CHECK AGAINST DELIVERY

WILLIAM QUEALE MEMORIAL LECTURE

Delivered by the Prime Minister, Mr John Gorton

At the Bonython Hall, University of Adelaide, Adelaide, SA

11 DECEMBER 1969

"EDUCATION FOR MANAGEMENT"

Mr President and Gentlemen :

Twice in the last few months, men from this planet earth have walked the surface of the moon. We saw them on our television sets and we heard their voices in our homes. Now that is part of the history of our times. We are back in an everyday world of our own, coping with everyday problems. But we know that what was previously held impossible, has been shown to be possible. We have seen this gigantic achievement, and it should help us all to strive for similar break-throughs in the more mundane problems which face us.

This, you may say, is a far cry from Education for Management which is the subject of my lecture tonight. This, you may say, has little to do with the late William Queale whose memory we honour tonight and whose memorial lecture it is my very great privilege to be delivering. Yet it is not, in fact, far removed, and let me tell you why.

The targets for man's first landings on the moon were set a decade ago. Studies were made, equipment was designed and manufactured, personnel selected and trained, test flights in space were carried out and the moon flight itself planned on a world-wide basis. At every point management techniques were under ruthless test, and without those management techniques, the moon flight would have failed.

Secondly, the moonshot was a pinnacle of achievement symbolising a new age, and that new age challenges management to seize new opportunities, to adopt new methods, to aspire to new horizons.

William Queale, I am sure, would have agreed with that for he was a man with a vision. It was not my privilege to know him, though his record and his works are familiar things in the Australian story. We are in his debt for that which he did for Australia and we assemble here tonight to acknowledge that.

I chose to speak to you tonight on education for management because of my personal interest in the subject and because I believe, as Disraeli said of England, that "Upon the education of the people of this country the fate of this country depends". Education of all kinds, but not least education in management.

Management is, I suppose, the science of using with the maximum economy, manpower, physical resources and intellectual skills in order to produce the maximum result. The goal of the skilful manager is to produce, or at least to work to, a blue-print or masterplan so that the goal, or goals, are set with absolute clarity, that they are understood at every level of the hierarchy, that each man knows the job he is to do, and does it without interfering with the work of others, as expeditiously as careful planning can provide. And he must be ready to abandon a blue-print, or a masterplan, when new and better methods are proved, or other changes are evident. These are the tasks of the manager and administrator.

I would like, first, to sketch the background to education for management and tell you a little of it's history in Australia. Then, if I have your patience, I will talk of management's role in national development.

For the first half of this century our society continued to develop logically from the revolutions of long ago -- social, industrial, scientific and political revolutions which gave mankind courses to steer and which divided him with "isms" and into communities distinguished by their wealth or their poverty, by their social standards or their technologies, by their political freedoms or their subjection to arbitrary rule.

Two world wars drove mankind fast along these courses, for better and for worse. The forced draught of war frantically stimulated man's inventiveness in material matters. He flew, he learned to communicate across great distances, he discovered antibiotics, radar, the jet engine, the computer, the guided missile, nuclear power and he burst into the space age. These were all extensions of what had been happening.

Then in the last decade or so, he began to separate from his past. It became clear that all around us things were beginning to happen that were not an orderly extension of the past, a refinement and a development of old systems, tested and brought to a level which satisfied the generation into which we were born. We were facing something new.

Peter F. Drucker, Professor of Management at New York University's Graduate School of Business has this to say :-

- 3 -

"The last half century has been an age of continuity.... the towering economic achievement of today, the affluent, mass consumption economies of the advanced countries, their productivity and their technical powers, are built foursquare on Victorian and Edwardian foundations and out of building blocks quarried then. They are, above all, a fulfilment of the economic and technological promotion of the Victorian and Edwardian eras and a testimony to their economic vision.

"Now we face an age of discontinuity in world economy and technology...it will be a period of change - in technology and in economic policy, in industrial structures and in economic theory, in the knowledge needed to govern and to manage... While we have been finishing the great nineteenth century economic edifice, the foundations have shifted from under our feet."

Drucker goes on to make the point of the need for "knowledge workers" as distinct from the emphasis on "manual workers". So we come face to face with education and management.

