary work in this connection has included the introduction and maintenance of cumulative record cards, the compilation of bulletins on guidance for the information and implementation of the guidance teacher, follow-up studies of guidance in schools, and the organisation of seminars and in-service courses for guidance teachers. Shortly, six officers are to be appointed as Regional Guidance Officers to ensure that effective guidance is available in schools. These various steps are all geared to provide guidance at schools with the boost it deserves.

In the secondary school itself guidance is provided in a variety of ways. The guidance teacher is responsible for the guidance programme in each school, but the guidance function is carried out by all teachers. In the bigger residential secondary schools the house system has been used not only for games participation but also for the development of the tutorial tradition where a teacher is a mentor and friend to a group of pupils who turn to him for guidance in matters of personal development, social relations, learning difficulties and allied problems of adolescents. In other schools the guidance teacher is especially allotted a timetable comprising in the main the teaching of Civics. Thus the teacher has that much more time, while teaching Civics, to undertake group guidance, discuss values and attitudes, teach occupations and prepare pupils for adult roles. In some other schools the time allotted for the teaching of Home Science is partly devoted to guiding pupils in matters of code of conduct, personal difficulties, and the establishment of satisfactory relationships with the other sex. The secondary school curriculum provides an excellent springboard for an indirect guidance role.

The guidance programme in a secondary school may be described as geared to the purposes of orientation, appraisal of the individual pupil, conveyance of job information, and helping pupils in personal-social relations. Undoubtedly the achievement of these objectives requires the co-operation of not only the teaching staff, but also the expertise and active support of other agencies, both governmental and private bodies.

Throughout the secondary school career of an individual pupil a personality profile of the individual emerges through the maintenance of the cumulative record card, anecdotal records of him, record of his test results, his activities membership, and the record of his interviews with the guidance teacher. On arrival at the first year of secondary schooling, he is

familiarised to his new environment, through an orientation programme. A pupil who is weak in certain subject might be given special attention. All pupils have access to the guidance teacher, and on occasion the guidance teacher might make home visits to gain the co-operation of parents in sorting out problems.

In the second and third years, while the guidance teacher organises the programme to place sufficient stress on the personal and educational development of pupils, the main stress is laid on helping pupils in their career development. For this purpose pupils are helped in their choice of electives, the teacher of Civics or English teaches pupils in areas related to the world of work, such as on how to apply for a job, the nature of job interviews, the particular careers open to pupils with various stages of secondary schooling, and he encourages pupils to think and articulate on themes related to their ambition or their self-concept. The pupils are helped to explore their interests and aptitudes by making available to them experiences which are job-oriented. Thus pupils are encouraged to think about the job implications of their participation in extra-mural activities. Organised visits to places of training and employment, the viewing of films on jobs, the provision of job experiences, and group project work in the detailed study of certain occupations are all primed to the broad vocational development of pupils and to the aim of helping them to specify in their own minds on a rational basis the career of their choice.

In the fourth, fifth, sixth and seventh year the programme outlined above is continued with certain modifications brought about by the fact that the pupils are older, more mature, and the problem areas are those of a personal nature or those related to entry into the world of work or further studies. The persons concerned with guidance in schools have liaison with personnel or persons from the Ministries of Labour, Health and Social Welfare, philanthropic organisations such as Apex, Rotary and the Council of Child Welfare.

Much is being done in the area of guidance, but counselling proper is in the main absent. True the guidance teacher does help pupils through talking to them, interviewing them and suggesting courses of action they might take, but counselling by properly trained personnel exists only in a couple of secondary schools.

It is recognised that it would be desirable to have at least one full-time guidance teacher in each secondary school but at the moment this cannot be implemented in full because there are other priorities to be considered as well. However there is a growing number of advocates of guidance, and the crucial factor in this respect might well be the assessment of the effectiveness of guidance by the principals of the school. In the final analysis their testimony on guidance in the secondary schools might well give a new boost to the guidance course.

