that which teaches science in secondary schools) so little that they are no longer renewing themselves, that might still have been the case — but at least it would then have been possible to tell where the fault now lies. The danger ahead is even more serious, for there is now every sign that British public education will be made an issue at the next general election some time in the next two years. If what the schools need is some peace and quiet to evolve an educational mechanism for fulfilling their obvious social function, another bout of quarrelling will have the worst possible effect. But if peace and quiet seem unattainable, there may be no choice. □

Oil keeps falling

We should worry about some of the casualties of cheaper oil.

THE price of oil has fallen further and faster than anybody had reason to expect. With the price of a barrel of crude oil hovering above or below $10, those concerned are alternatively cheerful and depressed. In most industrialized countries, the outstanding prospect is that inflation will be further reduced, marked by the further prolongation of the long bull market that the stock exchanges have seen in the past few weeks. Among the unexpected benefits of just this development is that the US Congress, already locked into its attempt to move towards a balanced budget, will have to struggle a little less hard than it had feared.

The other side of that coin is comparatively inconspicuous as yet. It is too soon to declare the state of Texas a disaster area even if Phillips Petroleum is only the latest oil company to announce a reduction of exploration for new oil (by 36 per cent). And for the time being, the threat that municipal bonds sold by communities in Texas and Oklahoma may have to be rated along with less than copper-bottomed investments is probably less immediate than it seems; Texas, at least, may benefit a little if the word gets about that is a little more like other parts of the world. And there are no tears to shed for those oil companies, and the traders who dance attendance on them, that complain they have had their fingers burned by holding stocks bought more expensively; the roundabouts will be back before too long.

The much more serious casualties of these downs of the oil market are developing countries which depend on oil for their export earnings and which have, in the past 15 years, saddled themselves with a load of debt in the belief that they could thereby shake off their dependence for good. Mexico, with foreign debts on close of $100,000 million, is the first in this despondent line. Venezuela and Indonesia are hardly in better shape. What will happen to Iran and Iraq it is hard to tell, except that their mutual war will now be less sustainable. Nigeria has been in trouble for many months already.

All these countries have in common not merely their now-suspended ambition to finance development from the revenue from selling oil but the circumstances that their revenues will fall immediately, while the benefits that may accrue from other developments, reduced interest rates or the increased exports of other kinds that may follow a growth of world trade, will by comparison be long delayed. They are also countries in which the process of development has not begun to moderate the plight of the poorest sections of their communities. In the industrialized world, there may now be a temptation to say that countries such as Nigeria have only themselves to blame for once having belonged to the Organisation of Petroleum Exporting Countries, or that those like Mexico would not now be so much in debt if they had been less corrupt in recent years. But this will not excuse the West, which now calls the shots, from dealing sympathetically and constructively with the problems that have been thrown up. Briefly, they all need more time to pay their debts. It is not a matter of charity but of self-interest. For just as the price of oil has fallen in response to market forces, it will be forced up again by the same forces. □

Visas back in favour

It is good news that the US and Soviet academies are to exchange people again.

THE decision of the Soviet and US academies that the time has come to breathe new life into their programme of scientific exchange which has been defunct for the past few years is a step in the right direction. Much good may come of the new development, especially if all those concerned are conscious of the difficulties that have previously brought similar programmes into disrepute. That is one of the reasons why it may be constructive, even though the US-Soviet agreement has been revived, that the old difficulties should be disinterred.

The first thing to say about the new agreement, as about the old, is that its formally specified quota of visits in each direction amounts to very little. Fifty man-months a year in each direction would be easily used up by the attachment of a few graduate students from one country to an institution in the other. The academic traffic that would be generated between countries such as the Soviet Union and the United States if universities were free to invite interesting people from elsewhere, and if those invited were then free to accept, would far outstrip the provisions now laid down. One of the potentially beneficial features of the new arrangements is that it will no longer be necessary that informal visits of this kind should be counted against the formal quota, but it should be widely understood that the past interchange of people between the two countries, even in good times, is meagre compared with the scale on which professional colleagues would be rubbing shoulders in normal circumstances. In short, there is a long way to go to normality.

The reasons why past experience of the operation of exchange agreements has been disappointing are easily catalogued. First, there is much less demand from individual scientists to travel for an extended period from the West to the Soviet Union. Language is a large part of the difficulty, but so too is the inevitable fear that a period spent in relative isolation from colleagues and competitors may punch an awkward hole in a career. Even so, it is remarkable that so many people in laboratories in the West have spent some time in a Soviet laboratory.

These are the pedestrian impediments to free exchange. The contentious issues of principle that have come up over the years are necessarily more difficult, and will never entirely be exorcised. One perennial trouble in dealings between the Soviet academy and its opposite numbers elsewhere is that the people who may be invited to, say, international meetings are not invariably those who eventually appear. However ridiculous it may be that people who have made internationally acknowledged contri-butions to important fields of research may never have been able to tell their tale to an international audience, people in the West who wish to see the new agreements succeed must not be tempted to use them as a way of teasing the Soviet system by means of repeated invitations to the same cast of characters who are not allowed to travel. Under the terms of the new agreement, this difficulty will be formally avoided by the provisions that each academy will nominate its own travellers, who may then be vetted by the recipient institution, but that will not (and should not) entirely banish hopes that exchanges will soon be much more free. The best route towards free exchange is constructive experience at the modest level now foreseen.

There are also more comprehensive political difficulties that are certain to arise. In the United States, for example, there will be one strong body of opinion that, while the Soviet Union refuses exit visas to those who wish to leave (for, say, Israel), no agreement can be worthwhile (or even consistent with the Helsinki accords). There is much in that view, but this is not the time to press it hard. Similarly, there will be many in the United States who fear that more visitors will mean more secrets lost, but that too is both an illusion and an irrelevance which should be buried for the greater good, at least for the time being. □

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