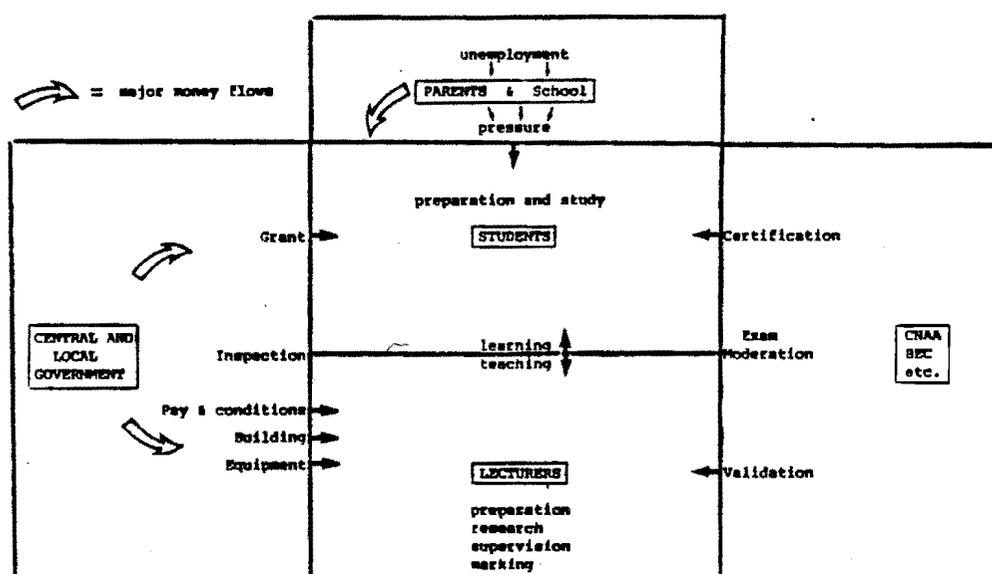


It is my feeling that the overall results of higher education are less satisfactory now than they were ten or twenty years ago. However, any attempt to pinpoint the cause meets with little success. If the cause is not simple and obvious then either the feeling is wrong or the cause is more complex.

Even a simple display of interactions shows a large number of contact points.



SOME FIRST ORDER INTERACTIONS IN POLYTECHNICS

### Some First Order Interactions in Polytechnics

Any or all of these may contribute to the decline in overall satisfaction. It would seem that, of the five major areas shown, only that of the Validation Bodies might be thought of as still reasonably satisfied. The other parties - Students, Lecturers, Parents and Government - are far from satisfied.

The students have problems. Their income in the form of grants is reduced and there is increased pressure to become students. In many cases it is the only real alternative to unemployment. Once with us they are faced with larger classes and less individual help as colleges strive to improve the nominal efficiency shown by student-staff ratios. Teaching methods are altered to economise on staff and materials. Thus the students arrive with better A-level results but simply do not perform as well as they used to. This may not altogether be their fault. There is frequent interference with the teaching process.

The biologically inherited component of learning will not have changed over thousands of years. It seems doubtful that students learn in any **FUNDAMENTALLY** different way than they did - say in ancient Greece. It is no small wonder that if educationalists try new theories on our children the results are in some way inferior. At one time we suffered in higher education from the effects of New Maths. The students may have understood the fundamentals of mathematics but they could not cope with arithmetic, which is what our students in Biology needed for later studies. For some reason the current problem is English. Science students have rarely been great masters of English, but precision and unambiguity should be their aim and students who leave out verbs or misuse the most common words are poor material for advanced courses. Worst of all is the attitude and despondency of many incoming students. They want to be taught rather than to learn and have little regard for excellence. Care and application are not thought particularly important. This attitude is not deliberate and it demonstrates a deep and basic change in their approach. As a result, second best has become their standard and it takes a lot of effort to raise it again.

The problems facing staff are somewhat different. Teaching is a rewarding profession and unlike mechanical tasks is notoriously difficult to quantify. It is best performed by enthusiastic, skilled, and knowledgeable lecturers. The rewards normally come not only from adequate salaries but also from the satisfaction of achieving teaching objectives. There is pleasure to be had when students understand the more difficult parts of the subject and acquire technical skills. In some ways teaching has something in common with acting. Good performances are difficult and take a lot of effort. Like actors, many staff are very sensitive about bad notices. The current trend to reduce the standing of the profession in the eye of the public, to label their efforts trivial, and assign a lower value to them than hitherto will result in a considerable loss of confidence, or, even worse, enthusiasm, and that most valuable characteristic is the one thing which can never be forcibly extracted.

Over the years little has changed in the methods of recruitment to higher education. Staff are still appointed as lecturers on their previous experience, for example of industry or as research scientists. As lecturers their main function is teaching, which is rarely a criterion used at appointment. In that sense then higher education is largely staffed by amateurs. Induction courses are a relatively recent feature of staff development and there is little use made of management training. This may well serve to reduce flexibility of approach to fresh problems.

The stress levels of the profession increase as simultaneous pressure is brought to bear from three sides. The Government's reduction of education funding increases workloads and depresses pay, building work, and equipment purchase. Greater student numbers and their attitude requires greater lecturer effort to maintain standards. Validation bodies appear to be in some sort of diabolical conspiracy to maximise trivial administrative paperwork and interference with normal teaching.

However, the most important interaction, and the one which is probably the basic cause of difficulties between the colleges and Government, is the way in which degree and diploma courses are organised and financed. The validation of courses is done by one organisation and the system paid for by another. The courses are validated by chartered universities, the Council for National Academic Awards, or similar bodies, none of which is directly responsible to Government. However, if the colleges accept students onto courses then the Government, through the local authorities, HAVE to pay fees and grants. Thus the Government which actually pays has little say in how the money is to be spent or even to some extent how much.

No doubt Government would like to restrict numbers, both of students and courses, to those it considers useful and efficient. Both useful and efficient would be defined by them. Such direct control of higher education and research would be self defeating in the long run. Colleges consider that academic freedom is of the utmost importance and can only be maintained by remaining independent and free from immediate predation by any central government with a short term aim of cost saving. Unable to effect any selective control over students and courses, this Government has chosen non-selective reduction of all higher education finance. For the most part the colleges affected lack the experience necessary to cope with this approach so that the long term effects will be damage both to essential sectors and to those which might, in times of great need, be temporarily pruned.

The paradox of higher education is that it is the easy-going attitude to method and research effort which has made it so powerful and efficient in the past. The richness of human resource presents as a haphazard and ill directed whole, but higher education depends on the enthusiasm, goodwill, and high morale of the staff to maintain the highest standards. When looked at from outside it might seem inefficient but in practice it is not. Imposing a rigid system or restricting staff to a few 'economic' teaching methods, regardless of subject, will almost certainly impoverish the system.