

PART 4

TOWARDS SOLUTIONS

A PROBLEM OF BALANCE

A Conflict of Aims

191. It is possible to define nine major aims in this field which can apply to developing countries. Any system of technical and commercial qualifications and examinations should:

1. contribute to the meeting of present and foreseeable manpower needs;
2. enable individuals to achieve their personal career objectives;
3. provide national qualifications to meet national aspirations;
4. award qualifications which are recognised by employers and educational institutions in the developing country and overseas;
5. be sufficiently local and flexible to meet changing local needs;
6. give certainty and continuity of standards;
7. provide valid and reliable measurements of human performance;
8. reduce student wastage by eliminating excessive failure rates;
9. not itself consume an unacceptable proportion of financial and manpower resources.

192. There is a possible conflict between aims 1 and 2; between aims 3 and 4; between aims 5 and 6; and perhaps between aims 7 and 8. If aim 9 is given priority, it could force a reduction of emphasis on other desirable aims and prevent the solution of conflicting aims; for example, if national and international examinations are used, then the conflict between aims 3 and 4 disappears, but the costs of the examination system will increase.

193. Within this conflict of policy aims it is, of course, the responsibility of each country to determine which aims should have priority at any given time. The dilemma for a developing country at present is that there appear to be only two viable solutions: a national system of qualifications, examinations and syllabuses, or use of the sort of external system provided by the UK and regional examining bodies. In theory there can also be college systems, but so far these have tended to become national. In practice there are often dual systems, but these also appear to be a stage on the road to a national system.

A National System

194. If a country opts for a wholly national system, it is likely to be able to

- (a) match it to present and foreseeable manpower needs (Aim 1)
 - (b) provide national qualifications to meet national aspirations (Aim 3)
 - (c) be sufficiently local and flexible to meet changing local needs (Aim 5)
- and, depending on the system it adopts, may be able to
- (d) enable individuals to achieve their career objectives (Aim 2)
 - (e) provide certainty and continuity of standards (Aim 6)
 - (f) reduce student wastage by eliminating excessive failure rates (Aim 8)
 - (g) provide valid and reliable measurements of human performance if it has a large enough student population in the various subject areas (Aim 7).

195. The main disadvantage of a national system, is that if it meets all the aims in paragraph 194 the cost will be extremely high. It will also be unlikely to provide qualifications which are recognised by employers and educational institutions in other countries. It is also likely that a purely national system will gradually, but inevitably, move away from the international syllabuses, which will mean that text books and other learning material based on them will no longer be appropriate - or at best only partly so. This does not matter if a country is sufficiently large and developed to support its own textbook publishing, but it is an important factor for consideration in all but the largest countries. Medium size and small states also have to be concerned about the effect of low examination entries on the reliability of measurement and attainment. Finally, it is possible that a country adopting a purely national system may become isolated from new ideas and developments, not only in the technological content of syllabuses, but in examinations and indeed in technical education as a whole. Again this is less likely if the country has a well-developed industrial base and strong university faculties in technological and business studies.

An outside system

196. If a developing country opts for an outside system of qualifications and examinations it is likely to be able to:

- (a) enable individuals to achieve their personal career objectives (Aim 2)
- (b) provide qualifications which are recognised by employers and educational institutions both in the developing country and overseas (Aim 4)

(c) have certainty and continuity of standards
(Aim 5)

(d) use a system which does not place too heavy
a burden on its financial and manpower resources
(Aim 9).

To some extent such a system may contribute to the meeting of present and foreseeable manpower needs (Aim 1), but while its measurements of human performance are likely to be reliable, their validity will be questionable (Aim 7) - although they may be sufficiently valid to be acceptable.

197. The main disadvantages of an outside system are that it does not provide a national qualification, and that it is difficult for it to meet all the changing local needs. As reported earlier, there is also, at present, an extremely high failure rate, but this may partly be due to the lack of preparation (and indeed the opportunity for preparation) for candidates who are not studying at a college.

Resolving the dilemma

198. It thus appears that, unless a developing country is comparatively large and wealthy and at a fairly advanced stage of development, whichever option it chooses - a national system or an outside system - there will be grave disadvantages. This dilemma echoes the extract from the Report of the Seventh Commonwealth Conference which gave rise to this study. But the stark choice between a national system and an outside system is not a logical necessity, but partly a product of historical relationships.

199. Certainly anyone involved with examining has the problem of balancing the four main factors of validity, reliability, efficiency and cost. These factors tend to operate against each other, in the sense that cost-effective measures to improve the validity tend to lower the reliability, while measures to improve the reliability adversely affect either the efficiency or the validity of examinations. There is never a perfect solution, just the best balance for a particular purpose.

200. It is equally true that those responsible for examinations in developing countries (especially the small states) are likely to have the same problem of balance in an exaggerated form. To be valid a syllabus has to reflect the local cultural, geographical and employment factors and the stage of development. Reliability will often be low because of numbers involved in any one occupation are small. Efficiency is more important than in developed countries as the time of both lecturer and student absorbs a greater proportion of the national wealth. Cost can be crucial, in terms of scarce resources of skilled manpower, of money, and of foreign exchange.

201. It is the firm view of the investigators, however, that the apparent dilemma can be resolved and the conflict of policy aims identified in paragraphs 192-197 can be reduced to the inescapable problems of balance described in the last two paragraphs. To do so, however, would require first a change in the relationships between the UK examining bodies and their clients in the developing countries of the Commonwealth; and secondly acceptance that there are three separable activities, of awarding qualifications, measuring human performance and developing examination syllabuses, and that these activities do not always have to be carried out by the same body. Finally, there may be advantages in looking for co-operative solutions within the framework of the Commonwealth. These themes are pursued in the final sections of this report.