Honouring the Human Potential

The Past, Present and Future of Montessori Education

Australian AMI Alumni Association Conference
August 1998

Featuring
Mrs Renilde Montessori

Conference Papers

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Letter of Greeting

August 12, 1998

Dear Montessori Friends,

As I sit here preparing for the start of another Primary level course in Portland, I can't help but have my thoughts wander far across the ocean. For all of you, these are the last days of preparation for the upcoming National Conference and Renilde Montessori's visit. My thoughts and best wishes will be with you throughout this coming week. I wish I could be present there with you, but will settle for being there in spirit.

This is such a momentous time of celebration. We just recently completed the National Conference here in the United States. We began and ended with tributes to Mario Montessori in this the centenary year of his birth. I am always inspired by reflection upon those who braved the new world to put forth a new vision of the child. Dr. Maria Montessori, as the visionary and pioneer, shared this journey with Mario Montessori, her son. We play both a small and a large part in seeing this legacy through. We are small in that we carry on a tremendous piece of work that has already been established for us. But we are large in that without us, the vision of the child held by Dr. Montessori and Mario will die! From the time of Dr. Montessori's death in 1952 to the end of his life in 1983, Mario held the AMI banner high. He worked tirelessly to see the work carried forward throughout the world. He took the initiative in establishing AMI training courses in many countries, so teachers would be ready to serve the child.

Now Renilde Montessori, Mario's daughter and Dr. Montessori's granddaughter, leads the way. You are truly blessed to have Renilde with you at this time. She is a great AMI Montessori advocate and has in her words "mid-wifed" the re-establishment of the Sydney course. I have leaned upon her wisdom and insight many times as we have worked to begin again in Sydney. She waved our banner high at AMI and continues to give us her support, love and encouragement.

May you all be inspired and uplifted during this conference. May we find ourselves more ready to meet children wherever they are and allow them the richness of a fully developed foundation for human life and the cosmic task.

Warmly,

M. Shannon Helfrich

Foreword

On the twelfth of February this year, a group of twelve Montessori directresses met in a 3-6 classroom of a school in the northern suburbs of Sydney. One of the participants was there by courtesy of a speaker phone from Melbourne, the phone placed carefully on a chair in the circle of women. We were there to begin to discover and design the central theme and program of the two-day conference, in August, to be held with Mrs Renilde Montessori. It was very hot. We ate juicy green grapes and began to try to unravel and explore how we could best serve this upcoming and very honoured event. As we voiced our own sense of the significance of hosting Mrs Montessori at this time in the life of the Australian Montessori community, the theme quietly appeared and stood before us: honouring. We became aware that we wanted to honour: Australian Montessori teachers and schools, the work that had gone before us, Patricia Hilson, Martha Simpson, Maria and Mario Montessori, ourselves, Renilde Montessori, the Association Montessori Internationale, the next generation, the human potential itself, which Montessori always saw in the child. The theme had emerged.

What does it mean to honour? We found: to hold in high regard, to give credit for behaviour that is worthy, to confer distinction upon, to pay homage to. The experience of designing the program and attending to the myriad of details which support Mrs Montessori's visit here in Australia has been an honour. The understanding of this theme of honouring has been a delightfully unending one – new levels of meaning keep arising! May the experience of returning to and re-reading these papers from this Conference, "Honouring the Human Potential: The Past, Present and Future of Montessori Education" be similarly enriching for all who partake. Enjoy!

Candice Shields

for the Program Planning Group,
Australian AMI Alumni Association,
Sydney, Australia, August, 1998

The Conference Presenters

RENILDE MONTESSORI DE MATUTE is Maria Montessori's youngest grandchild. She lived and travelled with her grandmother as a child and in her late teens audited one of Dr. Montessori's courses in India. She attended Montessori schools wherever these were available and finished her secondary studies at the Montessori Lyceum in Amsterdam, the Netherlands. Renilde Montessori married, has two sons and worked for many years in varied fields of endeavour. In 1968 she joined the Montessori movement as personal assistant to her father Mario Montessori. She went on to graduate from the Washington Montessori Institute in 1971 and since that time has been actively involved in Montessori education as lecturer, trainer and examiner. She founded and was director of training at the Foundation for Montessori Education in Toronto from 1989 to 1995. In September 1995 she assumed the position of General Secretary of the Association Montessori Internationale.

