The title as given to me suggests that I should consider at least, if not evaluate, education in Singapore in the perspective of our national concerns and of international developments. Before this can be done, however, it is necessary to be sure that all of us who are participating in this seminar are sufficiently informed about the nature of the education which we enjoy. So varied are the experiences of individuals in this field, depending on the teachers they have had, the kind of parental exhortation or criticism which they have received regarding schooling, or the environment of the school or schools, at which they have spent more than a few years of childhood and adolescence, that there are bound to be many persons with partial impressions of what education actually is and what it should do for them.

Education in Singapore rests on a tripod of objectives with its three legs firmly based on three main principles, namely, provision of equality of educational opportunity for all, attainment of unity in a diversity of ethnic origins and mother tongues and the development of human resources and human skills through education which is relevant to the needs of the country.

The rationale for the three objectives was given fully in the Education Report 1959; the year when the PAP Government first came to power. I quote:

"in a self-governing country which must give equal treatment to its citizens, equal opportunity means freedom of choice of the medium of instruction for the citizens' children, whether it be Malay, Chinese, Tamil or English. Having made this choice, the parent is assured that the standards aimed at are the same in all schools, both Government and Government-aided, with common curriculum and syllabuses, with teachers trained in the Government Teachers' Training College and the same degree of supervision exercised by the Inspectorate of the Ministry."

"To act as a bridge to span simultaneously the four streams of education and to unify a community composed of different races, exposed to communal suspicion and prejudices, the setting up of
one national language is vital. A common link for undivided loyalty
to one another and to the State is provided in the National
Language.”

“The third base of the Government’s education policy is designed to
equip the youth of the State with requisite skills, aptitudes and
attitudes for employment in industry. The economy of the State can
no longer be sustained by entrepot trade alone. In the re-
orientation of the economic policy of the State, industrialisation is
vital. Industrialisation is the key to survival. To increase industrial
productivity, potential skill must be trained. So a start in developing
the latent skills must be made in the schools. The new education
policy would ensure that students have increased facilities for
training as craftsmen, technicians, scientists and engineers.”

More than a decade and half have passed since these objectives were first
enunciated. How much of the promise inherent in these statements has
been fulfilled?

Equality of educational opportunity

The principle of parity has been given the widest possible interpretation to
cover every aspect of schooling. Quantitatively at least, the goal of
equality of educational opportunity was fully achieved well before the end
of the sixties. Free universal primary education for six years is presently
available to every Singaporean who seeks a place in the various
Government or Government-aided schools. Parental choice determines
admission to a school belonging to any one of four language streams. The
response from parents to this provision has been overwhelming, close on
a hundred per cent of the children in the correct age group are enrolled in
regular primary one classes each year. The negligible minority not
enrolled in such classes are mainly handicapped children for whom places
are sought in special institutions, run by charitable associations. In this
respect, the handicapped are still at a disadvantage.

In 1961, an effort was made to provide common syllabuses in the four
language media of instruction for all the traditional school subjects. By
1964 common syllabuses were also available in the newer technical
subjects taught at secondary level, making it possible for every pupil,
irrespective of the language stream in which he pursues his studies, to
choose from the full range of subjects for those best suited to his
individual capacity and ability.

Harmonisation of benefits has also occurred in the area of physical
facilities, in the provision of teaching and supervisory staff and in the
stipulation that all schools should maintain comparable standards and levels of expectations with regard to pupil achievement. This last mentioned has been particularly stressed in the most recent version of educational policy.

Today, the qualifications of school-leavers from the four streams are accepted on par since all children sit the same examination, whether at the primary school stage, the secondary or the post-secondary stage.

Equality between the sexes is an established fact. Nearly all government schools are co-educational and admission to each further stage of education is strictly by merit. Pay scales for men and women in the education service (as in other services too) are the same.

Socio-economic discrimination in respect of education is reduced to the minimum by generous government scholarship schemes and loans of free textbooks. Thus no needy child needs to be denied education because of inability to meet the concomitant costs. No racial discrimination exists in Singapore.

