after university or polytechnic status. As the council says in its report, "any censure of ours must be directed at the system in which colleges feel obliged to act immorally even to bring provision for existing courses up to scratch, let alone to extend them".

The dismissals themselves took place on December 7, 1970, some six weeks after the registrar had questioned the expenditure on part-time teaching salaries during a meeting of heads of departments. Two specialist teachers from the Department of Liberal and Social Studies and Modern Languages were given four days' notice and the department was left without a native French speaker among the French staff and in a situation in which two lecturers were forced to teach 45 students the whole range of English literature. The upshot was, as the council points out, that "the morale of both staff and students has been badly hit".

What seems to have happened is that Bolton Institute of Technology has been concentrating on high level courses in an attempt to attract more students and to gain academic respectability. In so doing, it has overextended itself and has been caught up in a cost spiral. But this is a familiar story in the further education sector, where the carrot of degree-level courses and their related kudos has led many colleges to have university aspirations. The resulting vicious circle, the Council for Academic Freedom and Democracy suggests, is that "an increase in facilities and staffing will only be possible if the student intake is expanded, although an expansion of intake is only morally justifiable if facilities and staffing have been increased".

But that is only part of the problem. In addition to the drive for academic status, the colleges are also servants to two masters as far as academic planning is concerned. The Department of Education and Science is responsible for recognizing courses, and if it withholds that recognition, the local authority would have to shoulder their cost. Moreover, degree-level courses must be validated by an external authority such as the University of London or the Council for National Academic Awards. This situation, the council report suggests, is rather like a game of three-dimensional chess.

This interplay between the various planning factors has already resulted in one bizarre situation at the Bolton Institute of Technology, and the implication in the report is that it is responsible for much of the disquiet that lies underneath the surface. The particular situation in question is the setting up of a course in psychology, leading to an external degree from the University of London. The Department of Education and Science refused to give approval for the course, but the institute nevertheless recruited students and staff for it. The department's hand was forced, and approval was given for only one year's intake—a situation in which the education committee was indisposed to sanction large amounts of money for equipment and books. The students consequently arrived expecting a psychology laboratory, but found instead a room marked laboratory with precious little in it.

The only effective way to relieve the pressure between institutions and to prevent such blatant status-seeking, in the opinion of the Council for Academic Freedom and Democracy, is to set up a body on the lines of the University Grants Committee but concerned with the whole of higher education. The alternative is the perpetuation of the binary division between the universities and the colleges.

INDUSTRIAL TRAINING Recipes for Change

THE rumbles of dissatisfaction at the way in which the Industrial Training Board system operates are likely to be reflected in the review now being made by the Department of Employment. In particular, it seems almost certain that the arrangement whereby the levies from firms are returned in the form of grants for suitable training schemes will be transformed so that levies can be reduced and the advisory nature of the boards expanded.

The training boards were set up under the 1964 Industrial Training Act, and now number twenty-eight. They are expected to make levies of about £175 million a year. The largest of them, the Engineering Industry Training Board, has a levy approaching £80 million a year and has responsibility for more than 3 million of the working population. (Not all of this levy is collected, for companies with training programmes keep a large part of the total.)

Much of the criticism of the boards has been crystallized by the Confederation of British Industry, which has put forward several suggestions which only just fall short of a recommendation that the training boards should be disbanded. The CBI advocates a gradual shift of emphasis, from the grant and levy concept, towards the concept of a training board as a body responsible for the long-term planning of training and for manpower forecasting. The last of these tasks was, in fact, one of the original objectives in the Industrial Training Act, but it does not come high in the list of achievements of the boards.

The CBI would be the first to admit

that levies cannot be reduced too quickly without losing the benefits of the past few years. Another of the problems which the Department of Employment will no doubt be considering in its review is that of capital expenditure by the training boards. Most firms are understandably sensitive about the use of money (which they have contributed) for projects, such as the building of research centres, whose benefit may have been inadequately defined.

SCIENCE ON STAMPS

Hormone to Remember

RECENT Canadian stamp commemorates the 50th anniversary of the discovery of insulin. This, the internal secretion of the islets of Langerhans in the pancreas, is a hormone enabling the tissues requiring sugar for their activity to absorb it from the bloodstream. With a deficiency of insulin, sugar accumulates in the blood and is excreted continuously or intermittently into the urine, chief symptom of the disease known as diabetes. It was the discovery of insulin by the Canadians McLeod, Banting and Best, late in 1921, which was to remove diabetes from the list of fatal diseases, their work resulting in the awarding of the Nobel Prize for medicine to McLeod and Banting in 1923.



1.5 times actual size.

The stamp, Canada's first fourcolour photographic example, shows the colorimeter used by the discoverers in their experiments, the earliest vial of insulin, an old hypodermic syringe which might have been used to administer insulin fifty years ago, some test tubes intended to represent tests for glycosuria and a pancreas preserved in a museum jar.