ESTABLISHMENT OF THE CARIBBEAN EXAMINATIONS COUNCIL

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After a little more than 10 years in its gestation, the Caribbean Examinations Council was finally inaugurated on 11 January 1973 with the following territories participating: Antigua, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Monserrat, St. Kitts/Nevis/Anguilla, St. Lucia, St. Vincent, Trinidad and Tobago and the Turks and Caicos Islands.

The area of operations of the Council is now divided into two zones, the eastern zone with the Administrative Headquarters of the Council situated in Barbados and the Western zone with an administrative centre based in Jamaica to serve the territories in that zone. The western zone will be headed by a Pro-Registrar who will be responsible through the Registrar to the Council. The Registrar will be based at the Administrative Headquarters in Barbados to hold direct responsibility for the operation of the eastern zone and will be available to advise and assist the Pro-Registrar in relation to the western zone.

It had been intended that prior to the inauguration of the Council an Examinations Research Unit would have been established to have carried out the preliminary work necessary to provide the material on which testing and syllabuses might have been based and permitting an early start to the Council proceeding to set its own examinations. This however did not materialize and the Council has been inaugurated without having the prior advantage of any research or statistical background specially directed towards this objective. The Council has therefore decided that such research as may be required should be conducted within the framework of the professional or specialized staff of the Council and that this should be done in collaboration with the Universities in the region. As a result, the Research Unit will not be a separate operation, but when staff is available will form part of the administration of the Council, even though it is likely that in the initial stages, at any rate, the Council will commission research from the Universities of Guyana and the West Indies.

The immediate needs of the Council are to appoint administrative and professional staff, and steps are being taken to have the Registrar and Pro-Registrar appointed in the very near future and thereafter on their advice such other staff as will be required in the early years. It is intended to approach the Cambridge Examinations Syndicate for assistance in the training of personnel and the provision of such consultant or consultants as may be needed to assist the Council in getting its preliminary work done.

To date there has not been any concerted effort at building up in the separate territories expertise in the fields of syllabus formulation or marking and correcting of scripts and while from time to time individual territories have approached the respective examining bodies in the United Kingdom as to the introduction of special syllabuses, this has not yet been done in any well organised manner. Curriculum committees have only been recently established in the territories of the region to analyse and determine the curricula needed for school leaving examinations. There will therefore be the need for a period of time to make a concerted effort to have people at all levels in the educational system exposed to these several experiences in

order that they may become proficient as examiners and in the formulation of syllabuses on which the Council will be able to be guided when setting its own examinations.

The history of examinations in the region does not suggest that problems of security will be insurmountable or that the teachers will be unable to rise to the challenge of participation in the setting and marking of examinations when agreed syllabuses have been formulated based on the curricula which the several territories will determine to meet their needs.

It is expected that the Universities in the region will continue to use the examinations set for school leavers in the secondary system as a basis for entry to their institutions. The constitution of the Caribbean Examinations Council provides for membership of the Universities of the West Indies and of Guyana, and for a Vice Chancellor of one of these Universities to be Chairman during the first three years. This link with the University will ensure that adequate standards are established at the outset.

It is obvious that the experience of other countries who have established their own Examinations Council will be invaluable to the Caribbean, and the Council hopes that opportunities to send staff, teachers and others engaged in educational administration to participate in seminars in these countries and undertake short attachments will be made available, so that in the shortest possible time the aspiration of having Caribbean School Leaving Examinations will be achieved. The record of secondary education in the Caribbean in recent years indicates that this goal can be achieved with the assistance of our friends in the Commonwealth.

THE SOUTH PACIFIC COMMISSION EDUCATIONAL TESTING
PROGRAMME

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In common with all developing areas, most of the island territories of the Pacific are faced with financial problems that make universal education a difficult if not impossible goal to achieve at present. In many territories primary education is not compulsory, and in the majority only a limited number can be admitted to secondary schools. For obvious reasons, when only limited numbers are admitted at secondary level, the available resources must be concentrated on those who will contribute most in later years to the development of the territory. Generally speaking, this means those who are intelligent, conscientious, stable pupils for whom there is a good educational and vocational prognosis.

