

Department of Education and Science. Most probably everybody would benefit if the teachers' unions were to turn their backs on the Burnham machinery and ask to negotiate directly with the actual employers in education—the local authorities. In the immediate future, most teachers would be better paid. In the long run, there would be more flexibility. Better still, local authorities would be more vigilant about the

quality of the education for which their electors pay. Who knows? It could even happen that the same electors would find themselves more vigilant as well, with the result that there would emerge a more direct link between the electors and the schools in which their children are taught. Not all teachers will throw their hats in the air at that prospect, but it is something at which to aim.

Way Ahead in Ireland

It will be interesting to see what the National Science Council of Ireland manages to make of the survey of Irish research and development in 1967 which has just been published (Stationery Office, Dublin, 3s 6d). Not so long ago, in 1967, the Irish Government was still smarting from the complaint by the investigating committee of the OECD that "Ireland is among the nations with the lowest rate of research expenditure in Ireland", and there is even a chance that the National Science Council owes its existence, in part at least, to that report. It is courageous, even daring, of the council to have invited such an immediate comparison between the pattern of research and development in 1963, the year for which statistics were collected for the original OECD report, and 1967, before its own undoubtedly good works could have begun to influence events. It is true that the newer survey has been prompted by the OECD and Unesco, but the National Science Council may now also find it useful as a means of picking out the natural lines of growth in the Irish scientific economy. This may be a comfort at a time when the most striking feature of the new survey for outsiders is the Lilliputian scale on which Irish research and development is (or was) carried on.

Between 1963 and 1967 the total amount of money spent on research and development of all forms increased from £3.83 million to £6.49 million, which represents an increase of 42.7 in real terms. This was a period in which Ireland was booming economically, however, so that judging by the magic yardstick of the proportion of the GNP devoted to research and development, Ireland must have seemed for four years to run hard so as to stay still. There is a case for not being too depressed about that, and indeed the National Science Council's survey is in its way a powerful proof that the percentage of the GNP devoted to research and development is only a crude kind of arbiter of policy towards science.

Publicly sponsored research has also grown quickly from £2.1 million in 1963 to £3.2 million in 1967, while the proportion (12 per cent in 1967) of this total devoted to industrial objectives multiplied almost by three in the interval between the surveys. This helps to show that the OECD study in 1963 was pushing at an open door by advocating a stronger government involvement in industrial research. Expenditure by private industry seems to have grown still more quickly, doubling between the two surveys. The National Science Council will no doubt be encouraged that new

Irish industries, especially chemicals and electronic engineering, had already by 1963 begun to make a mark on the pattern of research. For the time being, Irish industry remains almost entirely dependent on its own funds for the support of research, which must also suggest that the recruitment of skilled people will control the pace of development. It remains, however, a sad truth that food and industries accounted in 1967 for close on a third of the 700-odd people working as scientists and engineers in Irish research and development. Even if the encouraging trends of 1967 have continued ever since, it is plain that the National Science Council will have a harrowing time so long as the numbers of people working on scientific enterprises are so small that frequently they must fail to make a critical mass.

CHEMICAL FIBRES

Mergers in the Air

THE talks between ICI and Courtaulds have most of the attributes of a summit conference between cold war giants, something which is almost bound to be the case with the memory of the bid for Courtaulds by ICI in 1961 still rankling. Neither side is making any formal statements and it looks as if the negotiators are in for a long job. As much as anything, the talks have been sparked off by a new spirit of concord after the successful negotiation of an agreement on carbon fibres just before Christmas, when ICI and Courtaulds announced that they would cooperate on the development of carbon fibre composites. Only a few months before, in November, ICI had decided not to go in for the manufacture of carbon fibres until the market was better defined, although it decided to increase its research and development work. Courtaulds, on the other hand, has taken up a manufacturing licence from NRDC, and will be ICI's source of supply. Together, the two firms will work on research and development of composite materials and carbon fibre composites in particular.

But carbon fibres are small fry at present and what the talks will be taking account of is ICI's bid for the Viyella textile firm which caught the industry on the hop the day before Christmas Eve. Indeed, the first meeting was taken to be a courteous call by ICI explaining the Viyella bid. As well as going against the government's standstill on textile agglomeration by proposing to merge Viyella with the Carrington and Dewhurst textile group, ICI's bid for Viyella is at first sight in conflict with the policy, reaffirmed last year, of leaving the textile firms alone.