

been put forward for changes and modifications in the present system, or for its retention in its existing form in order to see whether it can be made to work or whether some new and better system can be found. The ways in which different sectors of the system are financed are reviewed together with the controls which have been used to deal with increasing expenditure on education (estimated in 1961-62 at £898 million for present expenditure and £163 million for capital expenditure, or 4.4 per cent of the gross national product). Some important points are suggested for consideration by the local and county associations of the National Union of Teachers. Emphasis is placed on the belief in the unity of education which runs through all the thinking of the Union, and on the recognition that in some fields it is the duty and right of individual teachers or groups of teachers to determine what is best in any particular circumstances. It is regarded as the right and duty of the Union to defend this freedom of professional judgment. Here the pamphlet suggests that, if the present grant system continues, there will, in effect, be a breakdown in local Government finance, at least as applied to education. Possible alternatives to the present grant system are: the devising of new techniques of rate assessment and levying that would mitigate the impact and social injustices of the present system; alternative or additional methods of raising local revenues; the reorganization of local education authorities into regional or larger or *ad hoc* authorities. The associations should also consider whether the Union should support a return to a system of specific grants; the transfer of payment of teachers' salaries to the Central Exchequer; the financing of different parts of the education system by different methods; a nationally financed system of education. Appended to the pamphlet are summaries of the main points made by Mr. J. R. Sampson, Mr. N. Morris, Mr. John Vaizey, Dr. Horace King, M.P., and Sir William Alexander before the Union's panel on educational finance.

### Sociology in Professional Training

THE question of what should be included in a sociology syllabus is frequently raised and many who are responsible for introducing the subject have indicated that they would welcome advice on this matter. The appropriate syllabuses could, with obvious advantage, be drawn up as a result of consultations between members of the various professions and sociologists who specialize in particular branches of the discipline. For example, discussions could be held between training college principals and educational sociologists, town planning officers and urban sociologists, those concerned with management studies and industrial sociologists. With the view of improving sociology syllabuses in general the British Sociological Association has established a panel of members from various fields in sociology to discuss the needs of professional organizations and to give advice in formulating sociology syllabuses. Further information can be obtained from the Honorary General Secretary, British Sociological Association, Skepper House, 13 Endsleigh Street, London, W.C.1.

### Family Planning Association

THE 33rd annual report of the Family Planning Association describes the success of the campaign to secure a large sum of money to extend the Association's activities overseas. Over the past four years the number of Family Planning Association clinics in Britain has increased from 300 to 409, oral contraceptives have been introduced as a normal method of birth control, training for lay workers has developed, training for doctors and nurses has been improved, advisory visits to clinics have been initiated and the procedure for the inspection of training clinics overhauled. A limited cancer smear service is now available, clergy courses are regularly arranged and

relations with a number of universities are much closer. There were 409 clinics in 1963, compared with 392 a year earlier. During the year covered by the report more than 335,000 individual patients were seen, 13,670 of whom used oral contraceptives; 138 of the Association's clinics undertake cervical smear examination, an important contribution towards the early detection of cancer of the cervix.

### Abnormalities of the Sex-Chromosome Complement in Man

KNOWLEDGE of human chromosome anomalies as causes of abnormal somatic and sexual development is relatively new, and is increasing rapidly on account of the technical advances that have been made. However, techniques are still time-consuming, and laboratories that specialize in this work can cope with only relatively small numbers of patients while, in general, fairly large numbers are required to obtain statistically sound information on a number of points concerning the types, origins and outcomes of human chromosome anomalies. Therefore, the publication of detailed reports by those laboratories which are able to make an efficient and accurate examination of persons with potential chromosomal anomalies is particularly welcome. In *Abnormalities of the Sex-Chromosome Complement in Man*, Dr. W. M. Court Brown and his colleagues have given as much valuable information about each case as they have been able to assemble during their painstaking work. (Privy Council—Medical Research Council Special Report Series, No. 305. Pp. viii+239+3 plates. London: H.M.S.O., 1964. 27s. 6d.)

The data have been collected in connexion with the Registry of Abnormal Human Karyotypes set up in 1959 in the Medical Research Council Effects of Radiation Research Unit in Edinburgh. The primary object of the Registry is to enable an investigation to be made of the long-term effects of the chromosomal abnormalities that have been detected in man. This report deals with 266 subjects with anomalies and discrepancies of the sex chromosomes—the total number of cases with sex-chromosome defects which have been registered from 1959 to the end of 1962. There are two introductory parts: in the first are described the techniques and methods of examination of human sex-chromosome abnormalities by means of sex-chromatin and metaphase-chromosome investigation, and a section is devoted to the recognition of sex-chromosome mosaicism; in the second part, the literature concerning chromosomal findings in the persons described in the main body of the report, which follows, is briefly and critically reviewed. The third and main part deals with the persons reported to the Registry; reasons for referral, history and general clinical findings are given and reference is made to publications in which the patient has previously been reported. The persons examined are grouped into three main sub-sections according to phenotype; 134 have a male phenotype, 128 are phenotypically female and 5 are true hermaphrodites. 99 of the 134 phenotypic males have an XXY sex-chromosome complement and 24 have sex-chromosome mosaicism. Of the 128 phenotypic females, 38 are XO, 22 are sex-chromosome mosaics, 33 are XXX and 26 (not 20 as stated on p. 129) have an XY complement, and of these, 20 are examples of testicular feminization. The report contains a great deal of factual information on practically all types of sex-chromosome anomaly discovered in man, and it is to be hoped that new material will be published in similar form as it becomes available from time to time.

### Total Beta Activity in Global Fall-out in Australia during 1963

CONTINUOUS sampling of fall-out for the measurement of total  $\beta$ -activity was maintained through 1963 by the