Look around us and what do we see? We see a world very different from the one our fathers knew, from the one we knew as children and that is not because it is just so much older. We are in a new age of burgeoning technological and scientific change. We are in a new age of discussion as to how best to use the new tools, the new knowledge, the new technologies, with which we are now provided.

This is the task of the managers, and the hardest factor to cope with in an advanced community like ours is the "knowledge" explosion. The hour still only contains 60 minutes and the day only 24 hours - but the amount of paper work which has to be dealt with rises in an exponential curve. As measured by manpower, number of periodicals or scientific papers, science is growing exponentially with a doubling time of about fifteen years. Almost ninety per cent of all scientific endeavour in the history of mankind has been undertaken during the past fifty years. During the past fifteen years the same number of scientists were produced as existed during the entire previous period of science. Exactly the same is true in the social sciences and history. Where can one begin to burrow through the mountain of paper to make an informed judgment, except with benefit of computer?

It is important to understand these changes and opportunities, for as we understand them, so we shall shape our skills and condition our hearts and minds to extract the greatest benefits from them. Therefore, we must look to education even more than we have in the years gone by.

As our pioneer forbears searched for water to open up an arid land and as our farmers planted the first grain so that they could live, so must we, in much the same way, turn increasingly to education to equip our nation for the long journey ahead. And education, by itself, is not enough. It is how we apply education to the brave new world of the seventies, the world which our children will inherit, that will determine our future and our fate, in a society where knowledge grows and skills abound.

It is true, I think as Drucker postulates, that the most rapidly growing area in international trade is probably no longer trade in goods, but trade in technology, in patents and licences. This inevitably is creating a new economic and industrial environment for which we must be educated and which we must know how to manage.

In Australia, as elsewhere, knowledge is growing in importance in relation to experience. This is inevitable but the trend is not absolute. There will always be some things that only experience of life and the years can give. Computers cannot dispense wisdom. Yet, by and large, we have to accept that experience without knowledge is no longer of the value that it was. By the same token, knowledge without experience has a diminished value.

There are, I think, five elements we need to make up the ideal for our education system.

- The first, naturally, is an opportunity for everyone of school age in Australia to have equal access to opportunity for education, provided they are good enough academically. This, by and large, we have.
- The second is adequate resources in staff, buildings and equipment to do the job. The problem is identified; the final solution is not.
- The third is a tertiary education opportunity for all who have the ability to use it. This depends on resources.

- The fourth is a proper adjustment of education methods and systems to meet the demands of the new age. This need is recognised, but not yet satisfied.
- The fifth is more intensive research into fundamentals, into priorities and methods. This, too, is recognised. Much remains to be done.

Today forty per cent of the Australian population is under twenty-one and therefore of school and university age. And the young are staying at school longer. The percentage staying on beyond the age of compulsory attendance is nearly double that of ten years ago. University enrolments have risen in ten years from 47,000 to 107,000 in 1969 and are expected to reach 127,000 by 1972.

I quote these facts to show the growth in higher education and the pressure that is on the system.

There has been, in recent years, an increasing direct interest by the central government in education. The responsibility for education outside the Commonwealth territories is primarily one for the States but for financial reasons there is an interlocking of activity between the Commonwealth and the State Governments. There is also constitutional provision for the granting of financial assistance by the central government to the States on terms and conditions approved by Parliament.

Under these arrangements the Commonwealth is able to make significant contributions to education in Australia.

I do not want to bore you tonight with too many figures, but may I quote just a few to illustrate the point of increased Government interest in education.

The Commonwealth Government is spending on education almost five times as much per head of population as it was ten years ago. The amount has gone up from $4\frac{1}{2}$ a head to 22 a head. The total has risen from around 40 million in a population of nine million to 265million this year in a population of $12\frac{1}{4}$ million.

At the same time, the Australian States have more than doubled their net expenditure on education, per head of population, in the last ten years and they are now committing nearly one-third of their total revenue and loan moneys to this end.

- 5 -

All this has not been enough to solve the problem, but there are many other calls being made by society on the resources of the community, and we have, in education, at least been advancing.

In tackling the range of problems we face, and being mindful of the five elements for an ideal system which I have mentioned, the Commonwealth and State programmes have touched the whole area from pre-school to postgraduate and adult education.

It is appropriate for me, I think, to confine myself largely to the tertiary level for this is where the established education system and management training come closest together.

