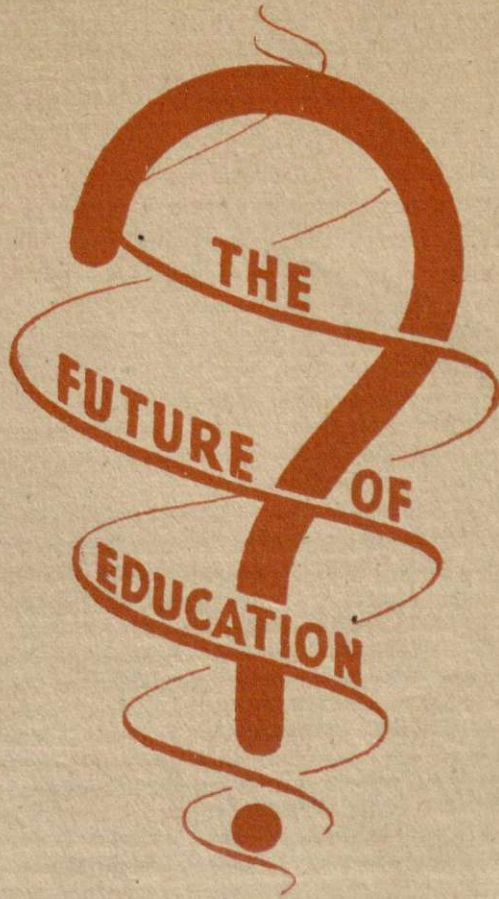


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LD

No. 9

THE SCHOOL LEAVING AGE

ELWYN A. MOREY

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Headquarters of Council: 147 Collins Street, Melbourne, C.1,
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THE FUTURE OF EDUCATION

No. 9

THE SCHOOL
LEAVING AGE

BY

ELWYN A. MOREY, M.A., B.Ed.



AUSTRALIAN COUNCIL FOR EDUCATIONAL
RESEARCH

1945

THE SCHOOL LEAVING AGE

AT present compulsory schooling in all the Australian states except New South Wales ends at 14 years. In New South Wales it continues to 15, and most of the other states have announced their intention of extending to this age and, in some cases beyond it, after the war. We might well ask what factors determine the end of compulsory schooling. Why do we choose 14 or 15 as the leaving age? We have become so accustomed to allowing children to leave school at 14 that we often tend to forget that this is an arbitrarily selected age, and that our ideas might well need revising in the light of modern developments. The leaving age is of course determined by tradition, by laws governing minimum age for employment, etc. Since ability to profit from schooling by no means terminates at this point the selection of 14 is educationally quite arbitrary. The history of compulsory schooling shows variations in the age for leaving. About seventy years ago, when compulsory education was first introduced by the Australian states, there was little agreement as to the length of time a child should remain at school, as is shown in Table I.

It is most interesting to note that Victoria, in 1872, fixed the school leaving age at 15. We are not apt to think, as a rule, that our grandparents held more enlightened views on education than we do. It is to be regretted that we have gone backwards instead of forwards in this matter.

TABLE I

Introduction of Compulsory Education

Place	Date	Leaving Age	Later Developments
England	1876	12	14 in 1918
Western Australia	1871	14	
Victoria	1872	15	{ 13 in 1899 14 in 1910
South Australia ..	1875	13	14 in 1915
New South Wales	1880	14	15 in 1943
Tasmania	1885	13	14 in 1912
Queensland	1910	12	14 in 1912

Why have we been so anxious to maintain the age of 14 years as the end of compulsory schooling? Do we consider that by that age the average child has learnt enough, so that he no longer needs to attend school? Or, on the other hand, do we hope that by that age his search for knowledge will have been so stimulated that he no longer needs to be compelled to attend school, but will continue to study of his own free will? If that is our hope it has not been fulfilled, since only 32% of children in Australia attend school between the ages of 14 and 17 years. Do we think then that it is desirable for the average child of 14 or 15 to sever his connection with the school?

The answers to all these questions surely depend on our concept of education. In the compulsory years, from 6 to 14, we presumably aim at accomplishing something definite. It is decreed by law that every child must go to school. What do we want to do with him while he is at school? What type of

boys and girls do we intend to send forth from our schools? Can our aims be achieved by 14 or 15? These are questions which concern every one of us as members of the community. We may state, as follows, three necessary aims of education:

1. To enable the child to earn a living (the utilitarian aim).
2. To prepare him for adulthood, that he may lead a full, useful and satisfying life (the social aim).
3. To introduce him to his cultural heritage (the cultural aim).

If we agree that education should be a preparation for life, in all its aspects, and not just for livelihood, we shall also agree that no one of these three aims is sufficient by itself. The full education of the whole man demands that we should aim at all three. That this has not always been the case, and that the school leaving age has a most important bearing on this point, is clearly seen in the light of history.

When education was first made compulsory for all children, the utilitarian aim was dominant. For the great mass of children, schooling was but a prelude to work and the sooner they left school the better. In those days, children at school did not learn much more than the basic skills—a little reading, a little writing and how to make simple calculations. Our approach is different to-day. In industry modern technological developments demand higher standards of learning for all employees from foreman to workman. It is generally accepted that 'the modern farmer is a reader.' Women in occupations of all kinds need more education. In short, educa-

tion, not mere literacy, is essential for technical efficiency. At the same time, the mechanization of industry and the growth of scientific methods have given man more leisure. We realize that his education must prepare him for this leisure as well as for work. Democratic government means that each man has certain rights and responsibilities as a citizen. His education should help him to accept these and use them wisely. In other words, the school years must give training which will prepare for the whole of adult life. Can we, by 14 or 15, give boys and girls an education which will accomplish this? Are they, by that age, sufficiently mature to appreciate their responsibilities as members of the community? Very few people would say that they are. Stories are sometimes told of the phenomenal rise to success of men who left school at the ages of 10, 11 or 12—but these stories prove nothing. For one thing, might not these men have been even more successful if they had had more schooling? And again, for every one of these who overcame the difficulties, how many were there who did not? If the schools are to introduce boys and girls to the adult world, they must continue their work into the years when a real interest in adult life is apparent. Thus in the world of to-day we cannot hope to achieve either of the first two aims without longer schooling for all. The third aim must not be neglected, however, for upon this depend the community's standards of art, music, drama and literature. Appreciation of, and a critical approach to, the cultural things of life do not come by instinct. They must follow wide and varied

experiences and careful teaching and learning. The poor quality fiction predominating in threepenny suburban libraries and the queues waiting to see mediocre films are a reflection on our system of education.