DR MAURICE BALSON is a consulting psychologist who has recently retired from Monash University, where he was a Professor of Education for thirty years. He is author of 'Becoming Better Parents' and 'Understanding Classroom Behaviour'. He established the Monash Parent-Teacher Education centre and works with parents, teachers and professional groups.

CHARLES DAVISON is President of the NSW Chapter of the Aboriginal Education Consultative Group and is Aboriginal Community Liaison Officer with the Department of School Education. He has collaborated in the re-writing of the Department's Aboriginal Education Policy and with the development of staff inservice materials. Charles had a leading role in establishing the Manning Valley 'Australians for Reconciliation' group. He has represented the community on committees, in forums and as a speaker on health, youth, juvenile justice, education and social justice issues at local, regional and State levels. Charles is married with four children and is committed to achieving reconciliation through educating the whole community about Aboriginal Australia.

BARRY HILSON collaborated with his late wife Patricia Hilson, in a range of Montessori endeavours in Australia and the United Kingdom over the last 20 years plus. Barry has served on the councils of the Canberra Montessori Society, MAA, NSWMA , MSWA and MTCA and has been involved with numerous other Montessori groups at a school, State and national level. Although his initial training and employment was in education his career has predominantly been in commerce. Barry is also a proud Montessori grandfather.

DEIRDRE BERRY found Montessori philosophy through her children. Having trained as an infant teacher she travelled to Sydney from Melbourne in 1988 and undertook the MTCA pre-primary course. Deirdre has worked as a pre-primary director at Plenty Valley Montessori and as 6-12 director at Caulfield Montessori. In 1993 she had the honour of assisting Pat Hilson on the AMI course in Melbourne. In 1996 she completed a Masters of Education thesis on the benefits of the Montessori method of teaching mathematics to pre-primary and primary aged children.

PAMELA NUNN had an influential childhood on a farm on isolated Kangaroo Island, off the coast of South Australia, where she lived until she was sixteen years old. She has taught in an alternative mixed-age-range classroom in Adelaide. She lived in London and Boston in the 1980's, raising three children. She trained as a Montessori teacher (AMI) in 1990 with Patricia Hilson and has taught at the Children's House, Lindfield, for eight years.

The Conference Presenters

SUE BIRDSALL has a Masters of Education and a Montessori AMI Early Childhood Diploma. She has taught for six years as a high school teacher in Sydney and Hong Kong and for thirteen years as a Montessori 3-6 teacher at Hills Montessori School and Cameragal Montessori School. She was a founding member of Cameragal School, Forestville School and the MTCA as well as playing key roles in NSWMA and AMTA over a number of years. Sue is a mother of three children with all having attended Montessori schools. She has a special interest in Aboriginal education and special needs children.

MICAELA KUH was born in Malaga, Spain and educated at Trinity College, Dublin (MA Psychology, Fine Arts, English Literature). She speaks English, Spanish, French, Italian and some Portuguese. She took her Montessori training (AMI) in Dublin and Bergamo at the 3-6 and 6-12 age levels and has had fifteen years' Montessori experience in eight schools on three continents. She recently started the primary classroom at Eastern Suburbs Montessori where she is currently working.

MARION McEWIN (BSc (Hons), BEc) is a Montessori parent involved with Montessori education in Canberra during the 1980's. She is past president of the Canberra Montessori Society (CMS) and a founding councillor of the MAA. She was President of the MAA from 1990 to 1993. Marion works as a social statistician.

MATTY VAN DREMPT gained her Early Childhood degree in Holland and worked for two years with preprimary children. After moving to Australia and while her children attended Montessori school , Matty undertook the AMI Montessori teacher training in 1986. Matty has worked at Forestville (2 years) and Avalon (6 years) Montessori schools and is currently at Hills Montessori School. Matty has held positions on both school and college councils.

TINEKE VAN GASSELT studied at the Montessori Institute in Denver and there completed the AMI Assistants to Infancy course in 1991, becoming the first Montessori professional qualified in Australia to work with the 0-3 age group. She has served as founding member and administrator of the MAA and on the council of the MTCA. Tineke has conducted parent discussion groups, workshops for early childhood educators and spoken at three Montessori national conferences. She currently holds Montessori under-three groups at Castlecrag where parents attend with their children.

FELICITY YOUNG has a Bachelor of Education degree (major in visual arts). In 1991 she was sponsored by the Montessori Children's World, Gymea to undertake the AMI Elementary (6-12) diploma in Bergamo, Italy. On returning to Australia she worked with the 6-9 group for five years. She is currently directress of the 9-12 class and acting Principal of Montessori Children's World.

