This paper offers a brief overview of the Australian education system and compares it with the United States system of education. The Australian economy presents no threat to U.S. hegemony, but its education system presents an interesting contrast. The paper describes the following features of the Australian education system: governance; school organization; private-school aid; the national curriculum; high school completion rates; examinations and credentials; higher education; aboriginal education; distance learning; devolution of authority; equality of opportunity; non-English-speaking students; and the status of the teaching profession. Education and training in Australia has been based on the labor-force needs of an industrial economy, a pattern that is now obsolete in a postindustrial economy. In response to the change, the Australian education system has taken on some characteristics of the American system, such as greater high school retention rates accompanied by a flow on to tertiary institutions, and increased total numbers of teenagers enrolled in full-time education. (Contains 7 references.) (LMI)
Australian Education: An Overview of a System adapting to a Post-Industrial Economy

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Preamble

An educator from the antipodes upon becoming familiar with the US system of education cannot but be struck by several features which mark the system as uniquely different and in sharp contrast to one’s prior experience.

It is clear from the high levels of student participation and from the high degree of citizen participation in decision making, fund raising and management of schools that Americans place a high value on education. This view is further reinforced when one becomes aware of the volume of public and private money that flows into the system. Although the long-running debate over standards continues, the nation retains a high regard for education and faith in schools and educational qualifications remains strong.

A newcomer is impressed with the ability of the American school system to engage such a high proportion of the teenage population. Over 85% will eventually receive a high school diploma or its equivalent. Further to the point, graduation rates for minority students are of a magnitude such that, if transposed to the Australian situation, they would appear, not as disadvantaged groups but as members of the elite (Windschuttle, 1988). One is struck by the wide range and the openness of access to higher education. Despite what might appear to an Australian as crippling tuition and boarding fees in US higher education, the system accommodates a growing numbers of traditional and nontraditional students. An increasing proportion of high school graduates (and their families) are prepared to make the investment in time and money, and forego income, in their quest for a
baccalaureate degree. This at a time when the value of such a degree is being questioned.

The above reflections occasioned the following article which is designed to give a brief overview of Australian education and provide at least a limited basis for comparison with the US system of education. While educational reformers have suggested that the US could improve its educational system by emulating other countries, little attention is paid to the Australian system. Perhaps Japanese education has been singled out because it appears to contribute in large measure to Japan's economic success. The Australian economy poses no threat to US hegemony but its education system presents an interesting contrast.

Responsibility for Schooling

Under the federal system of government in Australia, responsibility for schooling is shared between the six States, two Territories (Northern Territory, Australian Capital Territory) and the Commonwealth Government. State Ministers of Education have constitutional responsibility for the provision of schooling to all students of school age in their State.

Although education is not listed among the Commonwealth Government's responsibilities in the Australian constitution, it is playing a growing role in considering schooling more broadly; in the context of a nation undergoing significant social and economic adjustment. In cooperation with the States, the Commonwealth has a role to play in addressing resourcing, equity, and quality issues through its general recurrent, capital and specific purpose programs. Additionally, it has specific responsibility for Aboriginal peoples and migrant populations.

The Structure of Education

Following a preparatory or kindergarten year, Australian students spend between six and seven years in elementary (primary) school, depending upon the State, and five or six years in high school.
There is no equivalent of the US middle school/junior high school in the Australian system. The twelve year program, for those who graduate, is normally completed at age 17. In 1992 there were 1.8 m. elementary and 1.3 m. secondary students being educated in 10,000 Australian schools (Schools, Australia, 1992).

The typical elementary school is surrounded by a large tract of land; play area for the children in a country that is blest with warm summers and mild winters. The once common, one-room, country schoolhouse catering to the needs of the scattered rural population is disappearing as improved transportation facilitates the consolidation of rural schools. Urban students may be housed in older school buildings but these structures are invariably well maintained. The urban - suburban distinction is not clearly marked in Australian schools. Urban blight and the accompanying flight of the middle class to the suburban fringe is not characteristic of Australian cities.

Most secondary students attend high schools with populations of between 800 and 1200 students. High schools rarely exceed this size even in densely populated urban areas. There may be a staff of 100 or more including faculty and staff providing administrative and support services.

All government elementary and most non-government elementary schools are coeducational. However, in secondary education most, but not all, government schools are coeducational and the majority of non-government schools are single sex. This latter circumstance is significant in light of the fact that non-government secondary schools educate 32% of the high school population.