It is therefore apparent that the best type of education will embrace all three aims, so that when a child leaves school he will be prepared in every way to take his place in the adult world. He will have acquired the basic skills, his cultural experiences will have been many and varied, he will know something of the occupations which he may follow, and something, too, of his rights and responsibilities as a citizen. If we attempt to do all this by 14, we are attempting the impossible. Let us look for a moment at what we may expect to gain from giving every child one or two more years at school.

THE NEED FOR LONGER SCHOOLING

(a) *From the Community's Point of View*

The increasing application of science to industry in the past century, and the resultant expansion of clerical occupations, have given rise to a need for technicians and skilled artisans which could not be adequately supplied by the old forms of apprenticeship. The value of a scientific approach has been proved in all spheres of work from farming to manufacturing. Thus general education for all children, though it was originally instituted from ideas of benevolence, now has the harder sanction of economics. In a competitive world, even nations have to consider the general levels of efficiency of

their people. If Australia is to take her rightful place in the post-war world, then the future citizens of Australia must be given the kind of education which will place them on a level with citizens of other countries. Money spent on education is not lost, but invested. Such an investment will bring great benefits to the country, in the shape of well-educated and cultured citizens. At present we are not giving full education to many children, for at the beginning of the maturation period, when boys and girls are standing on the threshold of adult life, we allow them to leave school. The ideal, and one which will be attained in England and Scotland after the war, is full-time education for all children to 16 years, and part-time, at least, until the age of 18.

The nation as a whole would reap the benefits of continued education. Many a child, a future citizen and voter, leaves school at present with only a very hazy idea of the rights, responsibilities and duties of citizenship. His experiences at school have, as a rule, not aroused in him much enthusiasm for learning, and he turns in his spare time to the opposite extreme. The result is that he is easily swayed by propaganda, and what little knowledge he has of political matters he gleans from the Press or the radio, or conversation with his workmates. It is not unreasonable to suppose that with extended schooling for all children, much could be done to raise the standard of citizenship. In that extra year, or two years, the naturally growing interest could be fostered and stimulated by wise teaching. Children could learn something of local government, and take

an active part in the government of the school. This would do much to remove the apathy so prevalent to-day. Interest and participation in local matters would lead to more interest in social welfare, such as housing conditions, recreational facilities, and so on. There is much talk of the need for more nursery schools, and more libraries. If all the people demanded these, we should soon have them. The only way of ensuring a healthy and lively public opinion is to raise the general standard of citizenship first among young people, then in the whole community.

Some leading educationists, such as Sir Richard Livingstone, advocate concentration on adult education rather than extended schooling for all.¹ They contend that intellectual education is best given after some years of experience in the adult world, since otherwise 'their studies suffer from ignorance of life.' As an example of successful adult education, in a country where the leaving age is only 14, they cite the Folk High Schools of Denmark,² where all students are over 18. Only 25% have had anything more than elementary education; the others have spent the years from 14 to 18 at work.

While it is true that these Danish schools have done much to raise the standard of education among the Danish people, it is nevertheless true that, if correct use is made of the extra years to 16, the results should be even more spectacular. Even in Denmark the Folk High Schools reach only a frag-

1. Sir Richard Livingstone: *The Future in Education*, C.U.P., 1941, p. 33.

2. See Moeller, J. C., and Watson, K.: *Education in Democracy—The Folk High Schools of Denmark* (Faber, London, 1944).

ment of the population—in 1938 there were 5,802 enrolments for a population of $3\frac{1}{2}$ million. This figure is much higher than the figures for adult education in England or Australia. The Danish Folk Schools have caught the interest of the people, which is something our schemes for adult education have failed to do.

To concentrate on adult education without great improvement and expansion of full-time schooling would be as unwise as the addition of two or three stories to an existing building without ensuring that the foundations would stand the strain. A great many pupils at present gladly leave school at 14—and the majority of these refuse to come back for another dose in later years. It is not true that these children have absorbed all the education they are capable of absorbing by 14. The fault lies in the nature of the schooling we give them. The remedy surely is to revise our methods, to make the extra years profitable and interesting. There will then be such a demand for further adult education that its extension will become a natural consequence of raising the leaving age.

What else could the community hope to gain from extended schooling? In the extra years, children's experiences could be widened, and their tastes developed, so that we should probably have a far larger proportion of young people developing a permanent interest in things of abiding value, such as painting, sculpture, music, literature. This in turn would provide a really effective basis for adult education.

We could also expect a wiser choice of occupations on the part of those boys and girls who now enter the labour market at 14 years of age, often with little knowledge either of their own abilities, or of the occupations which are open to them. It should be the responsibility of every school to see that all boys and girls are given vocational guidance³ and also that they have accurate occupational information. A higher school leaving age would prevent the present exploitation of children for work in factories and in unskilled occupations, leading to unemployment at a later stage in their lives. Not only this, but it would make possible the training of a greater number of young people for the service of the community. Much talent which is at present wasted would be discovered and used for the benefit of the individual and the community as well.

(b) *From the Child's Point of View*

There is no doubt, then, that there would be much benefit to the community if all children were to remain at school until 15 or 16, or possibly later. What about the child himself? Would it be to his advantage to stay at school during these years—or is it better for him to be finding his feet in the adult world?