Conference Program

Saturday 22nd August 1998

HONOURING THE LEGACY

9:00 Conference Welcome
Conference MC, Candice Shields

9:10 Opening Remarks
Margaret Wayland, President, AAAA

9:20 Keynote Address
Honouring the Human Potential
Renilde Montessori

10:00 Audio-visual
Celebrating AMI in Australia

10:10 Presentation
Fulfilling the Human Potential
Patricia Hilson presented by Barry Hilson

10:50 Tribute to Patricia Hilson
Renilde Montessori

11:00 Morning Tea

HONOURING THE MIND

11:30 Presentation
The Mind and the Hand:
Implications of Recent Research on Montessori Theory and Practice
Pamela Nunn

The very essence of human potentiality lies in a fundamental understanding of the human mind. For Montessorians the mind is inextricably linked with the spirit, heart and hand. Nearly one hundred years ago Maria Montessori discovered aspects of the mind that unlock the key to human potential.

" The environment that we provide for children, the stimuli with which we encourage them to interact and the ways in which we demonstrate for them the uses of the human mind – these are the means at our command for shaping both their brains and our cultural future." (Jane Healy)

1:00 Lunch

HONOURING THE CHILD

"The most sensible advice Maria Montessori gives is 'Follow the Child'. It will take many generations for humanity to understand the common sense of this injunction. When it does, and only then, humanity itself will begin to fulfil its potential." (Renilde Montessori)

Workshop for Montessori Professionals

2:30 1. Grace & Courtesy *Renilde Montessori*
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Renilde Montessori will present the following two talks followed by open discussion and question time. This session is only open to Montessori teachers and assistants.

Grace – The Felicity of Being
Grace comes from gratus, a Latin term for beloved. When speaking of the Montessori prepared environment, its tangible and intangible characteristics are frequently discussed. Essential among the latter is the unconditional acceptance of every child so that its inherent grace may flourish in the knowledge that it is loved wisely and well. The spirit of this love is to be generous, fastidious, devoid of sentimentality, creating a growthsome climate of benevolence within austere, non intrusive parameters.

The Company of the Elect
In 'The Absorbent Mind' Maria Montessori says, "let us always remember, when we present ourselves before children, that they are of the company of the elect." This statement is intriguing and merits closer scrutiny.

Workshops for Parents and Educators

2.30 2. A Delicate Balance: School Structures that Honour the Child
Barry Hilson
Micaela Kuh
Marion McEwin
Matty van Drempt

Australian Montessori schools are unusual in that they are predominantly operated by parent councils. Professional management, business planning, fiduciary and fiscal responsibility are all key issues – yet how can they be balanced with the Montessori ideal? In Montessori schools the bottom line can not only be measured in dollars but must be measured in the impact on the child.

2.30 3. Principles of Montessori Education
Sue Birdsall
Tineke van Gasselt
Felicity Young

This panel presentation will look at fundamental principles and practices of Montessori education for the 0-3, 3-6, 6-12 age groups. The session is designed for those new to Montessori education, non-Montessori educators and professionals from related fields. It will outline key elements of Montessori philosophy, practice and environment and the role of the adult in facilitating the full development of the child at each stage of development.

Conference Program

Sunday 23rd August 1998

HONOURING THE PARENT

9:00 Honouring the Parent
Maurice Balson

The one biblical commandment that refers to parents and children instructs us to honour our parents. In modern times we have come to believe that it is love that binds this fundamental relationship together but perhaps 'honouring' deserves closer examination. Dr Balson will explore the role of parents in the full development of human beings.

10:15 Tribute to Mario Montessori
A personal account of his life, work and contribution
Renilde Montessori

Mario Montessori Commemorative Video
This video presentation was developed by NAMTA to commemorate the centenary of Mario Montessori's birth.

"Mario Montessori, who would have today been one hundred years and nearly five months old, must seem to the younger among us an historical figure, a relic of ancient times. To those who knew him, he is very present, very much alive, a continuing source of encouragement and warmth, a friendly, unobtrusive spirit, always there to be called upon when we flounder and common sense runs out. This in our private lives. In our work as well, Mario Montessori is a living presence, an invisible thread running through, interwoven with, the magnificent fabric of Maria Montessori's pedagogy. It is by no means our intention to place him posthumously in a limelight he never sought, for this would be an insult to him. Mario Montessori had a profound understanding of the meaning of service as one of the vital functions of deep ecology rather than as submissive servility. Mario Montessori, with his rich and powerful personality, is an outstanding example of enlightened selflessness". (Renilde Montessori)

11:00 Morning Tea

HONOURING THE FUTURE

11:30 Honouring The Child's Potential in Achieving Reconciliation
Charles Davison

Charles Davidson will explore the potential role of the child – and education – in the process of reconciliation. He will also offer insight into Aboriginal Australia whose ancient culture in this great southern land has much to offer for the full development of human beings.