**Unity in a diversity of ethnic origins and mother-tongues**

A primary concern of the PAP Government right from the beginning has been that the three main ethnic groups comprising Singapore’s population should not only be tolerant of one another, but should also become a cohesive whole. This concern has been pursued assiduously from the very beginning when the present Government first took office. The daily flag-raising and flag lowering ceremonies, the daily pledges to the country, the existence of integrated schools, the pursuit of bilingualism, the annual youth festival and other common activities all these testify to the seriousness with which the effort continues to be made to foster togetherness and loyalty and to break down communal barriers. An increasing number of school leavers is at least capable of communicating orally in a second language.

The study of Education for Living as a subject in primary schools is aimed at teaching specific values which will draw up-and-coming generations of Singaporeans into an appreciation of a common identity and common goals.

**Development of human resources and human skills through education which is relevant to the needs of Singapore**

Singapore’s economic success and industrial progress have been frequently noted by economists, visiting experts and the foreign as well as the local press.
Since it is the quality of the labour force which has contributed in large measure to this success, it may be assumed that education in Singapore, which has helped to produce the manpower to fill the ranks of the workers and the professionals, has passed the test of relevance to the social and economic needs of the nation. The need to expand the economy through a programme of industrialisation has been steadily met. All this has been made possible by a systematic expansion and diversification of education at secondary and tertiary levels.

At the secondary level, the introduction of technical education was made as early as the mid-sixties. Centralised workshops were setup in the cause of economy. All male students in secondary I and II, and half the number of female students at the same level, undergo some basic training and exposure to technical courses at the centralised workshops. Those with aptitude for technical studies may opt to study in the technical streams at upper secondary level or at secondary technical schools.

The setting up of the Industrial Training Board (ITB L_ in 1973 was aimed at ensuring a closer collaboration between Government and industry in the training of vocational workers so that graduates from Vocational Training Institutes, which were directly under the ITB, may be trained in skills which fit in with the needs of the industrial sector. Vocational institutes provide training at both trade and artisan levels. Baharuddin Vocational Institute specialises in manual and applied arts.

Commercial education, which takes the form of a two-year programme, superimposed on two years of general education, provides another channel for diversification. While a few secondary schools offer commercial subjects and one school teaches them up to pre-university level, commercial education remains largely an activity of the Adult Education Board and private commercial schools. Nevertheless, it is receiving greater attention at the AEB currently so that those pupils, who desire to pursue such a course of study, may have a chance to do so without having to undergo the burden of heavy costs which private schools charge.

At the tertiary level, too, expansions of facilities and diversification in the range of courses offered have been noticeable characteristics of development. The campuses of the Polytechnic, the Ngee Ann Technical College and the University of Singapore are all being enlarged, either on new sites or in loco, in order to cope with expansion. Courses offered at these institutions and at Nanyang University provide preparation for a wide variety of occupational choices. They range from the more traditional academic subjects in the sciences and the humanities to those with strong vocational and professional emphases. Examples of the latter are courses in engineering, law, urban planning, architecture, accountancy, business administration and social work.
Last, but not least, is the Institute of Education which is the sole institution for teacher training. Its programme comprises courses, not only for pre-service training, but also for in-service training and postgraduate research. While pre-service training remains an important responsibility of the IE, much greater thought is now given to the need to offer teachers an avenue for continuous self-development and improvement. This is more particularly necessary to-day in a world where knowledge becomes rapidly obsolescent. To continue to teach knowledgeablely, the teacher has to be renewed both academically and professionally. The Advanced Certificate in Education Course was introduced last year in recognition of this need and plans will continue to be developed in keeping with the concept of career-long education.

From the description given above of the various provisions made to realise the main goals set for education, it may be seen that, in so far as physical resources go, an ample build-up has been made. Against the international perspective, the average school in Singapore is better provided and equipped than an average school even in some advanced countries. Furthermore, a great many activities and programmes have been devised to meet the qualitative demands of education. While we may have our moans and groans about particular aspects of schooling, we may find, on closer examination that the same or highly similar points of dissatisfaction are mooted also to a greater or lesser degree in other countries with regard to the schooling they provide. (The fact is that education is subject to certain constraints such as financial capacity to bear its costs. Social changes tend to affect educational outcomes. Education is largely an enterprise launched in faith: the gestation period before results are seen is long. Effective control of the variables which influence results has yet to be achieved. It is also difficult, from the utilitarian point of view, to predict what skills would be necessary for the period ahead, simply because social changes occur very frequently with the passage of time. This has caused some educators to say that education should train young people for adaptability and "capability", that it is no longer important to specialise until after the individual has completed the average span of schooling.

