# OVERSCHOOLED BUT UNDEREDUCATED

Society's Failure to Understand Adolescence

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WITH HEATHER MACTAGGART

THE 21ST CENTURY LEARNING INITIATIVE

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## Overschooled but Undereducated: Society's failure to Understand Adolescence

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#### Note on the Pre-production edition

The trustees of The 21st Century Learning Initiative have watched with increasing excitement the writing of this book. The last chapters especially, coming as they do after the essential background material contained in the middle part of the book, seem to us to sum up better than anything we have seen elsewhere, the predicament of the English education system. And 'predicament' it surely is – a difficult, unpleasant and embarrassing situation – for the country's failure to nurture so many of its young people, from birth through adolescence to early adulthood, in home, community and school, reflects badly on all of us.

The Trustees are much impressed with John Abbott and Heather MacTaggart's careful analysis of how advanced countries have got into this state, and what we each need to do as responsible citizens to achieve real improvement. I use the word 'we' in the sense that John describes each of our roles in the creation and sustaining of civil society; we are all part of the problem, and so each of us has it within us to be part of the solution. Until all of us 'ordinary' people realise this, nothing that politicians or educationalists acting on their own can do, will solve the country's predicament.

It is this realisation which has prompted our decision to issue this pre-publication edition for immediate review purposes by journalists, broadcasters, politicians and all those who influence public opinion. At the same time we are arranging for its full publication, but as this takes time we believe that intense discussions of these issues have to start now. There is a secondary reason; it seems that most of the publishing world defines readers in highly segmented ways – technical books about brain function belong to science; books about teaching and learning belong to education; about religion and philosophy to religion; community to sociology, and business to economics. The Initiative's intention is that the ideas synthesized in this book from all of these disciplines urgently need to be brought together within a single text. This needs to read with the compelling interest of a good newspaper editorial while giving the reader enough technical knowledge to enable him or her to communicate these ideas to other people.

We have been told that no book about education has ever become a best seller. While this may well have been true in the past, it would be a tragedy if this book did not break that tradition. This seems a most appropriate time to do so with elections in several of the countries mentioned in this book due within the next year or so. What England and other countries need is serious informed discussion about 'the Big Picture' of what is involved in the "complete and generous" bringing up of young people. Until all sectors of national life understand this and recognise their responsibility towards children and parents, these issues will continue to be relegated to the dusty shelves of the education section at the far back corner of the bookstore. This book belongs either to the front of the store, or nowhere at all.

Education's predicament reflects a much weakened sense of civil society. Too much of what should be the normal responsibilities of individuals has been passed to, and apparently

willingly accepted, by parliamentarians to turn into legislative prescription. Schools neither need more money nor politically imposed prescription anything like as much as they need parents and communities who are equal, but gloriously different, partners in the creation of a world fit for children.

Any readers of this edition of "Overschooled but Undereducated" who think they can help activate such a change of national heart, should contact John Abbott at the earliest opportunity.

David Peake, Chairman of the Trustees, June 2008

### Acknowledgments and Thanks

Full acknowledgments will be inserted in the first edition.

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"Do not confine your children to your own learning, for they were born in another time."

ANCIENT HEBREW PROVERB

"We have not inherited this world from our parents. We have been loaned it by our children."

NATIVE AMERICAN TRADITION

"I call therefore a complete and generous education that which fits a man to perform justly, skilfully and magnanimously all the offices both private and public, of peace and war."

JOHN MILTON, 1644

"... the work of the Department for Education and Employment fits with a new economic imperative of supply-side investment for national prosperity."

MINISTER OF EDUCATION, 2001

#### Introduction

Civilised society can never be taken for granted since human passions are complex, contrary and potentially self-destructive. "Human history becomes more and more a race between education and catastrophe", was an essay I was required to write as a seventeen-year-old in the late 1950s. A heavy topic it might now seem to tax the minds of adolescents, but we knew then that we were within a year of being conscripted into the army, and possibly fighting on some distant battlefield. Our teachers were determined to challenge us to understand why we thought as we did, and why we accepted that our civilisation was worth dying for. The age of seventeen was not too soon to show that we were mature enough to become adults.

I was reminded of that essay years later when, lecturing in Africa on the subject of Adolescence, the African greeting "Umbutu" was explained to me. It is the traditional greeting used when people of different tribes come together. Literally it means "how goes it with the children?" It is an enquiry about the "state" of the next generation. It is every bit as much to do with rearing in the home and community as it is with formal schooling. It is about the preparation and nurture of young people to take over from their ageing parents. It is nothing short of a life and death issue, for on that depends the continuation of a way of living, of a civilisation. Adolescence, to those Africans, was too important to be ignored.

