

The world of Higher Education in this, the last quarter of the twentieth century, is highly complex, inextricably linked as it is to the rapidly changing needs and activities of industry and commerce and the social changes being brought about in society by a multiplicity of pressures.

About a hundred years ago, Mechanics Institutes were founded to provide in "night classes" an educational background - basic literacy, numeracy and science - for apprentices and others involved in engineering, textiles, pottery, etc. After the 1914-18 war, the subjects covered expanded to include motor vehicles, electricity and building, and new "Institutes" - for commercial studies and "Homecrafts" for girls - were started. Before the 1930's, "Institutes" became "Technical Colleges" and classes were held in the day for full-time as well as evening and part-time students. Some establishments were in the forefront of developments and were recognised by professional bodies (Inst. Mech. Engineers, Inst. Elect. Engineers, etc.) and London University, as centres in which their qualifications could be studied.

After the 1939-45 war, amalgamation of separate "technical", "commercial", "catering and homecrafts", and often Art Institutions occurred to form the "Further Education" institutions of today - multi-disciplinary and multi-purpose in nature. About 30 of the over 500 colleges pursued advanced academic work, became recognised as centres of excellence and passed through the stage of College of Technology and Regional Colleges to become the Polytechnics of today.

The Further Education institutions of today, then, have a long history and a record of continuous development, all of it firmly rooted in the needs of industry and commerce for the production of a skilled, competent, well balanced labour force, both well grounded in basic principles, and aware of modern technology. Each College is based firmly in its local community with its strengths - indeed, often its specialisms - originating from its own region. Thus, mining departments are to be found in the West Riding, Wales and Nottinghamshire, textiles in Bradford, agricultural machinery in Norfolk, aeronautics in Bristol, marine engineering in South Shields, etc. Over the century as the economy of the region - or the country - has changed, so has the nature of the service provided by FE. Foundry work, shipbuilding, textiles, etc. have all decreased and in some cases disappeared totally, whilst new specialisms or departments, e.g. in the service industries - hotel catering, retailing, nursing, electronics, robotics and so on - have all appeared.

Thus the whole ethos of FE is one of continued transition and no-one in this sector of work can remember a stable time. Always some elements are being phased out as others are phased in. However, overlaying these organic changes are certain periods of major upheaval. The last great one for FE was 15-18 years ago when as a result of technological advances in both industry and commerce the whole structure of FE courses had to be rethought. The "old type" craftsmen were no longer needed - at least in the number previously required - but higher level "technicians" and single skill "operatives" were in great - and increasing - demand. Technology, however, was advancing so rapidly that any educational programme would be outdated in three to four years, so a "unitised" or "modular" programme had to be devised, so that "retraining" or "updating" in technologies would be considerably simpler. This in turn has had a "cascade" effect into not only other courses in colleges but into the schools which provide a "feed" for Colleges and into Higher Education which takes the FE products.

Currently, FE is undergoing another seminal change. The emergence of the Manpower Services Commission (MSC) through the Department of Employment has brought a major influence into a field hitherto affected primarily only by the Department of Education and Science (DES). The considerable funds within the control of the MSC have caused the relatively narrow vocational aspects which are MSC's main interests to assume great importance in the planning and delivery of Further Education. As yet the full impact has not been felt but already politicians and educationalists alike are aware of massive forces imposing changes of direction. This in turn brings - as always - uncertainty, even apprehension to some in this field, but to the majority well accustomed to the vagaries of the field over the decades, it is clear that the opportunities are great.

Most Colleges are involved with four "client" groups:

- a) With full time students following educational training courses to enable them to enter employment or Higher Education - or re-enter employment having been unemployed.
- b) With part time students "on release" from their employment to obtain the "back up" education and training to assist them in their career progression and their employer in his labour efficiency.

- c) With full time or part time students pursuing "General Education" courses to supplement the technical competence they may already possess. Often this is to enable entry to Higher Education.
- d) Updating or retraining of mature people whether in employment or not, particularly in relation to new technologies. Motivation here is usually to keep or progress in a job already held or to improve chances of re-employment in an increasingly demanding labour market.

These client groups range in age from 16 to over 50 and cover the whole spectrum of subjects. Distances learning - tuition by correspondence, audio or video tapes, etc. - is becoming more important and most colleges now operate "drop-in" facilities for limited tuition in new technologies on a "demand" basis rather than in organised classes. In the jargon - FE is becoming more "student centred" than "course centred".

Where these, and the next moves will take us, is a matter of considerable debate at the moment. It is a fact that manufacturing industry, from utilising 43% of the workforce in the 1950's, is now down to 25% and will continue to drop - possibly to 12-15% by the turn of the century. New technology will ensure manufacturing output will be maintained or even rise. Service industries, of all types, are taking an increasing percentage of the labour force and, since "service" cannot be automated (at least in the near future) as easily as manufacture, this would well absorb the excess from the manufacturing field. What this means is that the probability of unemployment falling is remote and in fact it could well rise in the future decades.

Thus, a significant proportion of the population is likely to be "non wage-earners" in the foreseeable future. Shortening the length of the working week, reducing the age of retirement and raising the age at which compulsory full time education and training ceases are all feasible and are likely to be implemented. This means that even if fortunate (?) enough to be a wage-earner, a person will STILL have a considerable proportion of time non-wage-earning, and for those not fortunate, most of their time will be in this state.

Two things are obvious. Firstly, the wealth produced by the nation must be utilised to enable those who, for no fault of their own, cannot wage earn, to live a dignified and fulfilling life. Secondly, the educational system of this, and other developed countries will need to address with speed the problems which are ahead to provide suitable opportunities for everyone involved.

Within this scenario, Further Education, with its long experience and proven ability to absorb change, will clearly need to play a major role. The social needs of the problem, already considered in our curriculum discussions, will become even more important. This will probably be the next major upheaval in the FE world.