

OLD WORLD

FURTHER EDUCATION

CNAA Success Story

by our Education Correspondent

SOME idea of the impact made by the Council for National Academic Awards on the colleges of further education can be gleaned from the latest statistics published by the Department of Education and Science. There are now more students in the further education sector following degree courses approved by the CNAA than there are studying for external degrees of the University of London. In 1969, for example, these figures were 18,300 and 13,500 respectively (*Statistics of Education, 1969, Vol. 3 Further Education, HMSO, £1.40*). The CNAA has therefore firmly established an alternative form of higher education in Britain in less than a decade.

But the impact of the CNAA has been even more far-reaching than the mere numbers of students suggests. The council's function is to approve courses submitted by non-degree awarding institutions, and to ensure that their standards are equivalent to those in traditional universities. The non-university sector of British education therefore now has an open pipeline leading to degree status other than the already overloaded external degree system of the University of London. Moreover, many of the CNAA approved degree courses are more radical than their counterparts in the universities and from its inception the council has smiled on the sandwich course method of study.

The DES statistics tell more, however, than the success story of the CNAA. In 1969, for example, there were more than three million students enrolled in grant-aided further education establishments—a figure which puts in exceptionally bad light the lack of attention that has traditionally been paid to this sector of education. Of the total, 88 per cent of the students engaged on full-time and sandwich courses, 83 per cent on part-time day courses and 40 per cent on evening courses were working for recognized qualifications, the bulk of these qualifications being lower than GCE A-level.

A noticeable trend in the further education sector during the past few years has been the relative and at times absolute decline in the numbers of students engaged on part-time and evening courses. Between 1961 and 1969, for example, the numbers following full-time and sandwich courses leading to advanced qualifications increased at an average rate of nearly 17 per cent a year, while those engaged on part-time courses increased yearly by 7 per cent

and evening course enrolments remained almost static during the decade. A similar trend also took place in the lower level courses, with the numbers of full-time students, part-timers and evening students increasing yearly by 11.6 per cent, 5.5 per cent and -1.0 per cent respectively.

In spite of the fact that the statistics are two years old, their publication by the DES is a particularly useful exercise. It is one of the few attempts to draw together information about this important but little discussed sector of education which includes the polytechnics, colleges of technology, technical colleges, colleges of art and agricultural colleges—establishments whose only common denominator is often the fact that they all fall directly under the control of local authorities rather than the DES.

FRANCE

Clarifying Proposals

Paris, March 29

MORE weight was added to the rising tiers of French scientific bureaucracy when on March 29 the Ministry of Industrial and Scientific Development announced the creation of yet another liaison department, the Service Programmes des Organismes de Recherche (SEPOR). This new unit will serve as the link between the various research organizations which at present are administered directly by the Ministry, the Centre National pour l'Exploitation des Océans (CNEXO), the National Space Research Centre (CNEX), the Applied Data Processing Research Institute (IRIA) and the Atomic Energy Commission. The new department will be run by Mr Maurice Levy, a theoretical physicist who recently served for two years as scientific counsellor to the French Embassy in Washington.

The task of SEPOR will be to "put into clear text" scientific programmes concerning, primarily, oceanological and space research for the minister, Mr F. X. Ortolli. It seems that Mr Ortolli has lately experienced some difficulty in understanding the exact significance of some of the research proposals which have been put forward in these fields. SEPOR may well find itself in conflict with the Délégation à la Recherche Scientifique et Technique (GGRST), the inter-ministerial unit headed by physicist Pierre Aigrain, which is directly responsible to Ortolli and which carries the responsibility for coordinating the activities of the National Scientific Research Centre (CNRS), the Health and Medical Research Institute (INSERM) in addition to the space and oceanographical agencies.

The somewhat equivocal position which the oceanographical centre,

CNEXO, occupies in the French scientific establishment was well illustrated by the programme of the international colloquium on the development of the seas, organized by CNEXO and held in Bordeaux in early March. The centre seems to represent a supplement to the various oceanological efforts in the public and private sectors rather than taking the initiative as a coordinating organization. In effect, CNEXO has arrogated to itself the role of the Centre National de Recherches Scientifique (CNRS) in the field of basic oceanographical work, yet aims the thrust of its marine research towards the needs of the petroleum industry—which pays the bill—and this without the assurance that petroleum orientated research is necessarily the most profitable. This could be an unfortunate trend—until now, French oceanological research has not been at all bad.

POLLUTION

Guillemots and PCBs

THE accusing finger which pointed towards environmental pollutants as the cause of death of thousands of seabirds in the Irish Sea during the autumn of 1969 may have been a little premature, but it seems that at least one enlightened manufacturer is taking no chances.

Although records of "wrecks", particularly of the larger auks, go back to the middle of last century, long before pollution could be incriminated, none has been so devastating as the Irish Sea disaster which claimed at least 12,000 birds, mostly guillemots (*Nature*, **224**, 300, 402; 1969).

With a commendable sense of urgency, the Natural Environment Research Council stepped in to coordinate what has proved to be perhaps the most extensive and concentrated investigation of an incident of this kind yet undertaken. The work culminated in a report and supplement edited by Dr M. W. Holdgate, who at the time of the investigation was Deputy Director (Research) of the Nature Conservancy. This report is summarized in a booklet published by the NERC last week (NERC Publication Series C No. 4).

Nearly all the birds were suffering from malnutrition. The breast muscles were atrophied, and subcutaneous fat had been completely mobilized, but the most interesting and controversial finding was of unusually high concentrations of polychlorinated biphenyls (PCBs) in the livers of the majority of the birds, concentrations much higher than had previously been detected in land or fresh water animals. Whether the lesions in the liver caused by the PCBs were sufficient to cause the death of the birds remains conjecture, but is unlikely. Analysis of the livers of ap-