Pupils in academic classes in Pacific secondary schools normally sit metropolitan public examinations (e.g. the Overseas Cambridge Certificate or the New Zealand School Certificate) after three to five years of preparation.

Selection procedures for those proceeding to secondary level in most territories tend to concentrate on the results of academic attainment at upper primary level. Often these tests have not been well constructed, are not representative of the primary school syllabus, are weighted in favour of less important school subjects, and, most important of all, have not been successful in identifying those pupils best suited for further education. School records indicate a heavy drop-out and failure rate; pass rates at metropolitan examination level have been disappointing; and there have not been enough graduates at secondary, tertiary, professional and skilled vocational level to hasten the replacement of expatriates by local appointees at a rate which the optimum territorial development requires.

The crux of the problem, then, appears to be in the selection procedures. Expressions of dissatisfaction and concern resulted in the South Pacific Commission organising a Technical Meeting on Selection and Guidance at Goroka, New Guinea, in 1967. This meeting was attended by senior education officers responsible for selection procedures in Pacific territories. The whole problem was discussed in detail, under the guidance of two consultants skilled in testing and selection principles and practices. As a result of the Meeting, the South Pacific Commission appointed an education specialist who was given the responsibility to assist Pacific territories in the improvement of selection procedures.

In this connection, several basic problems must be faced. In the first place, there is the need to compensate for the unevenness of educational opportunity within each territory - for example the problem of the intelligent child, on some small island, who is culturally deprived and has probably had poor teachers, compared with the child from the administrative centre who may be less intelligent but who has had the advantage of a better cultural environment and better teachers. Secondly, there is the language problem, where the quality of teaching is again uneven, and when many children hear the metropolitan language (which is the language of secondary education)

spoken only in the school - and then it is often of poor quality and limited vocabulary. Thirdly, the length of secondary education must be taken into account. In some schools there is time for remedial work for disadvantaged children before they must face the metropolitan examination - for others the years at secondary school are too few to allow this.

After a careful review of the situation, the decision was made that selection should be based on two criteria - academic attainment in the basic subjects, and academic potential. For preference, both criteria should be in the form of standardised tests, and academic attainment should be based on understanding rather than on mechanical accuracy.

The administration of the selection tests also had to be considered. The Pacific is dotted with small inhabited islands, most of which have at least one school, and many of which have very poor communications. Social pressures weigh heavily on teachers to ensure that children pass examinations. In the important selection tests, therefore, it is necessary to have the tests administered by as few people as possible. Some of those concerned in testing are not trained personnel, and therefore the tests must be easily administered in standardised procedures that are not difficult to follow; and because these testers may be ashore on islands for only a few hours, they must be able to test comparatively large numbers at once. Because of the language problem, the tests of potential need to be non-verbal and as culture fair as possible. Simply administered standardised group tests were therefore indicated.

With these considerations in mind, a large number of existing tests of various kinds were surveyed. Many were found wanting for Pacific conditions. Others seemed more appropriate, were tried, and for various reasons - mainly lack of validity - were rejected. Finally, from experience gained, and from research, a battery of tests was constructed which seemed to cope with the requirements of the situation. The battery comprises the following:

(1) Tests of academic potential:

(a) A test of speed and accuracy

This test is the first in the battery. Results are not significant, but the item is retained as a "settling down" item for subjects, to enable them to overcome nervousness, to direct their attention to detail on the printed page, and to make them aware that time is an element in the test. (In later tests, concentration is on power, the time limit being adequate for most subjects to complete those items within their ability.) Test validity in pilot surveys was increased when this item was left in.

(b) Two reasoning tests based on symbolic material

These comprise series of numbers or letter in logical sequence, the subject being required to give the missing item in the series.

(c) A figure-grouping test

This is entirely non-verbal, and of this type of test, correlates best with academic success in the pilot surveys.

(d) A test of general ability

An adaptation of the Papua-New Guinea Reasoning Series.