The boy or girl who leaves school at 14 is thrust into the world in his early adolescent years. The beginning of the adolescent period varies considerably among individuals, but it is recognized by all

³. See Pamphlet No. 6 in this series—'From School to Work,' by W. M. O'Neil.

educationists and psychologists that the period from 12 to 16 years is one of the critical stages in the life of the individual. New internal secretions produce marked physiological changes, which in turn are associated with the necessity for making mental, emotional and social adjustments. The physiological changes take place much more swiftly than the readjustment and adaptation. The adolescent may look like an adult long before he is an adult in the full sense of the word. All children tend to grow rapidly just before and during adolescence. At the same time the amount of muscle tissue increases in proportion to body weight. However, instead of control of the muscles increasing at the same rate as the muscles themselves, this control is long delayed. It can be assisted by carefully planned exercise under good supervision. Supervision of exercise is essential since the heart muscle changes as do all other muscles. It is very easy to cause serious damage during this time through over-exercise or exercise of the wrong kind.

This lack of muscular control finds expression in awkwardness and clumsiness which may cause the adolescent boy and girl acute embarrassment. This they sometimes try to cover up by giggling or other forms of socially awkward behaviour.

But there are other very important physical changes during adolescence. Those changes associated with what are called technically the sex characteristics are amongst the most important modifications in the child's physical make-up. At this time the deepening of the voice, the development of the sex

organs, and the glandular changes associated with these have a profound effect on behaviour. The child is very self-conscious about these physical changes. It is noticeable that a boy takes more pains with his dressing, and a girl often worries considerably over her appearance. But the new bodily chemistry does not merely affect bodily growth. It gives rise to new attitudes, new interests, and new forms of social behaviour of which the cause is often unsuspected not only by the child but by the adults in contact with him. The adolescent feels that he is no longer a child, yet neither is he really an adult. He is, as it were, standing on the threshold of adulthood, feeling very insecure, and making his way slowly step by step. More than at almost any other time in his life, the adolescent needs understanding and sympathy until he has safely made the mental, emotional and social adjustments necessary for satisfactory living. The adolescent's attitude to his family undergoes considerable change. Striving to establish himself as an adult, he rejects parental authority. The family ceases to be the legitimate place where he can fully display his feelings, and although he often wishes to return to childhood security, the new sexual components in his emotional life prevent (or should prevent) the family from becoming a retreat for the full satisfaction of his emotional needs. If family ties have been over-possessive during childhood, the process of 'weaning' during adolescence will be even more difficult both for parents and child. Very often parents fail to understand and to provide for these emotional changes. As Dr. Peter

Blos remarks,⁴ these changing attitudes make family relationships more difficult, even though such changes are natural and inevitable. 'It reflects,' he says, 'the equivocal status which is held by the adolescent in society at large, where he is given the protection of a prolonged childhood in some situations, but is expected to assume the responsibilities of adulthood in other situations.' Since the family can no longer provide a retreat from all difficulties, the school has special value as an institution in which the child can develop naturally in an environment he already knows. He should be able to look to the school for expert guidance and understanding to help him establish himself.

By extending schooling to 16 years we are thus helping the child, by providing him with a stable environment in which to find his feet as a young adult. If, in addition to all the emotional and social problems with which he has to cope at this time, he also has to find a niche in the vocational world and to adjust himself to a completely new environment, his difficulties and disturbances are increased, while his chances of making satisfactory adjustments are lessened. As we shall see later, the school in these extra years could do much to prevent the unhappiness and loss to the community which at present result from occupational misfits.

If some evidence is needed that these views are not merely conjectural, it is found in the statistics for mental disorder and for suicide which attain peaks during the adolescent years. These extreme

4. Blos, Peter: *The Adolescent Personality* (D. Appleton-Century Company, 1941), p. 237.

cases are a sure sign of a much larger number of less dramatic but nevertheless quite serious cases of maladjustment. It is not too much to hope that a wise use of the adolescent years at school would decrease the incidence of these mental disorders, which are in large measure due to the individual's failure to overcome the conflicts arising from adolescent impulses and desires, and to unwise guidance and control during this period.

COST OF RAISING THE AGE

(a) *To 15 and 16*

Although it would appear that the benefits to the community and to the child himself demand that the age be raised as soon as possible, there are still many people who will want to know just how much this is going to cost. In war-time no one thinks of arguing that we should not continue the struggle because of the cost. We feel that the results are worth while at any price. But in the lasting internal war against bad conditions we rarely, if ever, seem to take such a stand. Why should the cheapest possible education have to suffice for young Australians? If we provide them with only the bare necessities for learning to read and write, and then thrust them out into the world as soon as possible to sink or swim, on the theory that adversity makes men, how can we hope for them to represent Australia side by side with the better-educated young people of other countries? In spite of our present earlier leaving age, the amount of money spent on public education in Australia is much smaller than

that spent by any of the other English-speaking countries. We in Australia seem to think too often in terms of the costs of improvements in our educational system—and frequently do not reach at all the stage of thinking about what is to be gained. To economize on education is surely false economy. The future of the country depends upon the children. They need the best possible education now to fit them for the future.

Moreover, we have been too accustomed in the past to think only in terms of the money required to carry out improvements. Where overseas commitments are involved, it is true that more attention must be paid to the financial issues. In a purely domestic matter, such as raising the school leaving age, the issue is rather one of human resources and materials than of money. We can produce here in Australia all the material requirements for such a step. We must ask therefore not how much money will this cost, but have we the men and women to do the work, and the materials for them to use? Are there enough men, for example, to build the extra schools, to make the equipment, to print the books, to carry on the work which otherwise these juveniles would have done? Are there enough men and women to teach these boys and girls, and to train these teachers? After the war will everyone be employed on other work, so that the increase in the leaving age will be an impracticable step? Let us briefly examine the employment situation in Australia before the war. In July, 1939, the unemployment figure for all wage and salary earners stood

at $12\frac{1}{2}\%$. This meant that one man out of every eight possible workers had no job. During the economic depression, in 1932, the figure was as high as 29%. During the years of peace we have always had considerable unemployment, that is, there has always been an untapped reservoir of human resources. From the manpower point of view we could have raised the age to 16 long ago and the community could have reaped the benefits of this move for several years. Our human resources are, and have been, considerably larger than we realize. Many more women have entered employment during the war and some of these will be prepared to continue working. After the war we are promised full employment for all. Are we going to have a high priority for educational requirements? In the allocation of manpower to works of national importance, such as housing schemes, the urgency of educational reforms must not be forgotten. We have the men and the materials to erect new schools, provide more books and equipment, and so on; what we must do is to give a high priority to education in post-war planning.