12:45 Lunch

2.30 A World Odyssey: Revelations of the Possible
Renilde Montessori

A panoramic view of Montessori evolves uniquely when one experiences first-hand the universal impact of Montessori education unfolding from culture to culture. Mrs Renilde Montessori's expanding contacts with worldwide Montessori, including her most recent visits to Austria, Spain, France, Canada, Hungary, Romania, Germany, the United States, South Africa, Japan, Korea, and Mexico have shown her a glimpse of how Montessori establishes unique identities in a variety of contexts. Her talk will centre on the expansive nature of the Montessori ideal and its possibility for wider applications in response to real global challenges.

3:30 Launch of AMI Teacher Education Centre in Australia
Presentation of plans for re-establishment of AMI Montessori Teacher Education Centre

HONOURING THE PARTNERSHIP

4:00 Honouring the Partnership: The Future of Montessori Education in Australia.
Renilde Montessori and other conference speakers will participate in an open panel discussion of the future of Montessori education in Australia.

5.00 Conference Close

From San Lorenzo to the World

Renilde Montessori

Before San Lorenzo, Maria Montessori was well-known, in Italy and beyond, as a woman doctor, a rarity at the time, and as a defender of women's and children's rights. Her work with deficient children had been recognised to have great merit. It was generally agreed that she had a brilliant mind. Furthermore, she was beautiful, feminine and charming. For these, and many other reasons, she was intelligibly admirable.

The new path she chose to follow after her experience in San Lorenzo fractured this intelligibility. She was a pioneer in the field of a unique science and the scope and content of her work was difficult to encompass in its totality. She became the object of kaleidoscopic interpretation and projection. For teachers she became a teacher, for seekers a visionary, for disciples a master, for sentimental children-lovers a quite inspired Kindergarten Mutti. And for pedestrian academics incapable of perceiving the farther reaches of enlightened science, she was dismissed as a romantic enthusiast.

San Lorenzo opened a portal whose doors had remained hermetically sealed before the advent of Maria Montessori. These were the doors to the realm of the child, the discovery of the child, the secret of childhood; the doors to knowledge of the child and of the laws governing the development of the human being from conception to maturity.

San Lorenzo was also the first prepared environment, a sparse and austere precursor of the hundreds, the thousands, perhaps the tens of thousands Montessori prepared environments that were to follow. All of these — the good, the bad and the ugly, the outstanding, the mediocre and the hideous — are descendants of that humble Casa dei Bambini, the laboratory where a far-reaching scientific pedagogy germinated, a pedagogy now full-grown yet not fully understood or implemented.

In San Lorenzo the first set of Montessori auto-didactic apparatus was presented to **the** children with results so totally unexpected that they inspired awe and a sense of revelation in all who saw it. First and foremost in Maria Montessori herself who, by observing the interaction between the children and the materials and the children's response to an orderly, disciplined environment where they were free to follow their inner directives, discovered the true nature of the human child.

The true nature of the human child, after 90 years, has not yet penetrated the consciousness of adult humanity. The prejudices surrounding the child which existed in Maria Montessori's time persist, perniciously. We do not see the open doors; and if we do, perhaps we gaze within, perhaps we even venture to cross the threshold. But rare is the person who enters into this unknown dimension following the child, as Maria Montessori enjoined educators to do, again and again, throughout her life.

For many, it is inevitable to perceive Maria Montessori's pedagogy as a teaching method, as a more or less scientific way of helping children to attain spectacular academic achievements at an early age. Others, more aware, consider farther reaches achieved through Montessori education, such as the importance of acquiring control and co-ordination of movement, independence, orderly work habits, of becoming socialised, etc. This is still a partial and mechanistic view of education as an aid to life.

If the farthest reaches of education are to be attained, man, and therefore the child of man, must be seen as an entity consisting of body, mind and spirit. But rarely is the spirit mentioned in secular communities; the issue of spiritual development is preferably avoided because the word spirit is suspect, it is tainted, it smacks of a shadowy religiosity and is therefore best left unspoken. And yet, unless we take into account the strong, tender, adventurous, exhilarated, rollicking, ethical spirit of humanity, a spirit capable of divine amusement, divine contentment, divine love, education is a sad farce.