(2) Tests of academic attainment

(e) A test of mathematical concepts

This test is based on understanding of the new approach to mathematics. It can be combined, where desired, with a mechanical accuracy test.

(f) A test of English

Still under revision, and based on the vocabulary and structures taught in the widely used Oral English syllabus produced by the SPC Language Specialist, Miss G. Tate.

(g) A test of reading and comprehension

Under construction. Will include word knowledge, speed of reading, general comprehension.

In the selection procedure the results of the tests, reduced to standard scores, may then be distributed on a scattergram, with the mark for academic performance on one axis, and the mark for academic potential on the other. The small number tested make this a feasible method in most territories. Selection procedures are then facilitated, and can be adjusted according to the educational system, and the number of places available in the secondary system. For example, territories with a short span of years before the metropolitan examination would select only those who score well on both criteria; while those with a longer span may include those with high potential and low performance on the basis that there is time for remedial work in the initial years at secondary school.

With these tests, it is recommended that teacher opinion be taken into account (especially in marginal cases) when making final selections. This should be as objective as possible, through the use of a checklist questionnaire which takes into account personality and social factors, attitudes towards study, conscientiousness etc..

The above tests have been used in pilot surveys in 1969. They are now being subjected to statistical checks, to be produced in final form for standardisation and validation in the immediate future. In addition to these tests, after experience with New Zealand Maori pupils and one group of Pacific Islanders, the Raven's Matrices Test is being investigated for use in the Pacific. Particular attention, on the basis of controlled research, is being given to the possibility of improved validity when the Coloured Matrices Test is administered as a practice item some days before the full Matrices

test is used as the test item. Initial results seem to indicate a higher validity with this procedure than with the administration of the full test alone.

The larger territories of the Pacific have developed their own testing services. The South Pacific Commission, for example, was able to draw on the experience of the Psychological Service of Papua-New Guinea; while in Fiji the new University of the South Pacific is directly involved in selection procedures at several levels of education. The South Pacific Commission service is directed mainly at assisting the smaller territories which cannot afford these specialist services, and have not adequate resources to cope with the problem internally. It is hoped to publish a full account of these investigations when final standardisations and validity have been established.

THE INTERNATIONAL BACCALAUREATE

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The International Baccalaureate was designed as an examination validating pre-university courses for the benefit of those pupils in international schools whose education took place outside their own countries, because their parents' employment demanded it. This is a growing group of young people. The mobile community to which they belong now includes not only the diplomatists, but, in far greater numbers, the servants of U.N. agencies, overseas aid projects and international commerce.

Although this was the first purpose of the International Baccalaureate, interest in it has grown for two other reasons, because it provides a less nationally oriented curriculum for use in any type of school, and because it provides an opportunity for experiment in curriculum and examining methods. It is probably the last of these reasons which may make it particularly of interest to the present conference.

The designers of this examination were faced with two main problems: how to design a curriculum which combined general education with the opportunity for the pupil to begin the process of specialisation in the direction which most interested him, and how to design examinations which would stimulate good teaching, would provide adequate criteria of assessment for university selectors and which could be administered in any part of the world.

The answer which the International Baccalaureate Office proposes to the first problem is flexibility. To secure the diploma, which is provisionally recognised for matriculation in almost all universities of the Commonwealth, Europe and North America, the candidate must follow courses in six subjects, two languages, mathematics, one subject concerned with the study of man, one with experimental sciences, and a sixth subject at free choice. This is designed to ensure general education. The opportunity to specialise is provided by the fact that three of these subjects must be offered at a 'higher' level and three at a 'subsidiary' level. Thus one candidate might choose Physics, Mathematics and Chemistry as his higher level subjects, with English, French and World History as subsidiaries, while another might choose English, French and African History as higher level subjects, with Mathematics, Biology and Yoruba as subsidiaries.

In examining techniques the first problem to be solved was that of languages. Clearly in an international examination of this kind translation could play no part in language examinations.