In spite of this approach, however, there are many people who will still wish to know how much money is involved in raising the age. Let us therefore examine some estimates of costs.

In 1939 it was estimated in New South Wales that the cost of raising the leaving age to 15 in one year would amount to £515,000. This figure included Social Services (Family Endowment, Widows' Pensions, Child Welfare Act), which have since been

taken over by the Commonwealth Government, as well as costs of Conveyance, Schooling and Buildings. Excluding Social Services, the estimated cost was £326,000. As approximately 17,000 pupils were involved, this would mean a cost per head of roughly £19. This agrees with an independent estimate from South Australia, which gave £90,000-£100,000 as the total figure for approximately 5,000 pupils, or £20 per head.

The age was raised to 15 in New South Wales in three stages, four months each year, commencing in 1941, because it was found that, with fewer children entering school, due to the fall in the birth rate in depression years, the extra children could be absorbed without great additional cost. Therefore, in estimating the cost of raising the age to 15 for the whole of Australia, it must be remembered that this has already been done in New South Wales. Raising to 15 in the other states in, say, 1945, would affect the 117,000 children in Australia who turn 15 in that year. Approximately 44,000 of these are in New South Wales; of the remainder, about 23,000 would remain at school in any case. This leaves 50,000 children. There are some parents, however, who like to keep their children at school beyond the compulsory age for one or two years. Some who would have left school at 15 or 16 when the compulsory age was 14, will now stay to 16 or 17 when the leaving age is 15. The number of these additional children might be about 5,000. Therefore the total number for whom extra provision would have to be made would be about 55,000. This

would no longer be partly offset, as at the time when the age was raised in New South Wales, by smaller numbers entering school, as after 1935 the birth rate began to rise again and each year now a group slightly larger than that of the previous year enters school.

At £20 per head, the cost of providing for these 55,000 children would amount to £1,100,000. Very approximate estimates for the different states are shown in the accompanying table.

TABLE II

Estimates for Raising the Leaving Age to 15

State	Approx. No. in Age Group	Approx. No. for whom extra provision would be needed	Estimated Cost at £20 per head
Victoria	32,500	24,000	£480,000
Queensland ..	19,500	15,000	300,000
South Australia	9,600	7,000	140,000
Western Australia	7,600	6,000	120,000
Tasmania ..	3,800	3,000	60,000
TOTAL	73,000	55,000	£1,100,000

To raise the age to 16 at the same time would mean more than double this cost, since children in New South Wales would have to be included, and there would be more additional children to provide for in other states. Approximately 120,000 children in Australia will turn 16 in 1945. At present a much smaller percentage remains at school voluntarily from 15 to 16 than from 14 to 15. While this percentage would probably increase if the leaving age

were raised to 15, there would nevertheless still be more extra children in this age group to keep at school. The following table gives an estimate of the cost of raising the age from 15 to 16.

TABLE III

Estimates for Raising the Leaving Age from 15 to 16

State	Approx No. in Age Group	Approx. No. for whom extra pro- vision would be needed	Estimated Cost at £20 per head
New South Wales	45,000	39,000	£780,000
Victoria	33,000	27,000	540,000
Queensland ..	20,000	17,000	340,000
South Australia	10,000	8,000	160,000
Western Australia	8,000	6,500	130,000
Tasmania ..	4,000	3,500	70,000
TOTAL	120,000	101,000	£2,020,000

Since much of this initial estimate represents capital expenditure on buildings, equipment, etc., the annual cost of a higher leaving age would be considerably smaller.

Any estimate such as this is necessarily very approximate. The expenditure per child varies considerably between states, particularly at the secondary level. Again, it is possible that an estimate of £20 per head for 1939 may be too low for 1945 or 1946. But even an approximate estimate of £1,500,000 for raising to 15, and £4,000,000 for raising to 16, gives some idea of how little this step would cost in comparison with the £562,000,000 per annum which we

are spending on the war. This is especially apparent when we remember that the age could be raised in stages, as was done in New South Wales, so that the additional expenditure would be gradual.

(b) *Part-time to 18*

Most educationists to-day condemn the practice of 'night school' for apprentices and other young people employed during the day. They suggest instead that every boy or girl who leaves school to begin work at 15 or 16 should spend part of his time at school until the age of 18. This will be discussed more fully in a later section of this pamphlet—our concern here is with what it would cost Australia to introduce part-time compulsory schooling for all boys and girls to 18.

At present only some 10% of our adolescents remain at school full-time after the age of 16. It does not seem unreasonable, however, to suppose that with subsidized secondary and university education this figure would rise considerably—say, to 20%.⁵ The other 80% will begin work at about 16. It is for these boys and girls that we wish to provide part-time schooling for the next two years; about 100,000 adolescents in each of the two age groups. If we envisage one day per week for each boy and girl, this would be approximately the same as full-time education for 40,000 children. If we accept our previous estimate of £20 per head, the cost

5. In the United States, where the leaving age is 16 or higher, the percentage of students remaining at school beyond the compulsory leaving age is much higher than in Australia. In 1938, 46% of 17-year-olds and 14% of the population between 18 and 21 years were still at school. *Statistical Summary of Education, 1938*, Chapter I, pp. 11, 13. Federal Security Agency, U.S. Office of Education.

would be approximately £800,000 per annum. However, in the case of these older boys and girls £20 may well be too low an estimate since specially trained teachers and greater equipment will be required. The cost will probably be between £1,000,000 and £1,500,000 per annum.