Ages of Compulsory Education

Although Australian children usually start school at around age five when they enroll in a preparatory or kindergarten year, compulsory attendance begins at age 6 and is completed at age 15. This is a year or two earlier than US students. This earlier
completion of compulsory schooling makes possible the optional exit from school at the end of the sophomore year (Year 10). The final two years of high school are essentially years of post-compulsory schooling.

The optional exit point at the completion of the sophomore year provides an interesting contrast with US practice. A large (but decreasing) proportion of Australian students leave before completing their final two years of high school. Students who leave school at this point are not labeled 'drop-outs' and are not seen as a social problem. They conclude their school career with a series of state controlled (or state moderated) examinations, are awarded a certificate in recognition of their educational attainments and usually embark on a career or begin studies at a TAFE (Technical and Further Education) college.

In recent years adverse economic conditions have not favored this group of school leavers. Leaving school at the conclusion of the sophomore year was a realistic option in the years when industry provided opportunity in the form of apprenticeships. With fewer opportunities for apprenticeship, students have chosen to remain at school and complete their final two years of high school. Those who have chosen to leave school early have joined the ranks of the unemployed in increasing numbers.

Private Schools

Private schools in Australia educate 28% of the elementary-secondary population (Schools, Australia, 1992). This compares with a figure of 12% for the US. This difference is a condition of the fact that the Australian Federal Government and the six State Governments provide financial aid to private schools.

The provision of state aid to private schools has been a contentious issue in the past. There would now appear to be wide, but not universal, community acceptance of the provision of such financial assistance to the private school sector. Arguments pro and con involved assumptions about the value of diversity in a
pluralistic society, the flight of talented students to the private schools, even the reappearance of sectarian animosity. Charges of discrimination and divisiveness have been heard from both sides. In 1981 the High Court of Australia dismissed a challenge to 'state aid' and ruled that the Commonwealth has virtually no authority to guarantee religious freedom to its citizens. It merely has to be non-discriminatory in its own actions and laws (Hogan, 1984).

Australia, virtually, has a dual system of education which is not likely to disappear in the foreseeable future. Public money will continue to flow, in some measure, to both the public and private systems of education. Governments are going to continue to pay for the education of all Australians. It would appear to be preferable to support a dual system which has general community support than to nationalize all education.

Curriculum

Since the provision of education is constitutionally a State responsibility, the formal responsibility for defining the scope and content of the curriculum rests with the States. National curriculum objectives, espoused by the Commonwealth Government, are pursued through collaboration between the States and federal agencies such as the Commonwealth's Curriculum Development Center.

Of recent years there has been a pattern of devolution, giving schools increased responsibility for curriculum decisions. This is in part, recognition, of an increased level of responsibility for teachers, of the increasingly diversified school population, and of efforts to accommodate the diverse backgrounds and interests of students. However, not all teachers have the capacity or the desire to assume responsibility for detailed curriculum development and there is evidence of a reversal of the trend towards school based curriculum development (Quality of Educ., 1985).

There is reasoned argument for the addition of materials such as driver education, political education and an expanded health education curriculum. These potential additions are not trivial but
where are the corresponding suggestions for subjects which might be dropped? There are competing suggestions for a narrowing rather than a broadening of the curriculum. Such arguments reflect a more conservative desire to ensure the development of students' basic skills. A more general argument is that, without some positive narrowing of the curriculum focus, schools will attempt so much that they will be unable to do any of it well.

High School Curriculum: A Case in Point

One way to focus the curriculum on the essential purposes of schooling while allowing for student diversity is to define a core of studies for all students and then to add various options from which the students may choose. This has been the 'modus operandi' of Australian high school curriculum developers. Despite criticisms that the subjects in the 'core' are too narrowly academic and those in the optional category have been downgraded, the system (with various modifications) has been in use in the secondary schools for thirty years.

In the upper secondary, post-compulsory years, freedom to choose a course of study is much greater than in the earlier, compulsory years. At this level students judge relevance in terms of maximizing their matriculation score for entry to university or in terms of subsequent employment. The temptation is to substitute exam aggregates or training for education. Curriculum developers are well aware of this pitfall. They know that the vagaries of the job market will likely render particular training irrelevant. They also know that almost all students will proceed to some form of further education or training either in conjunction with their work or in full-time preparation for it. (Quality of Education, 1985). Thus a curriculum that is narrowly vocational is both impoverished and redundant.
High School Completion Rates

Although school drop-out rates in the US remain a matter of public concern and failure to complete high school is usually a reliable predictor of long term socio-economic disadvantage, the same is not true in the Australian situation. In Australian high school education there is a distinct break in the curriculum and the life style of the student between Year 10 (sophomore) and Year 11 (junior). Year 10 is generally the culmination of a sequence of courses which begin with the student's entry into secondary school (in Year 7) and involves a study of compulsory core subjects (English, math, science, social science) and a limited number of electives. Entry to Year 11 means less compulsory course work, more course options and smaller class sizes. In many schools entry to Year 11 brings a relaxation of discipline, an increased amount of responsibility and the first real opportunity to learn to know teachers as people. This barrier between the junior and senior years dates back to the days when only the select few pursued senior secondary studies and prepared to enter higher education.