The whole range of the examination is at present offered in English and French, but for an Arab student, for instance, studying in an international school where the language of instruction was English it would be manifestly unfair to set an examination in French which involved translating from French to English or vice-versa and therefore demanded knowledge not of one but of two 'foreign' languages. The International Baccalaureate language examinations are always carried out therefore in the language being examined and involve no translation. We have undertaken to examine in any language which the candidate chooses, provided that it has a written literature. In the 1972 examinations, for instance, we examined in 18 different languages, including Arabic, Burmese, Czech, Danish, Iranian, Korean and Rumanian, as well as the most commonly spoken languages.

In spite of this emphasis on literature, at least in the first language, I.B. examinations place more emphasis on command of the spoken language than most national systems. In the first language (often the mother tongue) 25% of the marks are awarded to the oral examination and in the second 40%. The wide dispersion of schools using this examination means that only the first language can be orally examined 'face to face' and the oral examination for the second language is recorded on tape. In the second language I.B. also makes use of an 'aural comprehension' test based on the playing of a tape and answers recorded on a 'quiz sheet'.

The written papers in the second language also include objective multiple choice tests. The advantage of such tests is two-fold. In the first place, they eliminate the subjectivity of the individual examiner and ensure equal treatment for all candidates. This is perhaps particularly important where the same examination is being used in widely different cultural backgrounds. Secondly a fifty item multiple choice test makes it possible to sample a much wider range of linguistic skills and of familiarity with speech patterns than an examination purely based on essay questions. It is mainly for this second reason of wider sampling that I.B. uses objective multiple choice questions, as part, not the whole, of the testing process in many other subjects, such as mathematics, the sciences and economics.

People have sometimes questioned whether it is worth the trouble and cost of devising multiple-choice questions for an examination which is still in its experimental stage and which even this year will only have between 400 and 500 candidates.

It is, of course, true that to devise the best possible multiple choice test, with all the careful scrutiny of every item, the pre-testing of items, the rejection of those which are either ambiguous or poor discriminators, is a very expensive process. When one is dealing with thousands of candidates this expense is offset by the fact that the responses can be marked by machine rather than by highly qualified, and therefore highly paid, examiners, but with our small number of candidates it may seem extravagant.

I.B. uses this method partly because ours is an experimental examination and we must experiment with the best methods even if, with our small numbers, they are at this stage uneconomic. But it is also true that objective testing, like many other scientific pursuits has bred its own purists. To reject a fifty item test because three of the items are faulty may please the 'experts' but it is not realistic. The remaining forty-seven items will still give a more objective assessment and sample the syllabus more effectively in certain areas than a purely essay type examination, and the 'injustice' to individual candidates arising from the three faulty items is far less than the injustice arising from the 'luck' or 'bad luck' of getting questions that suit the individual candidate in essay type papers. Even with limited resources therefore and less than perfect objective tests we believe that we are achieving a fairer assessment than we could by relying entirely on conventional essay type questions.

Just as in language examining the International Baccalaureate relies on a 'battery' of different tests, oral, aural, multiple choice and essay type, so throughout the examination we believe in employing a variety of examining methods to arrive at a global assessment. Thus in history examinations although the first two parts of the syllabus, world history and the history of a region, for instance Africa, America or Europe, is examined by conventional essay type questions, the third part, the study in depth of a strictly limited

historical issue, is assessed on a long essay of up to 6000 words written by the student during the last year of the course and based on his own 'research'. This particular part of the course has great pedagogic value and has proved very popular with students. It does, however, present particular problems of assessment, the first of which is that it is very difficult to be sure that the long essay is actually the work of the student who claims to have written it. Even at university level students have been known to buy doctoral theses and then submit them as their own work.