Let us examine some of the more familiar complaints. One is commonly made about the restrictive nature of the selection process. In Singapore, there is a succession of examinations the PSLE, the 'O' and the 'A' level examinations. Success of an acceptable standard at each level must be achieved before entry to the next is permitted. Not as many are admitted as those who seek places at each next level. In view of rising levels of performance and aspiration, some would advocate a liberalisation of the selection policy. But there is no simple answer to the question of who shall be chosen to benefit from education. So long as education is viewed mainly as an avenue to more material benefits and not as something to
be enjoyed for its own intrinsic worth, the economic constraint has to be applied to the number of places which a country may rationally provide. In countries such as India and the Philippine, the result of a liberal policy has been a glut of educated unemployables. Australia, which, a few years back, offered free education for all students up to tertiary level, is now in the process of reversing this policy, as its financial implications have affected other areas of development.

Another criticism frequently bandied around has to do with the content and methods of study. The fact that content has to be changed or modified is not easy to accept, especially where a system maintains itself best on routine practice. Change is bound to introduce an element of disruption into the system and a capacity to absorb this is necessary in order that progress may continue to be maintained. And yet educational change is often necessary to keep up with developments on other fronts.

Educational change is difficult to measure. Its evaluation tends to be subjective. Though the results of most innovations in education need time to be fully known, evaluation is made more in the hope of instant results. Innovators of curriculum change also have a problem in that they cannot really ensure that the course of change will 'run smooth, though they may have sound objectives and have planned for controls on the direction and methods of implementation. Such changes are often affected by social or political changes. A change in the philosophy about what education can or should do can alter what happens at school level. In Britain, for example, the curriculum offered at comprehensive schools has been a subject for debate for years, with comprehensive schools favoured or out of favour, depending on whether a Labour Government is in power or not.

Practice in the classroom can be similarly affected. Streaming or de-streaming, that is, teaching homogeneous or heterogeneous classes, has come and gone, each in its cycle, since the turn of this century as surely as women's fashions change. The one or the other practice is advocated according to whether a conservative or liberal view of education prevails. Methods, however, have no merits per se. Much depends on the practitioners who use these methods or carry out advocated practices. An unintelligent application of a method, no matter how good in theory, will not produce the results desired.

This issue takes us to the third complaint frequently mooted, namely, the inadequacy of the teaching force when measured against both quantitative and qualitative targets. Quantitatively, there are never enough teachers. The best manpower planning suffers from unpredictable changes due to social change. Locally, it was anticipated that by the year 1970, the supply of teachers would have reached sufficiency and, indeed, it did seem so just about that time, but the years of successful industrialisation highlighted the material advancement which knowledge
of English seemed to offer more surely than knowledge of other languages. So more and more parents began to send their children to English-medium schools. The consequent shortage of teachers in the English-medium is a phenomenon with which we are still grappling to-day.

Quantitative considerations in the in turn affect qualitative targets. The greater the shortage, the less the ability to ensure quality. Those recruited for teaching during a period of need include among their ranks a greater number of persons for whom teaching is not a first choice: the pre requisites applied in respect of admission qualifications are minimal. I have often remarked that teachers who do not love teaching cannot teach children to love learning; teachers who do not love learning cannot teach others how to learn; those who have no insights cannot bring insights to others. If there is no concern and attitudes are lax, a disciplined society will not necessarily result.

I have dwelt at some length on the nature and objectives of education in Singapore. I have drawn attention to these problems noticeable in the local context and have shown them to be problems which are concomitant with socio-economic or socio-political changes and which will continue to exist so long as the educational system remains and, necessarily so, not as a unique concern, but as a subsystem of the whole social system. Hence they are problems which are common to all countries developing or advanced. The point to be made here is that, while there is still much room for improvement in the process and products of education, Singapore has already achieved the necessary infrastructure for education to progress from strength to strength, given the will to see to it that national objectives will be translated into the best possible qualitative terms.