A good general education is, of course, basic to any professional competence, but it is at the point where specialisation has taken place that management training is most needed. We must ensure that the expert is not "grooved" or his vision narrowed by the blinkers of his specialisation.

In talking of management training at the tertiary level, it may be appropriate for me to mention here that the first university to introduce a course in commercial studies was the University of Adelaide which had an Advanced Commercial Certificate in 1902.

The University received a benefaction in that year of 1,000 from Mr Joseph Fisher, which was to provide an income for "the promotion of the study of commerce in the University". The need was justified on rather negative grounds as was made clear by the inaugural Joseph Fisher lecturer who said :-

> "The slow starvation of hundreds of young, briefless barristers, and the forlorn outlook of scores of 'general practitioners' relegated to the back block townships, must eventually work a cure by giving pause to the enthusiasm which creates these in such profusion. Their places would be more than supplied if it were possible to offer a truly educational course having a direct bearing on business life equal to that lavished on the professions. "

Well, we've come a long way, I suppose, because frankly, I do not know of any starving barristers today and most of our GP's 'go bush'' only by choice. Adelaide's first commercial certificate was followed by diplomas and degrees and commercial studies available in a variety of courses eventually became part of our tertiary education system in all States. The concept of management training as part of

commercial studies was introduced in a limited way at a much later date.

Now I come to the resources we have today for management training, either as part of, or in addition to, commercial training in the higher levels of our education systems.

The most relevant management education courses are for Master's degrees in Business Administration at the Universities of Adelaide, Melbourne, New South Wales and Monash. This year the total enrolment at all of them was 406.

Then there are courses, full-time and part-time, for diplomas in management, in business studies and business administration at some of our advanced colleges of education and our leading technical schools. Something like eighteen institutions are currently providing these courses over the whole of the Commonwealth.

Supplementing these courses are others with which industry itself is closely associated. For instance the Australian Administrative Staff College at Mt Eliza in Victoria, the Summer School of Business Administration at the University of Melbourne and the Institute of Administration, run by the University of New South Wales at Little Bay.

Other universities have plans in this field of business administration ranging from studies at Diploma level to a Master's degree.

Now all this is good up to a point. You will see that the existing facilities are mostly for undergraduate studies. These are essential and there will have to be more of them. But when we come to a discussion of the nation's future needs at postgraduate level in management we find ourselves in the middle of a continuing deb ate. Should each Australian State and the Capital Territory bave its own university or its own College of Advanced Education staffed and equipped for this purpose?

Or should resources be concentrated in one or two institutions of excellence? Should we accept the problems posed by location and possible interstate jealousies for the sake of a concentration of effort and staff and equipment.

I do not profess to know, but a decision has to be made and made without too much delay - and for myself, I incline towards the avoidance of too much duplication. But this is a problem to the solution of which managers themselves should devote their thoughts and decide their attitudes.

In some respects, Australia has been slower than some other industrial countries in its development of management training. The first Master's Degree in business administration was not available until 1962 and our education resources are not yet fully geared to the surge in national development which is upon us, particularly in the mineral industries.

Until about eight years ago, an Australian business executive who wanted management education at the highest level had to go abroad and usually he went to America, to renowned institutions like Harvard and Stanford. Many still do.

And yet, for years before that we had shown the world we could grow the best wool, wheat and meat in the world, we could build aeroplanes and ships and develop major industries. Some of our scientists and medical men had been pre-eminent in their fields and of world-wide reputation. Australians, in fact, were proving they could succeed in any company.

But they had little opportunity for refining their administrative skills. The specialist was in his slot. There was little incentive for him to broaden the base of his management skill.

Now we are seeking to overcome that. Industry at large is beginning to recognise it - as the Institute of Management did long ago. The demand from traduates and undergraduates for management training is rising sharply. So too is the demand from industry.

I envisage the solution emerging as the result of joint development by governments and industry. Most of you will be familiar with the decision the Government made in May of this year to institute an inquiry into Australia's future needs in the field of post-graduate education in management and how best these needs could be met.

This followed the study made by a panel from the Manufacturing Industries Advisory Council which set the future needs of industry as high as five hundred Masters of Business Administration a year.

I believe, here, we are starting at the right point.