(c) *Allowances*

The foregoing estimates are based entirely on the cost to the community of raising the age. But another and very important fact to be considered is the economic situation of the child's parents. Many children leave school at 14 or 15 because they must contribute something to the family purse. With increased cost of living and perhaps other children to be fed, clothed and educated, many parents are forced to send their children into employment at this comparatively early age. We must consider this fact when making plans for extended schooling for all children. It is universally recognized to-day that the child's freedom from ignorance and inefficiency should not be subject to such chance factors as the financial position of his parents. Raising the leaving age to 16 would therefore entail, not only free education for all, but also some compensation to parents in cases where hardship would be caused by keeping the child at school, when otherwise he would be contributing to the family budget. The first step towards providing free university education for those who have the ability but not the means to pay has been taken by the Commonwealth Government in establishing subsidies for students in certain

courses. Even this step, however, benefits only a small number of students. Those who wish to read in such courses as arts, law or commerce, receive very little Government assistance.

The numbers of University and Senior Technical students assisted for the year from the 1st January, 1944, to 30th November, are shown below.

TABLE IV
Subsidies to Students, 1944

State	No. of Students Assisted	Approximate Cost	Approximate Cost per Head
New South Wales	699	£73,397	£105
Victoria	523	54,073	103
South Australia	224	21,851	98
Western Australia	157	14,672	93
Tasmania	37	3,712	100
Queensland ..	154	16,330	106
TOTAL	1794	184,035	103

This is a war-time measure which should be extended and continued after the war. At present, even with university subsidies, many parents of talented children cannot afford to keep them at school between the ages of 14 and 17, so that this talent is being lost to the community. As a temporary measure, even before the leaving age is raised, subsidies for secondary school pupils should be introduced at once. For one thing, if this scheme were in operation for some time before the leaving age was raised to 16, it would allay to a certain extent the fears of those parents who object to this move

for economic reasons. There is another great advantage in this scheme, too, for it would be much simpler to handle the relatively small numbers who would require assistance whilst schooling above 14 was still voluntary, than to begin with the thousands who will remain once the age is raised.

The scale of allowances would have to be determined with great care. It might be decided, and indeed there are many arguments in favour of such a course, that maintenance allowances should be paid to all children above a certain age, irrespective of the financial position of their parents (cf. the Australian Child Endowment Scheme and the billeting allowances for evacuated children in England).⁶ Or again, since some children would need more assistance than others, the scheme might consider the family's financial circumstances, the number of other children, and so on (cf. the present scheme of subsidies for university students).

It would be out of place in a pamphlet such as this to advocate any detailed scheme of maintenance. However, allowances do play a most important part in introducing a higher leaving age. Once this move is made, it should be difficult, if not impossible, for parents to obtain exemptions from schooling for their children. If there are no maintenance allow-

6. The billeting allowances for unaccompanied school children in England and Scotland from April, 1942, were as follows:

5 years and under	10	10/6	per week
10	"	"	"	"	"	"	11/-	" "
12	"	"	"	"	"	"	12/-	" "
14	"	"	"	"	"	"	13/-	" "
16	"	"	"	"	"	"	15/6	" "
17 and over	"	"	"	"	"	"	16/6	" "

These allowances were only intended to cover costs of food, etc., and do not include clothing, books, etc. (*Scottish Educational Journal*, April 3rd, 1942, Vol. XXV, No. 14.)

ances the authorities will be forced to grant many such exemptions on the grounds of economic hardship.

The total additional cost, of course, will depend on the scale of allowances, and the number of children to whom allowances are to be made. Even if the previous estimates of £1,500,000 for raising to 15, and £4,000,000 to 16 were doubled by the granting of allowances, the cost measured in terms of service to the individual and to the community would not be too great when compared with other national expenditures.

WHEN SHALL WE INTRODUCE THE HIGHER LEAVING AGE?

FACTORS TO CONSIDER

(a) *Child Population*

When a higher age was introduced in New South Wales, the change was made over a period of three years. At this period the number of children first entering school was at its lowest because of the drop in the birth rate during the depression years. There was a steady decline in the birth rate from 1929 till 1935. The numbers of births per 1,000 of the annual mean population were as follows:

1929	20·25
1930	19·86
1931	18·16
1932	16·86
1933	16·78
1934	16·39
1935	16·55

From 1935 on, the number increased. This means that the period has now passed when smaller numbers entered school each year. From 1945 to 1950, however, the advantage will occur at the other end, that is, there will be smaller numbers of 15-, 16- and 17-year-olds. This is partly offset by the increased number of children entering school at 6 years of age, due to increased births from 1939-1944. From a consideration of both factors it would appear that some time between 1946 and 1949 would be the most suitable time for the higher leaving age to become effective. This follows whatever the increase—to 15 or 16, or including part-time to 18.

TABLE V

Approximate Number of Children of Certain Ages in Australia⁷

Age	Year 1945	Year 1946	Year 1947	Year 1948	Year 1949	Year 1950
6 (entering school)	116,000	118,000	127,000	129,000	141,000	144,000
15	117,000	110,000	102,000	102,000	103,000	105,000
Sub-total	233,000	228,000	229,000	231,000	244,000	249,000
16	120,000	117,000	110,000	102,000	102,000	103,000
Sub-total	353,000	345,000	339,000	333,000	346,000	352,000
17	133,000	120,000	117,000	110,000	102,000	102,000
Total	476,000	465,000	456,000	443,000	448,000	454,000

(b) *Teachers*

No extension of the school leaving age can be contemplated without an adequate supply of properly

7. Estimated from figures in the Demography Bulletin and the Quarterly Summaries of Australian Statistics.

trained teachers. This will probably be the most difficult problem to solve before bringing in any reforms, since the supply of teachers was steadily declining even before the war. It would not be practicable in such a pamphlet as this to discuss ways and means of providing extra teachers. These are major subjects in any discussion on educational reconstruction. Again, the number of additional teachers is somewhat difficult to estimate, since, for example, it depends on the size of classes. One of the most urgent reforms needed in Australian education is a reduction in the size of classes—first perhaps to 40, and later to 35 and 30. This alone will demand many more teachers. In making plans for the additional 14- and 15-year-olds who will be kept at school, we must estimate one more teacher to every thirty children. This would allow for classes of forty in city schools, and smaller classes in country centres.