Because it is not entirely possible to eliminate this danger, the International Baccalaureate Office cannot give as much weight in the marking to the long essay as it would wish to, or as the majority of essays would deserve. Certain precautions, however, can be taken. Of these the most rigorous is the oral examination. An oral examiner who has read the essay can, in a viva voce examination, assess fairly accurately not only whether the essay is the student's own work, but also whether he really understands what he has written. One of the defects of much modern education is that students acquire a vocabulary of clichés and half understood generalising concepts. It is, for instance, quite difficult to tell whether a student who discusses social history in a written examination in terms of 'alienation' really understands the concept he is using, or has adopted, without understanding it, a fashionable jargon. A probing oral examination will soon determine which of these two cases the examiner is dealing with. Unfortunately, the I.B., being a world-wide examination, cannot send its oral examiners across the seven seas to every school in the project. We have been driven therefore to devise 'long distance' methods of oral examining. In history, for instance, since the examiner who reads the long essay cannot always visit the school and meet the candidates face to face, he poses three searching questions on each essay. These are presented to the candidate in his own school, under the same sort of conditions as an oral examination, and the candidate then tape-records his answers on a cassette which is sent back to the examiner. It is possible that this device might be of interest as a contribution to solving not so much the problem of long distance oral examination as that of harmonising standards. It is well known that oral examiners are even more subjective in their assessment of student competence than examiners of written essay type questions. Yet in the world of today, with all the media of electronic communication, oral competence is becoming increasingly important compared with written communication. The official who is clear, concise and balanced on the telephone is as valuable as used to be the official who wrote a clear, concise and balanced memorandum. Perhaps the use of cassette recordings as a method of moderating oral examiners' assessments may enable us to give more weight to oral competence in examinations and so promote its development in the schools.

Another area where the International Baccalaureate has been forced to experiment in examining techniques is in the assessment of practical laboratory work in the sciences. It has long been recognised that this is an important part of the science course but also that the formal practical examination, carried out by an external examiner on a single occasion, is a very unrealistic method of assessment. In the International Baccalaureate we recognise that the only person who can really assess the individual's practical competence in an experimental situation is the teacher who is in constant contact with him. The same, is, of course, true of all systems of 'continuous assessment'. I.B., therefore, entrusts a large part of the practical assessment to the teachers, but there is a need for some kind of external control. We are, therefore, experimenting with the use of film as a test of practical competence. The candidates are shown an experiment on a specially prepared film and are

equipped with a 'quiz-sheet'. At certain points the film stops and they are asked to write down their answers to certain questions designed to test whether they understand what is happening, can identify the apparatus used, explain its purpose and suggest the next step to be taken.

Finally, many national examining systems, realising that no single test administered on one occasion can fairly assess the whole competence of the student, are seeking to introduce some element of continuous assessment, which, as we have seen, can only be the assessment of the teacher. In the I.B. system teachers are asked to grade their pupils themselves for each subject. Examiners award their own provisional grade purely on the basis of performance of the tests, but they are asked, having done so, to look at the teacher's grade and if there is a marked discrepancy to re-check their own grading. It is, perhaps, important to emphasize that this is not an 'averaging' of the examiner's and the teacher's grade but simply a way of alerting the examiner to the fact that he may be misinterpreting a student's performance.

Finally, since the examination as a whole is offered either in English or French, it is our practice, whatever the nationality of the chief examiner, to ensure that he has both an anglophone and a francophone senior assistant. The examination, which I have described, is now very widely accepted as a basis for university matriculation throughout Europe and the Commonwealth - by all British, Canadian, Australian and New Zealand universities, for instance, and by many in Africa, and Asia. Its graduates are already attending 100 universities in different countries throughout the world. But it is still a flexible and experimental system which provides an opportunity for research and development in examining methods.

UNESCO'S ACTIVITIES IN THE FIELD OF EDUCATION

Paper presented by UNESCO

Part 1 - International comparability and equivalence of higher education diplomas and degrees

Originally the main objective of the Organization's first projects in this area was to facilitate the access of students with diplomas from foreign universities to institutions of higher education in other countries. Given the relatively small number of universities and the similarities in their structure and operation, Unesco had planned to establish a system of "equivalences" among the higher education diplomas being awarded at the time.