I turn now to management for national development. The size of the task in Australia hardly needs restating before a distinguished audience like this, for you are all, in your respective spheres, deeply involved. It is primarily an exercise in responsible government and "responsible government" as the late Sir Frederic Eggleston once said is "the attempt, never completely successful, of free democracies to secure in an integral process an effective forum, proper consideration and decision and effective execution".

I see it as an exercise at three levels. First we have the application of political principles to the formation of policy by governments.

Then there is the administrative arm of government, which is non-political and continuous, and which provides the tools governments need to do the job. It has vast skills and inherent qualities of management. I refer to the Public Service.

And finally there is private enterprise which makes the heart of a nation whole. This we might define as a huge, sprawling, incredibly diverse association of individuals and communities, bound only by economic laws and subject to economic sanctions.

Let us look for a moment at the political level in the exercise of responsible government. No political philosophy can succeed in a democracy (though it may survive) unless it has a concept of management which is based on the human values of the individual, a respect for his liberties and an understanding of the forces which motivate him. There must be incentives to work and proper rewards for labour. The opportunity to live without fear and in dignity must be his.

In our early civilisation, man's needs were few. They were concerned with subsistence and survival. Management was a primitive exercise in looking after oneself. Today those needs still are there but they exist in a new environment which is made complicated and demanding by man himself because of the development of his knowledge, his skills, his inventions and his innovations.

A political philosophy has to encompass in this modern age full regard for the liberty of the individual and also recognise a framework of society in which that liberty can exist. It must be committed to the security of the social system in a world caught precariously between the eternal values and the forces of destruction.

It has to be flexible and it cannot be so if it does not accept the virtues of compromise. Henry Clay, in writing of the Federal system in America, said compromise was the cement that held the Union together.

"All legislation", he explains "is founded on the principle of mutual concession... let him who elevates himself above humanity, above its weaknesses, its infirmities, its wants, its necessities say, if he pleases, 'I will never compromise'; but let no one who is not above the frailties of our common nature disdain compromise".

That, I am afraid, is commonsense, though compromise must never involve abdication from principle. It seems to me that, in meeting the challenge of the change around us, we have to be concerned, at political level, not only with the art of compromise, but with a fuller understanding of how to manage the "knowledge worker" of whom I have already spoken. He needs and expects more than just "a living." He must be challenged to achieve greatness in his own field, not so much by people as by seeking to attain objectives = objectives which others may regard as unattainable.

Governments have the task, in a management sense, of defining the objectives of a society. In material terms those objectives in Australia can be summarised quite briefly.

- . We want to see Australia free, independent, secure and prosperous.
- . We want people and capital resources to develop this continent.
- . We want to increase our self-sufficiency at home and enlarge our markets abroad.
- . We want to play a responsible part in the community of nations with a proper recognition of our regional responsibilities.
- . We want to provide the greatest variety of opportunity for self-fulfilment and purposeful living to the individuals who make up our nation.

Those objectives may be as old as our sovereignty, yet they are constantly taking new forms. New objectives are also emerging which are less tangible but of real importance, but I will come to them a little later.

I have spoken a good deal on the political level of management in national development, but perhaps I may be forgiven because of my direct involvement in it.

The second level I want to talk about now is the Public Service. This is the link which joins succeeding governments and it has management responsibilities of a high order.

While the politician has to make the ultimate decisions and is accountable to his peers and his constituents for what he does or does not do, top management in the Public Service still has weighty responsibilities. This is where the translation of policy decisions into administrative action, advisory functions and a whole range of support activities exist. Facts, figures, analysis, assessment and advice must flow continuously to the Cabinet, the Ministry and the Parliament.

I believe the Service performs these tasks well. Its probity is unquestioned and its record second to none. The officers of the Service are part of the new breed of "knowledge workers" as well as the architects of management techniques in government. The Service has come a long way in the second half of this century. University graduates are joining in greater numbers and occupy many posts in the higher echelons.

It was not always so and in the first thirty years or so of Federation, entry was by examination at the age of fourteen or thereabouts. This led W.K. Hancock to write in 1930 :-

> "Democratic sentiment applauds the sound argument that every office boy should have a chance to become a manger and perverts it into a practical rule that no-one shall become a manager who has not been an office boy."

I quote this to show that in the administration of government, a vast transormation has already taken place and the process is still going on. The higher educational qualifications in the Public Service and the training in management practices which the Serivce provides internally and externally are powerful reinforcements for the system of responsible government.