Now it is obvious that if we really intend to raise the leaving age, we shall have to plan a long while ahead and to train the additional teachers in readiness. In the Services at present there are many men and women doing instructional work and enjoying it. If the prospects of teaching were made sufficiently attractive, many of them would enter the schools after the war. Here, then, is a golden opportunity of obtaining recruits to teach these adolescents, recruits who have already had some experience in instructing young people, and who would make excellent teachers. This source of supply must not be wasted, for it is one which exists only temporarily.

It would appear that we should begin now by selecting and training additional teachers. If, for manpower reasons, these are not yet available, plans can be made for the period immediately after the war. Men and women in the Services could actually be recruited now and given correspondence courses to prepare them for their work later. It is not intended, in this pamphlet, to discuss the ways and means of obtaining these recruits, but it must again be stressed that the profession of teaching will need to be made more attractive if a sufficient number of suitable men and women are to be persuaded to join its ranks.

(c) *Buildings*

Extra children at school will mean extra buildings and more equipment. Herein lies another big problem since at present we have neither the manpower nor the materials for these. Since the war, thousands of Service buildings have been erected, many of which could without much trouble be converted into temporary classrooms and workshops. Some of these huts could be moved, as they stand, to a school to provide extra accommodation, or, if the site were suitable, it could be taken for a new school. But such a step must be regarded only as a makeshift until better buildings can be provided. The very big disadvantage is that the 'temporary' might become 'permanent.' It will be necessary for all states to embark on comprehensive building schemes after the war, not only to provide for new schools, but to eliminate old, dilapidated and unsuitable

buildings in which children are at present housed, particularly in industrial areas.

(d) *Juvenile Employment*

From the point of view of the labour market the best time for raising the age would be at the time of demobilization. If all the adolescents who normally would enter industry and commerce were to be kept at school for another year or two, this would assist materially in finding employment for demobilized Service personnel.

Since the age for apprenticeship is 15, another year at school would benefit those boys who intend to be apprenticed to a trade. At present many of these spend a year or so in a dead-end job which neither interests them nor adds much to their education.

THE EXTRA YEARS

(a) *The Curriculum*

Any extension of the leaving age would be futile unless accompanied by a complete revision of the school curriculum. Unfortunately many of our children to-day leave school at 14 with a great sigh of relief. Never again do they want to learn the kind of thing they were taught at school. This is partly the fault of the school atmosphere, but is largely due to the unreality of the existing curriculum. One or two extra years spent in covering the same ground would be of little value to the majority of children.

In general, education has become far too much a high-pressure affair. We plunge the child at too early a stage into formal learning. We have courses

of study based not on what investigation has shown that the average child can master in a given time, but rather on what we know some children can do, and imagine all should do. We over-emphasize the formal and 'examinable' subjects such as mathematics, and make little attempt to relate the teaching to real life. In order to secure good examination results teachers often push through the year's syllabus in, say, eight or nine months, so that they will have ample time left for revision. Reports of inspectors constantly complain of poor standards in the 'examinable' subjects without apparent realization of the fact that the child's capacity is the measure of things educational. Assuming reasonable teaching and teaching conditions, we automatically condemn by such comments our courses, or our attempt to put all children through the same course. We have steadily added to the school curriculum, but are much slower to drop even those topics or studies which can strongly be suspected of having little use except to provide material for examination questions.

The total result is a relentless pressure on all except bright scholars. The pressure of to-day takes far more subtle forms than it did in the old whipping days, but for some children it is far more damaging. There is little time for those unhurried forms of learning which in the long run pay the best dividends, or for cultivating the special talents of each pupil as an individual. One great advantage of extending the years of schooling would be the opportunity which it would give for relieving the pressure of work. It cannot, however, be over-emphasized

that such a result would not come about automatically. It would have to be deliberately sought after, or else the same pressures would merely extend over a longer period. Nor would it be sufficient to go through the present curriculum, and merely lighten the load of earlier years, aiming to teach the same amount but over a period of two years longer.

For the purpose of this pamphlet we must assume that this ruthless revision has been carried out and that by the time a child is 14, he has mastered the basic skills, and that his intellectual, physical, emotional and social growth has been successfully fostered and stimulated during his early school years. At 14, he is on the threshold of adulthood—eager and enthusiastic to join in the experiences of older folk, curious about government and social affairs, and vitally interested in the world of work. All these interests must be considered in planning courses for the additional years.

In the second of this series of pamphlets, 'A Plan for Australia,' it was suggested that after the first few years of secondary education, the child should be given the opportunity for some vocational training. Quoting from this pamphlet (p. 21):

'The general nature of the courses in secondary schools should be as follows:

'Years 1 and 2 (12 plus to 14 plus years)—A general integrated course for all pupils based preferably on the study of community life.

'Year 3 (14 plus to 15 plus years)—Integrated group activities should continue, but pupils will undertake as

well exploratory courses with an occupational bias, including the first systematic study of one or more foreign languages.

'Year 4 (15 plus to 16 plus years)—Pupils would still combine for common studies and activities, but courses would be based primarily on occupational choice or intention, especially in the case of children for whom this is the final school year.'

The 'exploratory courses' in the third year would give opportunity for individual variations, according to preferences and abilities, whilst the 'integrated group activities' would include studies based on the community itself, and would assist greatly in developing citizenship. During this period, the children can participate in local surveys—soil, climate, industrial, historical. Their interest in local government can be stimulated by excursions, miniature elections and a system of self-government in schools. Lewis Mumford, in his book on *The Culture of Cities*,⁸ says of this: 'What is needed for political life is not mere factual knowledge, for this by itself is inert: what is needed are those aesthetic and mythic impulses which open up new activities and carve out new forms for construction and contemplation. When the landscape as a whole comes to mean to the community and the individual citizen what the single garden does to the individual lover of flowers, the regional survey will not be merely a mode of assimilating scientific knowledge: it will be a dynamic preparation for further activity.' In the past education has been too often divorced from real life to

⁸ Lewis Mumford: *The Culture of Cities*, Secker and Warburg, London, 1940, p. 385.

such an extent that when the young citizen is plunged into the world of work at 14 or 15 he has to begin again and learn for himself what kind of a place the world really is, and what part he must play in the community. Of his rights and responsibilities as a citizen he has only a vague idea. This state of affairs produces apathetic men and women, easily swayed by propaganda, and with poorly developed social consciences. Yet it is in the impressionable and idealistic period of adolescence that the child develops a keen interest in community affairs and wants to learn something about government. It is the duty of the school to cater for this interest. In the years from 14 to 16 much can be done to widen the experiences of the child, so that he will leave school with a knowledge of his obligations to the community, and also with sufficient training to enable him to form sound judgments on the major problems of politics. He should be able to decide wisely which party will be most likely to achieve the ends he desires. He must be able to read the daily newspapers with discrimination and an understanding of the different types of newspaper which cater for different readers. He should understand something about 'advertisement appeal' and the way some advertisements aim at exploiting the weaknesses of human nature. All these things can be learnt through experience, in the last two years of his schooling.