Indigenous people the world over from the native tribes of North America and back to the ancient Greeks, knew something which advanced western cultures seemed to have forgotten – unless their young men and women could prove that they were tough enough to play a full role in adult society they were simply cast out. Not that any of those societies would have survived if they rejected too many of their young – life was too precious for such a waste. The ongoing survival of the tribe was totally dependent on a supply of responsible and tough new adolescents replacing the worn-out skills of their elders. Although initiation ceremonies were tough, few failed because their entire education up to that time had prepared them to stand on their own feet.

Adolescents in our western society are nowadays getting an increasingly bad press, from newspaper reports "detailing anything from rude and brutish behaviour to random stabbings". It is too easy to assume that the problem lies with them, something that has gone wrong with their internal psychological make-up. That is simplistic, and very wrong. Many adolescents are courteous, responsible, idealistic and as horrified by violent crime as any of us, but too many adults have become so engrossed in their own affairs that they have forgotten to give youngsters the opportunity to prepare themselves to be the next generation of responsible adults. This has gone on now for several generations, so today we are surrounded by many older men and women who have never properly grown up – people who can't really stand on their own feet. This is becoming an ever more serious issue as the years pass.

Neuroscientists are discovering that adolescence, for reasons this book will explain, is

a period of profound structural change in the brain, an integral part of its progression from birth to adulthood. This means that adolescents are especially susceptible to environmental, social and emotional pressures. Adolescence confuses adults almost as much as it disturbs the individual adolescent. Inquisitive yet confrontational, capable of amazing energy when roused yet frequently infuriatingly laid-back, we don't know whether we love them or despair of them. No longer children to be told what to do, they simply blow hot or cold quicker than the rest of us. Apparently lacking adult powers of judgement, they are often as uncertain as to how to behave as are adults in how to respond to them. Curiously it is often those who had to batter their way through adolescent trauma who are, years later, more successful than those who had an easier passage.

This relatively short book about the development and education of young people raises a quite fundamental question. By misunderstanding teenagers' instinctive need to do things for themselves, isn't society in danger of creating a system of schooling that so goes against the natural grain of the adolescent brain that formal education ends up *trivialising* the very young people it claims to be supporting? This is an unintended, but inevitable, consequence of an out-dated design brief (from the shape of schools, the nature of the curriculum, the structure of assessment, and the way teachers teach). By failing to keep up with appropriate research in the biological and social sciences, current educational systems continue to treat adolescence as a problem rather than an opportunity bequeathed to them through the genetic transfer of important mental pre-dispositions to learn in particular ways. These pre-dispositions, once activated, transform the clone-like learning of the pre-pubescent child through adolescence into the self-directed learning of the mature adult.

Our ancestors understood this intuitively and saw adolescence as a special time in life in which both mind and muscle needed to be stretched. Until the late nineteenth century in the western world there was no room for youngsters who couldn't do anything properly. Basic skills of reading, writing and arithmetic might be taught in a classroom, but apprenticeship was most people's finishing school, as it still is in some places to this day. It was apprenticeship that gave young people an education for an intelligent way of life. It was the process by which teenagers could both learn useful skills while also modelling themselves on socially approved adults, thus providing a safe passage from childhood to adulthood in psychological, moral, social and economic ways.<sup>2</sup>

Apprentices learnt well in those days. They knew the inherent satisfaction of a job well done, and they had the time to refine their skills and learn in depth. However, as factories became ever more productive, and the cult of economic efficiency grew, the craftsman could not compete with such a single-minded focus on profit-making. So the opportunity for apprenticeships decreased and the frustrated energy and high-spirits of unemployed youths — too large now to stay sitting in a classroom, and too young to be employed — threatened the social order. By 1904 American psychologists, observing the apparent chaotic and dysfunctional life of adolescents with nothing meaningful to do and no role models to follow, started to define adolescence as a kind of disease brought on, they assumed, by the rapid development of sex hormones. This, they argued forcefully (but simplistically) to politicians willing to be impressed, had to be treated with extended years of schooling to "protect" teenagers from the risks of adult life until they were mature enough to deal with them on their own.

In this was the birth of the modern secondary school – a kind of holding ground in which the problems of adolescence could be worked through so that eventually youngsters would be mature enough to deal with adult society. School was the exact opposite of apprenticeship. Schoolchildren were required to sit docilely in classrooms, listening to the received wisdom of the teacher and then reproduce that knowledge when tested. Independent

and creative thinking was not encouraged for that threatened the teacher's control of the rest of the class. Young apprentices, on the other hand, had to be so put through their paces that the older they became the less dependent they were on the craftsman, and the more confident they were in demonstrating their ability to solve problems. Every skill learnt, every experience internalised, increased the apprentice's sense of autonomy. Recent research in cognitive science and neurobiology makes it obvious that apprenticeship was a culturally appropriate response to the neurological changes in the adolescent brain. Apprenticeship was a form of intellectual weaning whereby the more skilful and thoughtful the apprentice became, the less dependent he or she would be on the teacher. The German philosopher Nietzsche put it succinctly, "It is a poor teacher whose pupils remain dependent on him".