In recent years the cross-pollination of industry and the Public Service at officer level has been increasing. The fact that industry now turns frequently to the Public Service in its search for top executives, top managers and specialists is a tribute to the system and the quality of the officer it attracts and trains. Similarly the opportunities the Public Service itself provides do attract recruits from industry.

- 12 -

·-·-· ...

In this sophisticated, twentieth century world, I do not believe the Public Service should be separated from industry by any significant barriers or artificial divisions of skill providing the traditional rights of the public servant are protected. After all, the differences between the responsibilities each accepts and the service each provides are not very great.

The real barrier has been the non-transferability of superannuation. To remove this barrier the Commonwealth Government has accepted the concept of "portability of pensions" - a clumsy phrase perhaps but one which means that, subject to certain conditions, a Commonwealth public servant does not lose his superannuation rights if he transfers to different spheres of Commonwealth employment, to the State public services, to the universities or to industry. It would seem eminently sensible for this to become a general principle in all sectors of employment. Though I know the industry has reservation as to this.

May I now take the third level of activity in managing for national development. I refer to private enterprise. This is your territory, gentlemen.

Now private enterprise has provided a great deal of the thrust that has taken Australia to the point of development we are at today, and it is indeed the base of our free enterprise society.

It was private enterprise which opened up our rural lands; it was private enterprise which gave us our manufacturing industries. It was private enterprise which first drew from the earth the mineral wealth that today has given a new dimension to our growth, our export opportunity and our national economy as a whole.

But it has not, and I probably need not remind you, done types things exclusively on its own. Governments had to create a climate of opportunity and indeed to provide important incentives. This they have done, and through this we have seen the development of a partnership, ragged though it may appear at times, between the public and the private sectors in order the better to **attain** our national objectives.

It was private enterprise, too, as I told you earlier in my historical reference to education for management, that inspired commercial education at the tertiary level. It was also informed private enterprise which began to advocate higher post-graduate education for management. But private enterprise in my opinion, is not pulling its weight in one important field; research for industry has been too much dependent on Government finances.

I say this frankly because I think it merits your consideration and because it seems to me that research should have a very high priority when we are working out which way we will go in the next decade. This applies to management needs as well as management policies.

An analysis by Dr Peter Stubbs of the Institute of Applied Economic Research at the University of Melbourne showed that while the Australian research effort overall was small the percentage contribution made by the Government sector to the total amount spent was far greater than the percentage contributed by the Governments of other countries in their own economies. The countries he selected for comparisons were the United States of America, Britain, Belgium, France, West Germany and Holland.

Of the estimated gross national expenditure on research and development, the Government sector in Australia contributed around 73 per cent and the next highest government contribution was in Britain where it was 64 per cent.

Dr Stubbs makes it clear that in this field Australian industry, that is the private sector, has played a very small role both in its proportion to the Australian national effort and in absolute terms when compared with other industrial countries.

I bring this to your notice because if we are to grasp the opportunities the future holds, we have to be inventors and innovate and it is top management which has to frame the policy towards innovation. By innovation I mean the act of bringing invention to fruition, the development part of "research and development". Invention we know as the act of creating a new product or process and Australians have a good record here, but development of an invention to the point where it becomes commercial does not occur in Australia to the degree that it should.

No-one can be an innovator without thorough research and a study of all the possibilities and no-one can be a successful innovator without management skills.

We need the most advanced and specialised managerial skills we can attract. There have been regrettable cases in the past when citizens have had abundant gifts to offer but they have been unable to fit into already existing patterns of organisation. No matter how radical we may think ourselves, most of us are deeply ingrained with conservatism in organisational matters.

An example is that of the Greek town planner and architect Constantinos Doxiadis. Dr Doxiadis was a leading architect in Greece before the Second World War, and in that war he led the Greek underground and was awarded the British OBE. After the war he was a Cabinet Minister and directed Marshall Plan operations in Greece. Following a change of government in 1951, he lost office and decided to migrate to Australia.

Once in Australia he found that technical difficulties about qualifications prevented him from contributing as much as he would have liked and for two years he grew tomatoes in Western Australia. He wrote several books on town planning and in 1953 returned to Greece. He made one more attempt at Australia in 1956 but was unable to find an appropriate post for his talents.