But in widening the adolescent's experience stress should not only be laid on preparing him for his future career. We should have learnt from the Greeks that the search for and appreciation of the

beautiful is at least as important as the amassing of a store of knowledge. Adolescents are particularly susceptible to these things, yet so often we push them out into an ugly, competitive and industrial world without having done anything to arouse their appreciation of the beautiful in art, music, dress, architecture, or even of the beauties of nature. Appreciation is not something which can be taught—it must grow through experiences suited to the age and needs of the child. From his earliest school-days, he will have been undergoing such experiences—in the last two years they can be widened and strengthened, until by 16 he will be able to discriminate between good books and trash; he will know something of music, art, drama. He will know where to go, and what to look for to satisfy the thirst for the beautiful which his schooling has aroused.

One of the greatest advantages in remaining at school after the age of 14 years is that it renders possible a wiser and more intelligent choice of occupational life. We must not be misled by the oft-quoted cases of individuals who, in spite of a minimum of education eventually reach positions of importance or at least of prominence. A few chosen individuals would win through no matter what the handicaps. But for every such case there are thousands of persons doing monotonous routine jobs. If their school training had not stopped so early, many of these would be engaged on more skilled work or would be holding positions of responsibility.

In the educational system of the future we en-

visage the provision of skilled vocational guidance for all young people. The patterns of ability within the individual are not usually defined with clarity until the adolescent years. From this point of view there is every advantage in postponing until as late as possible final decisions concerning careers. Again, in the extra years, children, if assisted to do so, can obtain a sufficient knowledge of the occupational world to form genuine preferences. Only in rare cases are children of 12 or 13 years able to do this. As a rule, at this age, they have little time, desire or opportunity to acquire reliable information about occupations.

There is much to be said for making the school responsible for the first stage of the child's vocational training whether this is to be professional, rural or industrial. This would become practicable in the year from 15 to 16. This training could be carried on at the same time as training for citizenship by making local surveys, by the widening of experiences and the development of aesthetic taste. The vocational training might occupy up to half the school time. For children at present in our academic schools we now provide an intense training in subjects leading to professional careers (that such careers are followed by only a small minority makes no difference to the curriculum). We do the same in our technical schools for subjects of importance in industry. But except in a few cases, we make very little attempt to see that the child chooses his career wisely, and is properly trained at school before beginning work.

There is every reason to believe that, considered educationally, the first year or two of employment for young people going to work at 14 or 15 years is often extremely wasteful. Concentrated and carefully graded courses of technical instruction for adults training for war industries have surprised by their results even those accustomed to technical training. Such extremely condensed courses would not necessarily be wise for post-war training, but it is no longer possible to argue that individual efficiency requires young people to start working at 14 or 15 years. In the extra two years spent at school they could begin training for their future vocation, and this training could be completed at day-time continuation school in the first few years of work. Experiments show that efficiency would be increased in this way—they would begin work with the ground usually covered by the first year or two of employment already covered at school, and their physical condition would be so much better if further training were carried on in the employer's time rather than at night school. Better work and higher production would undoubtedly follow.

To sum up, the work of the extra two years can be of incalculable value to every boy and girl if the curriculum is wisely planned and carefully carried out. Some of the points to be kept in mind are as follows:

1. There should be plenty of activities involving the effective use of spoken and written English, of simple mathematics, and so on, but not as separate subjects. When separate instruction is necessary, it

should take the form of 'self-improvement' classes attended voluntarily.

2. The basis of all systematic courses should be a fuller understanding of community life and the world in which we live.
3. As far as possible this would be based on first-hand observation and participation. School visits and excursions would supplement the actual undertaking of suitable projects of community value.⁹
4. Considerable attention should be devoted to talks and discussions on current affairs. Above everything, there should be practice and training in looking at both sides of an argument. Through the use of well-equipped libraries pupils should learn to track down information and seek authoritative guidance.
5. Special emphasis should be placed on the acceptance of responsibility and adherence to decisions arrived at by discussion among equals. That is, real self-government by the pupils would be a major feature. It is a strange commentary on our approach to these matters that we seem to have believed that an authoritarian schooling should provide a satisfactory preparation for life in a democratic community.
6. Our schools, especially during the final two years, should not scorn to deal with very practical issues such as diet and health, personal appearance and speech, the wise expenditure of money, domestic

9. There are precedents and illustrations available—e.g., the school forestry scheme in Victoria; the work of the Area Schools in Tasmania; the special provisions made in certain New Zealand towns where school buildings were temporarily taken over for military purposes. For a good account of how a school can develop courses likely to have a real meaning for pupils, see the description of the Rangiora High School in *The School Looks at Life*, by J. E. Strachan, published by the New Zealand Council for Educational Research. For examples of integrated courses in social living see the Virginia Core Curriculum. See also C. E. Beeby: *The Intermediate Schools of New Zealand*. New Zealand Council for Educational Research, 1938.

economy, the choice of a career, the problems of marriage, and so on. Much of this instruction might be individual; some of it would be incidental. The school, too, must learn to work in closer co-operation with the parents. Frequently it is better for instruction to come through parents rather than the school, but there should be a definite link between school and home, so that the work of one can adequately supplement the work of the other.