Over recent years, however, there have been quantitative as well as qualitative changes which led Unesco to revise its objectives and the guiding lines of its action in this field. The number of students wishing to register at universities outside their own country has increased so much as to make this problem a significant element in educational strategies. In the current academic year alone, more than one million students will attend institutions of higher education outside their home country. Among the factors which have contributed to this development are:

- (1) the substantial increase in the number of institutions of higher education the world over;
- (2) the rising awareness of each country's need for a system of higher education which meets its specific requirements and development objectives;
- (3) the increasing diversification of training patterns called for by the scientific and technical revolution;
- (4) the growing trend for students to leave their home communities to further their education, partly due to greater support for this purpose. For students from the developing nations, this "migration" is practically inevitable, as their countries are in urgent need of trained manpower insofar and as long as all the necessary facilities do not exist at the national level;
- (5) Government's desire to utilize persons trained abroad rapidly and in an efficient, development-oriented manner.

These and other changes in systems of higher education throughout the world have necessitated the development of a new approach to the problem of the equivalence of degrees, and Unesco is now making available to Member States a variety of instruments in order to facilitate the comparison and recognition of studies and diplomas.

The main long-term objectives of the Organization's programme in this field are:

- (1) to increase the international mobility of researchers, professors and students, with a view to a better utilization of training resources on a world scale;

- (2) to facilitate access to the various stages of higher education for students from other national or foreign training centres; and
- (3) to ease the re-absorption of persons trained abroad in their country of origin.

Unesco's programme in this area may be divided into four categories:

- (1) Studies aiming to develop the theoretical foundations for the comparability of studies and diplomas. Papers already published or currently in preparation include:
 - (a) Comparability of degrees and diplomas in International Law (published in 1972 in English and French)
 - (b) Comparability of degrees and diplomas in Engineering Sciences (in preparation)
 - (c) Comparability of degrees and diplomas in Biological Sciences (in preparation)
 - (d) Comparability of degrees and diplomas in Mathematical Sciences
 - (e) International equivalences in access to higher education (published in 1971)
- (2) Studies aiming to set down practical guidelines for the international recognition of diplomas, including
 - (a) A major study entitled Higher Studies. Tentative comparison of teaching and degree systems (published in French; English, Russian and Spanish versions in preparation). It comprises a country-by-country description of systems of university education, highlighting the main steps of education at this level, for every country with higher education facilities; and a glossary of the principal types of diplomas;
 - (b) Methods of establishing equivalences between degrees and diplomas (published in 1970 in English and French)
 - (c) A paper outlining practical procedures for the recognition of certificates and diplomas (in preparation)
- (3) Activities promoting the development of bilateral, regional and international legal instruments
 - (a) The Unesco General Conference has decided to convene a diplomatic Conference with a view to the adoption of a Regional Agreement on International Recognition of Studies and Degrees in Higher Education in Latin America and the Caribbean. An

inter-governmental committee of experts will meet prior to the Conference to prepare the final draft of the Agreement on the basis of a draft submitted by the Unesco Secretariat;

- (b) Similar instruments are being prepared for the Arab States, Africa, and the African and European States of the Mediterranean region;
 - (c) Unesco cooperates with international governmental and non-governmental organizations (including the Organization of African Unity) and encourages universities to meet with the academic and professional bodies concerned with a view to the conclusion of agreements or the modification of existing agreements in this area.
- (4) Activities promoting the creation and development of national and regional mechanisms to ensure the implementation of policies adopted on this question, and, specifically to:
- (a) establish national guidelines for the mobility of professors, researchers and students;
 - (b) coordinate the efforts undertaken to increase mobility on the national and regional levels;
 - (c) ensure the implementation of agreements in force; and
 - (d) grant recognition to particular studies and diplomas.

To this purpose, missions have been sent to several Member States, including Ethiopia and the Ivory Coast.