Times, however, are changing.

In 1982 the national retention of students to Year 12 (senior) was 36%. In the ten years to 1992 that retention rate almost doubled to 71% (Schools, Aust., 1992). The national deterioration of the labor market and the continuing high levels of unemployment have, no doubt, influenced retention rates. Much education and training undertaken in the past was premised on the labor force needs of an industrial economy. Such a premise is now obsolete in this post-industrial age. Students are realizing that they have to complete the full secondary course of studies and receive a broad general education as a foundation on which to build the occupational skills necessary to operate in the labor market of the future.

Examinations and Credentials

It is the primary purpose of credentials to rank people for occupational choice. Since it is increasingly difficult, as a result of
technological change, for people to begin with few or no credentials and progress up the occupational ladder from the factory floor, school credentials are acquiring even more potency than in the past. One consequence is that the social demand for education keeps lifting up from the bottom level of credentials needed for any footing at all on the occupational ladder. In the US this progression has already devalued the high school diploma and is now undermining the value of the baccalaureate degree.

This progression is not as advanced in the Australian situation where (in most states) external assessment is retained at Year 12 and admission to university is much more restricted and based upon a final, exhaustive, multi-subject examination known as the Higher School Certificate. In a system where tertiary selection dominates the final two years of high school students are all too conscious of the narrow way in which this examination is used to select among applicants for admission to tertiary institutions. For many of them it can develop into a harrowing 'make-or-break' situation.

Australian educators have long been aware of the shortcomings of a system geared towards credentialing and they are well aware of other forms of accountability. However, to this point, the needs of the tertiary institutions have dominated post-compulsory schooling (Years 11 and 12). The irony of this situation is that only a minority of students are admitted to the universities.

At the conclusion of Year 10 (sophomore year) schools are able to exercise more initiative in assessing the quality of student learning. Year 10 certificates are awarded on the basis of moderated school assessment. In some states the process of moderation involves teacher meetings and school visits from state appointed teams of moderators. In others, state-wide reference tests are used. The increased use of internal assessment in Year 10 reflects the concern of educators to resist external curriculum pressures, to reassert the educational role of assessment, and to build in a greater degree on first-hand information about students from the teachers who are actually teaching them.
University and College Education

Entry to university is competitive, based upon the results of matriculation examinations conducted at the conclusion of the high school senior year. For those who qualify all tuition costs are met from Commonwealth Government funds. Students incur only service fees and incidental costs. The nation's only private university, Bond in Queensland, charges tuition and boarding at a rate that would place it among the most prestigious institutions in this country. To date it has not turned a profit.

The Australian observer working in an American university finds the quality of education much more diverse than he is accustomed to. There is no doubt that American institutions rank among the most prestigious in the world. However, many four year institutions offer curricula and degrees that an Australian would find more appropriate to two year colleges. In Australian higher education paramedics, police and prison officers, realtors, hotel and restaurant managers and interior designers are not awarded four year bachelor's degrees.

Two Year Colleges

Two year or TAFE (Technical and Further Education) Colleges are a well developed part of the educational scene in Australia. As with their American counterparts they offer vocational and trade training. The most striking difference is that they enroll almost 70% of the total tertiary education population. However, this figure is a little misleading as many of the courses they offer are pre-vocational, remedial or secondary equivalents. These are courses frequently offered in vocational streams and technical schools in the American secondary system. To this extent there is a degree of overlap, as between secondary and tertiary education, to be found in the two year colleges.
Governance

Australian schools are controlled at the state level; there is, virtually, no local input. Education ministries in each of the capitol cities are responsible for overall planning, staffing, curriculum content, course accreditation, physical plant and furnishings. State education departments recruit and appoint teachers in government schools. This effectively means that a young, beginning teacher can be appointed virtually anywhere in the state. Given the enormous area of Australian states, the rookie teacher may find herself a long way from home. Additionally, these central education ministries take responsibility for a range of assessment policies governing such matters as high school exit examinations and credentialing, matriculation requirements and basic skills testing.