If Western society is to survive (and it really is as serious as that), it is essential that all those involved with young people escape from that assumption made a hundred years ago by early psychologists, that adolescence is an aberration, something which is an inconvenience – an irrelevance which has to be got over. That is what this book is all about. While the human brain has evolved to enable each of us to function effectively in complex situations - we naturally think big, and act small - modern education has become side-tracked into creating specialists who are well-qualified in their own disciplines, but nothing like as good at seeing the wider impact of their action. Because formal schooling has done its best to neutralise the impact of adolescence, recent generations of young people have been deprived of the strength that comes from knowing that they are not frightened of taking difficult decisions, and if necessary picking up the pieces when things go wrong. We have effectively lost the plot: adolescence is an opportunity not a threat. Understand that, and it changes everything.

This book has been a long time in the writing. It draws very heavily on the work of Education 2000, a British not-for-profit foundation of which I was Director between 1985 and 1995, and on the subsequent work of The 21st Century Learning Initiative<sup>3</sup>. The Initiative is a transnational research group whose work started in conjunction with the Johnson Foundation at Wingspread<sup>4</sup> in Wisconsin. There a team of some sixty researchers, policy makers, politicians and practitioners started to bring together thinking from different perspectives to produce a synthesis across the biological and social sciences on the principles of human learning. In late 1999 the Initiative moved its base back to England and in the past eight years has delivered training programmes and given more than five hundred lectures in various parts of the United States and Canada, in South America, across Europe and the Near East, Africa, Indonesia, Malaysia, Japan, Korea, Australia and throughout the British Isles. I began to explore many of the arguments in my three earlier books, *Learning Makes Sense*, *The Child is Father of the Man* and *The Unfinished Revolution* with Terry Ryan<sup>5</sup>.

This is a short book intentionally. Extensive work in Canada in conjunction with the Canadian Council on Learning<sup>6</sup> over the past three years, and the energetic and determined enthusiasm of my Canadian co-author, Heather MacTaggart that I should not lose the urgent message of these findings in too much technical detail, means that this book has been made as "reader-friendly" as possible. That it is written from an English perspective should not detract from its value to people in other English-speaking countries<sup>7</sup>, for while their attitudes towards children and the shape of their education systems will inevitably reflect their own national identity, go back only a hundred years and the origins of many of these national systems were brought to their shores by immigrants from England<sup>8</sup>. Some readers might wish to speed-read Chapter Five and much of Six so as to get to the meat of the argument from Chapter Seven onwards. They might then find that they would want to return to the more detailed explanation of educational policy at a later stage. All readers will need to interpret the

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issues raised in the book through the lens of their own circumstances, culture and knowledge of their own history.

Our task has been to synthesize<sup>9</sup> an array of research from both the physical and social sciences and show how these insights can contribute to a better understanding of human learning, especially as this relates to adolescence. If in any way this has led us to trivialise what is to them their life's work we apologise unreservedly, and ask them respectfully how they would have expressed the essence of their research in as few words, and still made it possible to complete the jigsaw of a picture<sup>10</sup>.

An education system that truly went with the natural way in which people learn – I call it "going with the grain of the brain" – would prepare children in their younger and prepubescent years for the self-defining struggle that is adolescence. A delightful story illustrates this well. A man, seeing a butterfly struggling on the sidewalk to break out of its now useless cocoon, bent down and with his pocket knife carefully cut away the cocoon and set the butterfly free. To the man's dismay the butterfly flapped its wings weakly for a while, then collapsed and died. A biologist later told him that this was the worst thing he could have done for the butterfly needed the struggle to develop the muscles to fly. "By robbing the butterfly of the struggle, you inadvertently made him too weak to live", the biologist explained.

Every child needs the struggle of adolescence to sort themselves out and put away those childish behaviours which earlier had served them well. Sometimes alone, often with their peers and supported by the guidance of wise and caring adults, adolescents need a careful mixture of guidance and the space to work things out for themselves. Through the struggle of adolescence they develop the strength for adult life. To waste adolescence is to deny future generations the strength essential to deal with the ever changing scenes of life.

Neither our writing of this book, nor your reading of it, is an end in itself. Hopefully the story told here should make you determined to help transform our overschooled but undereducated society. It is not a book which, once read, you should ever be able to put away on the bookshelf. This is a call to action to create "responsible subversives", people in all walks of life ready to face up to the tragic consequences of our society's failure to understand the significance of adolescence. When that happens things really will change for the better.

John Abbott May 2008