Part 2 - Other Activities

There has been no programme directly connected with the problem of examinations other than that related to the problems of equivalence. In fact, the Draft Medium-Term Outline Plan for 1973-1978 presented to the Unesco General Conference at its 17th Session in Paris in the autumn of 1972, went so far as to say, in connection with the programme related to reform of the organization of pre-primary, primary and secondary education:

"In a perspective of life-long education, the conventional structures will, like the curricula, have to undergo changes which cannot be improvised. The key factor in the reorganization of the systems is the continuity of the education process throughout the whole period of the child's school attendance. We should therefore stop thinking in terms of "levels" (pre-primary, primary and secondary) with all the obstacles (examinations, competitive and otherwise) they incorporate for the purpose of making a more or less just and efficient selection, and substitute the notion of continuous education - 8 to 10 years in the same school for example - which in any case is more in keeping with the democratization of education".

Nonetheless, there have been a number of projects financed by the United Nations Development Programme by which Unesco has provided assistance to various Member States in the reform of their examinations (e.g. in Ethiopia, Jordan and Trinidad). Unesco has also provided assistance under its Participation Programme in activities of Member States (either fellowships or expert consultant services) on the problems of re-organizing examination services (Afghanistan and Syria). There have been also projects whose main aim is the reform of curricula or the reform of a guidance system, in which activities specifically directed towards the study and reform of particular examinations have been an important element (Cameroon, India and Ivory Coast).

In fact, it is difficult to work on problems of curriculum reform in the present state of education in most countries without seriously studying the problems of examinations. The contents and manner in which both the external and internal examinations are conceived and administered have a strong influence on the curriculum. The Unesco position taken in this matter has been guided by the conclusions of the Expert Meeting on Curriculum of General Education in Moscow, January 1968. The experts recommended that Member States consider evaluation as an integral part of the curriculum; a bad system of examinations has a pernicious influence on the best designed curricula and could even compromise carrying out the most important objectives of education. A well conceived system of curriculum evaluation serves to maintain and even to improve educational standards. A system of evaluation should be organized and carried out in such a way that it serves as a means of measurement both of pupil progress and of the acceptability of the curricula (para 88 of the Report).

Following this indicated line of action, the Unesco programme has included a series of activities related to the training of curriculum officers in the techniques of curriculum evaluation. The first seminar organized, which was planned by Unesco but carried out by the International Association for the Evaluation of Educational Achievement, was the International Seminar for Advanced Training in Curriculum Development and Innovation (Granna, Sweden, July-August 1971). One of the main elements of the training provided was evaluation methods. Teams from many countries took part (from Africa, teams from Ethiopia, Ghana, Kenya, Nigeria and Zambia). Similar training seminars are to be carried out under the programme approved for 1973-1974 by organizing regional workshops or seminars on techniques for the evaluation of curricula (one in Latin America and one in Asia in 1973, one in French-speaking Africa in 1974).

Unesco has prepared no studies specifically on the problems of examinations. However, a number of publications have provided incidentally some information related to examinations, e.g. the Asian Study on Curriculum prepared under the Unesco-NIER Regional Programme for Educational Research in Asia which made an intensive study of curriculum development in elementary education in the Asian countries. One of the aspects studied was pupil evaluation and in the two volumes of the publication (Volume 2 and Volume 3) devoted to the situation in each of the countries, one will find detailed information on type of examinations, both external and internal, existing in primary and secondary education.

The most recent publication put out by Unesco which contains definite recommendations concerning examinations is Learning to Be

(Unesco, Paris 1972, Harrap, London, 1972). The International Commission on the Development of Education, of which this is the report, studied examinations in the light of selection problems and enunciated the following Principle and Recommendation:

"Principle

Access to different types of education and professional employment should depend only on each individual's knowledge, capacities and aptitudes, and should not be a consequence of ranking knowledge acquired in school above or below experience gained during the practice of a profession or in private studies".

"Recommendation

As educational systems become more diversified and as possibilities for entry, exit and re-entry increase, obtaining university degrees and diplomas should become less and less closely linked to completing a predetermined course of study. Examinations should serve essentially as a means of comparing skills acquired under varying conditions by individuals of different origins, a mark not of a conclusion but of a starting-point, helping each individual to assess the effectiveness of his own study methods. Evaluation procedures should measure an individual's progress as much as the extent to which he conforms to externally fixed standards".