The Commonwealth Government's educational responsibilities are exercised through the Ministry for Employment, Education and Training. The Commonwealth plays an important role in focusing attention on the broader purposes and structures of schooling and providing significant supplementary finance to the States and to non-government schools. The Commonwealth Government also has responsibility for education in Australia's external territories; small island groups in the oceans surrounding the continent.

The non-government schools operate under conditions determined by State education ministries but, if fact, they enjoy a good deal of autonomy. They are required to meet certain minimum education standards and provide satisfactory premises. In the high school years the national emphasis of tertiary credentials is sufficient to keep their programs focused and aligned with state curricular objectives. Almost all non-government schools have some religious affiliation, most commonly with the Catholic Church which enrolls 70% of non-government students (National Report, 1992).

Devolution of Authority

Traditionally, education in Australia has been organized in a 'top-down' fashion with little autonomy for individual public
schools. State school faculty appointments and finances are centrally managed by giant bureaucracies in the capitol cities. The watchword has been 'conformity'. However, within the last two decades there has been a move towards the devolution of educational decision making from central authorities to the schools. Such a move reflects a shift both in underlying ideas about education and in the function of the institutions through which these ideas will be realized.

The curriculum example was mentioned earlier. Until comparatively recent times teachers in State schools had little freedom to develop curricula and the independent schools stayed close to state guidelines as they prepared students for matriculation. Since the late 1960's a system of school based curriculum development has seen teachers become involved. Through programs interpreted and organized within the schools, teachers are provided with opportunities for the exercise of autonomy and group initiative. Nowadays curricula issued by state departments of education take the form of lists of aims. Each school must translate these aims into practical objectives and a program in accord with its distinctive characteristics.

**Equality of Opportunity**

Equality of opportunity in Australian education was, for many years, based upon the principle of equality of provision of educational services. Basically, the huge centralized state systems of education guaranteed that equal educational facilities would be available in all areas to all students. The assumption was that by providing schools that were accessible, equal, and free, all students would have equal opportunity for success. What such systems did not take into account was the capacity to benefit. Since the capacity to benefit from the provision of educational services is affected by the social and economic circumstances in which individual students find themselves, equality of provision does not, necessarily, facilitate the same opportunity.
The focus has now switched from equality of provision to equality of educational opportunity. Of course, the principle of equality of opportunity implies unequal provision of educational services, since in order to achieve greater equality of opportunity, compensatory assistance may have to be provided to schools and students who are perceived to be at an educational disadvantage. While talents cannot be equalized, environmental and social handicaps as they effect groups and individuals may be able to be reduced.

Carried to its logical conclusion, greater equality of educational opportunity may lead to less equality of educational outcomes. If the promotion of equality of opportunity means that the focus is to shift to the most disadvantaged groups, the net result may be to produce greater equality of individual outcomes but not without some loss in the general level of achievement. The gifted and academically able provide a case in point. Traditionally, these children have enjoyed every opportunity in an Australian education system that recognized their abilities in public examinations and rewarded them with free university education. One has to wonder how much longer the resources will be available to pursue this absolute excellence in academic performance. There may not be the resources available to maximize the absolute excellence of the very talented and to simultaneously realize the potential of the disadvantaged.

**Non-English Speaking Students**

Each year immigration programs bring to Australia thousands of students who have minimal or no proficiency in English. Without English these students are deprived of access to education and to the general culture. Among a number of federally funded and state administered programs that focus on this particular group of students, English as a Second Language (E.S.L.) is, by far, the largest. It has been in existence for the past quarter century and reviews have concluded that it has been successful in assisting students to
reach coping or survival levels of English and has helped them make personal and social adjustments. Even more significantly, it has heightening the awareness, in education, of the needs of students of non-English speaking backgrounds.

There are however some disturbing characteristics of ESL education peculiar to the Australian situation. It falls within the directorates of special education programs away from the major curriculum agencies. Because of its special status there is no widespread acceptance by mainstream teachers of responsibility for the language development of non-English speaking students. Additionally, teacher are inclined to see ESL education as a temporary phenomenon which could disappear if federal funding were withdrawn (Quality of Education, 1985).

In Australia's increasingly ethnically diverse society this seems to be an unsatisfactory situation. It does not assist the process of social integration nor does it meet the educational goal of equality of opportunity.

**Aboriginal Educational**

Although there have been improvements in Aboriginal education in the past several decades, the outcomes remain seriously deficient. Retention rates in the final year of high school are about a quarter of the national average. The Aboriginal population suffers a disproportionate share of unemployment and the number of Aborigines participating in higher education is infinitesimal.