7. There should be much more emphasis on practical work in the form of arts and crafts, hobbies, etc. As far as possible, all pupils, and especially those going into clerical and professional occupations, should possess some utilizable manual skill.
8. In the last two years there will be ample opportunities to give all pupils wide and accurate occupational information. School excursions and visits would help in this way, as also would contacts with people actually engaged in those occupations. More definite knowledge of conditions, prospects and types of work available would be of great value in the choice of a career.
9. Wider experience in the realms of art—dramatic, musical and visual—should be a feature of the last two years.
10. The curriculum should be adaptable to local needs and interests and a large measure of freedom should be given to the teachers to allow room for variety and initiative.

PART-TIME COMPULSORY SCHOOLING

The new Education Act in England, passed by Parliament in 1944, makes provision for compulsory part-time schooling for all children from 15 or 16

to 18. Young people will be required to attend on one whole day or two half-days for 44 weeks each year, or where continuous attendance is more suitable, for a continuous period of eight weeks, or two periods of four weeks each year, at institutions to be known as 'Young People's Colleges.'

This move is an attempt to provide supervision and help for the adolescents in the first years of work which are so important in the formation of character and the training of mind and body. Except for the comparative few who at present attend night classes and technical schools, thousands of boys and girls on leaving school cease to have any systematic help in developing recreative interests or furthering their general education. Day continuation schools would not merely extend the education obtained in earlier years. They should be regarded, in the words of the British White Paper on Educational Reconstruction as 'the entry on a new phase of life and development'—hence the proposed name, 'Young People's Colleges.'

The type of education given in these English schools will contain some basic elements for all students. Physical training and instruction in health and hygiene for all, in conjunction with school medical services, should lead to higher national standards of health and physique. Other basic elements will include training in clarity of expression, and in the understanding of the written and spoken word, together with some education in the broad meaning of citizenship—to give a better understanding of the working of government and the responsibilities of

citizens, and some interest in the affairs of the world around them.

The remainder of the course will have to be shaped to meet individual needs and requirements. Some time will undoubtedly be devoted to vocational training, although this will not be the main function of the school. Courses in handicrafts, domestic arts, etc., will be provided to stimulate interests and create for the students resources of satisfaction and self-development.

One of the most important aspects of day continuation schools is that night training for apprentices would thereby be eliminated. At present many boys who have to work long hours during the day spend as many as four nights a week attending night school. This means, virtually, that not only do they have no time for recreation, but that their working day is longer than that of most adults. Such a situation must have a detrimental effect on the mental and physical health of these young boys. Their vocational training should be given in the day, and if the nature of this training is such that the time required is more than 50% of the day which they will spend each week at a young people's college, then additional time will need to be granted at the college. One solution is to have two boys to each job, so that each one can spend $2\frac{1}{2}$ days at the college.

In England it is hoped that these young people's colleges will serve as youth centres for the district; that young people will return in the evenings for all kinds of activities, recreative and cultural. As the White Paper says, 'It (the college) will thus

perform what is the real function of an education service—to provide a live environment in which, by the pursuit of a variety of interests and activities, both boys and girls alike may bring to fruition the character and capacities with which they are severally endowed.²

Some such scheme is urgently needed for Australia. It could be introduced in stages to coincide with the increased leaving age, so that by the time the full number of additional staff were trained, and the new buildings erected, it would be practicable to have compulsory full-time education to 16, and part-time to 18.

OTHER COUNTRIES

It is interesting to compare our present leaving age with that of other countries. In the United States of America as early as 1918 only 10 states had 14 years as the end of compulsory education. Of the other 38 states, 7 had fixed 15, and 31 16 years as the age for leaving school. By 1939, in 45 states the age was 16 or over. In England and Wales, legislation for raising to 15 was intended to become operative 1939-1940, but was deferred owing to the war. However, by the Education Act of 1944, the leaving age is to be raised to 15 years, although not before 1st April, 1946; and to 16 as soon as becomes practicable afterwards. In addition, as was mentioned before, part-time education is to be compulsory from 15 to 18 at first, and later from 16 to 18. Other countries where part-time education is enforced to 16 or 18 include Germany,

Sweden, the Irish Free State, and Russia. Children in Russia, moreover, are required to remain at school full-time until the age of 17.

CONCLUSIONS

1. The school leaving age should be raised to 15 in all Australian states immediately.
2. A further increase to 16 should be introduced as soon as possible, either in 1947 or 1948, or to coincide with the period of demobilization.
3. Steps should be taken to provide compulsory part-time education for all adolescents from the time of leaving school until the age of 18.
4. Since the courses to be covered in the extra years will require careful preparation, a thorough revision of the curriculum for all grades should be commenced. In providing courses for the children who will be compelled to stay at school for an additional year or two nothing less than a completely new approach will prove satisfactory.

AUSTRALIAN COUNCIL FOR EDUCATIONAL
RESEARCH

"THE FUTURE OF EDUCATION" SERIES

The Australian Council for Educational Research is publishing, under the above general title, a series of pamphlets aiming to show the need for, and to provide a plan for the reconstruction of education in Australia.

Pamphlets already published are:

1. 'Education for Democracy' J. D. G. Medley
2. 'A Plan for Australia' A.C.E.R. Staff
3. 'Education for Some . . . ' J. A. La Nauze
4. 'The Primary School'
 J. M. Braithwaite, C. R. McRae, R. G. Staines
5. 'Universities in Australia' Professor E. Ashby
6. 'From School to Work' W. M. O'Neil
7. 'Education for Parenthood' Zoë Benjamin
8. 'Adult Education in Post-War Australia' C. R. Badger
9. 'The School Leaving Age' Elwyn A. Morey

The following are in course of preparation:

- 'Twelve to Eighteen' Professors Browne and McRae
(Education of the Adolescent)
- 'The Pre-School Child' Miss C. Heinig
- 'Child Problems and Clinical Work' Dr. I. Sebire
- 'Individual Variations in School Pupils' Dr. H. S. Wyndham
- 'Physical Education' B. F. G. Apps and K. M. Gordon
- 'School Buildings and Equipment' A.C.E.R. Staff

It is proposed also to publish pamphlets on other subjects, including Technical Education, and Libraries.