

FUTURE TRENDS

202. The main aims of the study have been to establish the present position on technical and commercial examinations and qualifications and to identify current problems. As any solutions will take some time to achieve, it would be sensible to plan to provide for foreseeable developments in any future systems.

Modularisation

203. Some modular structures of courses and examinations have existed for a long time. Reference has already been made to the popularity in the developing Commonwealth countries of the City and Guilds Telecommunications Technicians scheme and the single subject examinations of the examining bodies in the commercial field. More recently the greater use of computers for administrative purposes in the field of qualifications and examinations has made possible more sophisticated modular systems, such as those adopted by BEC and TEC.

204. A greater use of modular syllabuses might provide a means of reconciling local needs with international recognition as well as contributing to the solution of the problem of appropriate standards. A wider range of choice at each level than is available at present would enable the principles, supporting subjects and many applications to be drawn from a central 'module bank' and only genuinely local differences (e.g. law and currency) be devised on a local or national basis. Although the capital cost of a 'module bank' would be high, it would still be lower than separate curriculum development in each country.

Greater Personal Mobility

205. Internationally, there is a trend towards greater personal mobility for additional education and for work. More and more people are likely to study in countries other than their own. Many countries have an urgent need for skilled labour which they cannot quickly fill from their own resources. Where English is the lingua franca it is to be expected that students and skilled workers from Commonwealth countries will be among the temporary migrants. Although immigration may be restricted by decrees of government, the general improvement of communications, despite the energy crisis, seems likely to ensure that this trend will continue.

206. This trend will lead to a greater pressure for harmonisation of qualifications, a recognition that one qualification is equivalent to another for a stated purpose, whether that be entry to further education, exemption from part of it, or a 'licence' to work. The harmonisation of existing qualifications is an extremely difficult task. It would be preferable if future qualifications, at least for those countries with an interest in accepting or 'exporting' students or workers, could be designed to be comparable. The 'module bank' referred to above would help this objective.

The less fortunate

207. Many developed countries are already devoting large resources to education and training schemes to provide opportunities for the less fortunate young people - those who because they have had poor schooling, or are apparently less able, or have just been unlucky, are ill-equipped for

life in a modern technologically-based society. In many developing countries a similar problem already exists in the large cities. As resources become available it is to be expected that the developing countries also will tackle this social problem. It is, after all, an unacceptable concept that youth unemployment and skill shortages should exist side by side forever.

208. Qualifications and examinations for the less fortunate have to start at a lower level than is normal for those in technical and commercial fields. It is unlikely that examinations can be held in a language other than the student's first one, even if a formal examination is appropriate at all. The UK has as much to learn about this as any other country, and indeed many of the initiatives are being taken by examining bodies such as City and Guilds and the RSA. Perhaps this is a field where the whole Commonwealth, developing and developed, can learn together.

Technology Transfer

209. Especially (but not solely) with applications of microelectronics, technology is changing faster today than at any time in history. The new work force coming forward needs to have these new techniques and applications included within their basic vocational education. The existing work-force needs to be updated. The key to the transfer of the new technologies from research and development to day to day applications is the means of updating the teachers and trainers. A system for keeping trained workers up-to-date is also needed but it cannot work without the teachers and trainers. Here again, developed and developing countries are on the same starting line with virtually nil experience. Again, perhaps both can learn together.

210. This is not blind idealism. Anyone who believes that the gap between developed and developing is already too wide must be even more concerned that the speed of technological change will widen the gap still further. It is not just the resources gap that matters - the knowledge gap does too. Techniques have to be found to bridge it, and qualifications and examinations are likely to be involved.

Distance Learning

211. One such technique is Distance Learning - a more recent (and more embracing) term for what has been known for years as correspondence education. Guildford Educational Services is itself engaged in an investigation into Distance Learning for Technicians - to see how feasible it is to establish a network of colleges to provide in the UK at technician level the sort of facility which the Open University does at university level.

212. Distance Learning systems may provide opportunities which do not exist - for reasons of cost among others - for thousands of people in the developing countries. They may provide, for example, a systematic method of preparation for those who at present attempt external UK examinations improperly prepared and swell the numbers of failures. Again, many of the concepts are new to developed countries, but they are actively moving forward, with advanced systems in Australia and Canada as well as the Open University in the UK. One of the prerequisites of a system is the continuity of the qualifications on which it is based (because of the high capital cost of the material for self-learning). A Distance Learning system in a developing country will therefore be dependent on its settling its policy on vocational qualifications and examinations.

213. Distance Learning systems are likely to use the printed word to a great extent, but may also depend on educational television or radio (in which a number of developing countries have considerable experience), audio cassettes and increasingly on computer assisted learning. It is likely to increase the pressure for modularisation (because the student working outside a college needs to learn in small steps) and the high cost of the learning material is likely to add to the pressure of harmonisation.

Examinations Technology

214. Recent developments in technology will inevitably change the methodology of examinations. The following developments seem the most likely:

(a) The increasing cost and unreliability of high volume post or air freight (paragraphs 166-167) could lead to its replacement by data transmission via a satellite if the right administrative and security arrangements could be devised.

(b) The widespread introduction of examinations on demand could be developed from Pitman's tried techniques, via new ideas generated by City and Guilds, to instant marking of an individual's attainment when he is ready to take the test. The equipment already exists, but is very expensive. A less costly version is almost ready for marketing. The administrative and security systems will surely follow.

215. Such changes in examinations technology are likely to increase the cost-effectiveness of international systems of testing as compared with national ones, and will tend to increase the flexibility of the systems, so that national and local requirements can more readily be built in.

216. The hardware for this new technology already exists or is likely soon to be available and the cost of such equipment is not likely to be prohibitively expensive. However, designing the software, and the administrative and security systems is a completely separate issue. The most opportune time to establish a system based on this new technology would be when systems in general are being changed.