Educational authorities are not unsympathetic to the needs of the Aboriginal population and are intent upon reducing inequality in group outcomes for this population. The challenge lies in the selection of the measures to be employed.

The Aboriginal population which makes up 1.5% of the total population is not homogeneous and is geographically dispersed. In the educational process, care must be taken to preserve the indigenous culture. On the credit side, there is a strong demand in
Aboriginal communities for education. This is particularly true for mature age tribal members and adult education programs designed to provide vocational and general education have proved successful.

The answer to problems associated with Aboriginal education probably lies in the formation of consultative frameworks and direct participation, on the part of aboriginal communities, in decision making on such issues as curriculum, facilities, schedules, bilingual education, and the training of tribal members as teachers and teachers' aides. The example of Paulo Freire's work with the peasant peoples of Brazil and Chile springs to mind as a possible model in this rather unique educational setting.

**Students of the Outback**

Scattered across the vast pastoral and semi-desert regions of the Australian continent are small numbers of geographically isolated students. Almost all of these children qualify for assistance under the Commonwealth Government's Assistance for Isolated Children Scheme or some other form of assistance operated by the States. These schemes ensure access to schooling through correspondence lessons, through living away from home in hostels or boarding schools, or through living with family appointed guardians during the school year.

Perhaps the most famous of the educational initiatives undertaken on behalf of students in the 'outback' is the School of the Air. Established in 1951 in the Northern Territory using two-way radio equipment first developed by the Royal Flying Doctor Service, the School of the Air allows students and teachers who are hundreds of miles apart to communicate as if they were in a classroom setting. Today the service is carried by satellite from twelve outback centers to children over an area of one million square miles (Education in Australia, 1984).

Research evidence as to differences in educational performance between these isolated rural students and other students is inconclusive. A South Australian study (Cawthorn, 1980)
showed that, as measured by matriculation examination results the academic performance of these rural students was not greatly different from their urban counterparts.

**The Status of the Teaching Profession**

There are 202,000 teachers in Australian elementary and secondary schools with some 148,000 of these teaching in the government school system (Schools Australia, 1992). With future employment prospects clouded by an oversupply of teachers and prospective financial rewards somewhat less than attractive, the perceived status of the profession may be affecting the choice of teaching as a career. A national unemployment figure of 11% would appear to be a major offsetting factor. Prospects are no better in other employment sectors.

The status of teaching may have fallen relative to other professions. Competition for places in the more lucrative and higher status profession through matriculation and entry to university courses is keen and attracts high ability students. The broadening of career horizons for women may have restricted this source of quality teachers. In the recent past issues such as union activism have resulted in widespread negative publicity about teachers. The current tide of youth unemployment reflects unfavorably on the schools and the teaching profession. The combination of a poor public image, restricted opportunities for advancement associated with the aging of the teaching force, and more lucrative alternatives would appear to restrict the profession's capacity to attract and retain high caliber teachers.

**For the future**

After thirty years of uninterrupted growth Australia has, in the past dozen years, experienced a sharp economic downturn characterized by slow growth, inflation and high rates of unemployment. With this reversal has come the recognition that as economic restructuring takes place the education system will need
to enhance the capacities of students to deal with the changed circumstances which will confront them in a restructured job market.

Education and training in Australia has been based on the labor force needs of an industrial economy: a minority of professionals and highly skilled trade workers and a large majority of unskilled and semi-skilled workers. This pattern is now obsolete in a post-industrial economy. In order to acquire the necessary range of occupational skills the present generation of young Australians will now have to complete a broad secondary education.

In responding to these changed conditions the Australian system of education has taken on some of the characteristics of the US system. Retention rates in high school continue to rise and are approaching US levels. This has been accompanied by a flow on to tertiary institutions (universities and TAFE colleges) and the total number of teenagers in full-time education has increased significantly. The baccalaureate degree, once a relatively rare credential is now much more common. Graduate studies have grown apace.

The social context in which schooling in Australia is taking place has altered in recent years. These changed circumstances require new arrangements and new responses. The old emphasis on the pursuit of absolute excellence for a talented minority of students is replaced by a vision of higher minimum standards with schooling designed to ensure that all students can benefit to the maximum extent. The public still exhibits a good deal of ambiguity to changed emphases in Australian schools. Teachers and administrators not only have to implement change but have to communicate the nature of the educational choices facing the community. Australian educators are operating in a more demanding environment and have risen to the challenge.
Works Cited