Since then he has founded his own university in Athens, and has begun massive town planning projects in Greece, in Philadelphia, Washington and Louisville in the US, in Baghdad and Khartoum, in En gland, South America and Asia. Only Australia has made no use of his genius. He won the coveted Aspen Award and is a member of the American Academy of Arts and Sciences.

I would like to think that if Dr Doxiadis were to come as a migrant now, with our growing sophistication and our recognition of the need for advanced managerial skills, he would not be rejected. But I cannot be sure.

I put it to you, therefore, that when we look at our management standards and the contributions which come from the public and private sectors, we should also look at our research needs and explore ways in which government and industry can come closer together. Some progress has been made in recent years and the Australian Government has made finance available through special committees for both fundamental research and applied research in industry. But I believe there is room for more direct activity by industry and the field of development and application of new inventions in techniques and processes.

Given wide-ranging and effective research, I believe we then have a solid ground floor from which the practitioners of the three levels of national management can operate. These levels, as I have explained, are represented by the politician - both in government and opposition - the Public Service and private enterprise. How well they fit together is the measure of our capacity toget the job done. I believe they fit remarkably well and we see this across the whole panorama of national activity today.

When I spoke carlier about our material objectives, I spoke of a different, non-material range of objectives before us. These may be stated simply as the objective of a more satisfying life for our citizens.

In concerning ourselves as a people, with what makes for a more satisfying life, we have to admit that we are mostly only vaguely interested in what is happening to our environment, and what is more important what, indeed, we are doing to it. The sins of commission, I think are perhaps as great as the sins of omission.

We - all of us as citizens - pollute the very air we breathe, we savage our unique wildlife with little shame, we slay our fellows on the roads with monstrous carelessness and we accept the congestion of our cities as though urban sprawl was the fault of somebody else. We blame everybody but ourselves for the grey areas in our daily lives.

You may ask: What has all this to do with education for management? What has this to do with education for national development? I think it has much to do with those things. For the success of government efforts in this direction depends heavily on an educated public opinion, on the breaking down of the barriers of "it doesn't matter" and "I don't care". This is where private enterprise, which I have loosely described as a "free-acting association of individuals and communities" has to make up the partnership and take up the challenge. It is a challenge to the "knowledge workers" and the managers to help create the climate in which an articulate public opinion can flourish and where people will come to say simply "I do care" - and where as a result a more satisfying life will be the more easily attained.

It is a brave man, indeed, who is dogmatic about the kind of people and the kind of nation we will be in the next century, but as we move towards its beginning, I believe the desire for a better life and a sense of involvement in the making of a nation are things close to the heart of most Australians.

These things we cannot achieve by some kind of imperial rescript. They will come to us if we make a conscious effort to read some of the signs around us, as I'm sure William Queale did in his day, and if we keep the human values straight. An educated public opinion is our starting point. So tonight, Mr President, we have looked historically at our record in education for-management and the need to do better if we are to succeed in a world of change. We have looked at the base structure of education development in Australia and the elements of government and the people which form the management team for national development. We have looked at our national objectives in material and human terms.

And we have grounds for confidence, but none for complacency. I believe that if governments and people continue to question and to strive, and are not bound by the concepts and practices of the past, we can stand up to the weathering of the centuries.

You may ask "What of the future if we do all these things?" I am no prophet but let me tell you what I see, from the shape of things as they are :-

- I see Australia as a nation of perhaps twenty-five million people by the end of the century. That is double our population today.
- . I see Australia as a society retaining political freedoms and using that freedom plus skilled management to provide economic freedom and more opportunity for creative self-expression.
- I see Australia as a nation of explorers probing the seas, and the discoveries of the earth, and seeking new and better ways of providing more and better material things.
- . I see Australia developing in an environment we seek to protect and not destroy.
- . I see Australia as growing in tolerance, as increasing in the realisation that there is a common and a noble task for all sections of society to work for in harmony.

I conclude, Mr President, by saying just this. We are all practical men. Of necessity we have to be. But we can have our dreams. And I say "let us have those dreams".

Thomas Jefferson, a long time ago, said - "We must dream of an aristocracy of achievement arising out of a democracy of opportunity".

You and your successors, I and my successors, have the chance in this nation to translate those dreams into reality.

I thân k you.

- 16 -