Montessori pedagogy is not yet perceived as the luminous revelation it is, nor yet as the promise of a possible change in the evolution of mankind which may bring new dimensions to its life on earth.

This change will only come when we learn to see the immense power for good of the gentle, tiny beings we bring so ignorantly, so thoughtlessly, into the world. Whether or not they are conceived from love, whether or not they are born into a loving environment, they are the personification of the great energy called love which Maria Montessori describes with precision and clarity in **The Secret of Childhood**, in **The Absorbent Mind** and in **Education and Peace**. As parents, as educators, as adults of the species, it is necessary that we become adequate to observe the visible phenomena resulting from this vital force which permeates the child.

Among many others, seven of these observable phenomena stand out: — the child's capacity to forgive; to accept; to assume responsibility; a thirst for knowledge of all life offers and demands; solitude as a vital necessity; the pursuit of completion; enlightened trust.

FORGIVENESS ~ The child comes into the world disposed to love its environment and all within it, passionately and totally. Particularly, it comes into the world disposed to love its mother, its father, its family, its people. One of the manifestations of this love is the child's capacity to forgive and most striking is the quality of this forgiveness. Adult forgiveness is often limited and conditional; it chillingly allows guilt to remain latent as a deterrent and a warning. The child's forgiveness absolves. When the child forgives, it endeavours to bring comfort and consolation, to make again immaculate the soul that erred thereby restoring its world to beauty. How many parents, how many teachers have not encountered the generosity of a child's forgiveness? And how often have we not remained oblivious to it, denied it, disregarded it? Until, one day, because of our misguided conviction that to give has more virtue than to receive, spiritual discouragement overtakes the child and its soul becomes sad and dull.

ACCEPTANCE ~ The child in the process of adaptation, in the first years of its life as it is constructing itself to become "a man of his time, place and culture", is in a state of total acceptance.

In **The Absorbent Mind** Maria Montessori quotes St. Paul:

> *"Charity is slow to anger, is kind; charity does not envy, nor deals perversely; is not puffed up. It is not ambitious, seeks not to own, provokes no opposition, plans no evil, rejoices not in injustice, but delights in the truth; bears all things, believes all things, hopes all things, endures all things."*

She comments:

> *"It is a long list of facts, a description of mental pictures, but all these pictures remind one strangely of the qualities of childhood."*

Acceptance in the young child is a vital condition which may become a construct of its personality, be eradicated, or be adulterated, depending on its environment. If a child itself is not accepted, its potential for acceptance cannot flourish to become a force for good, for it has to deal for the rest of its existence with its own non-acceptance. Its capacity for acceptance may warp to become that tepid travesty of acceptance known as tolerance which has no resemblance to the rejoicing in another's existence, the mute, powerful help and encouragement offered to another which is the essence of acceptance and characteristic of childhood. Profoundly touching examples of '*charity does not envy*' are a constant in Montessori environments where children derive greater joy and conscious satisfaction from others' achievements than from their own.

RESPONSIBILITY ~ It is not sufficient for a child to be given care and education. If it is truly loved, the child must receive respect for its human dignity and for its vital exigencies; it must be allowed to assume the responsibilities it is capable of at each stage of maturation. From the beginning of life the child requires the comfort and security of knowing it is a contributing member of its group. Its contribution in the very early hours, days, weeks, months of life, is simply the delight it brings by its very existence. There are few things sadder than to see a baby considered an imposition and a sacrifice due to whatever malignant affectation is assumed on the part of those who should rejoice unconditionally in its being. To hear a young mother say "It is a good baby, it sleeps all night and most of the day" is horrible. It negates the companionship between mother and child that should exist from the time of conception and persist throughout their life together, the companionship which is the source of mutual responsibility.

In **The Human Cycle** Colin Turnbull has a most touching description of nascent companionship between mother and child:

> *"As the pregnancy progresses, the mother-to-be pursues her normal everyday life without much change right up to the moment of delivery, but she increasingly avoids activities or situations that might tax her physically or emotionally. She*

adorns her body with leaves and flowers.... It is clearly a form of consecration. In the last few months she takes to going off on her own, to her favourite spot in the forest, and singing to the child in her womb.

The lullaby that she sings is special in several ways. It is the only form of song that can be sung as a solo and it is composed by the mother for that particular child within her womb. It is sung for no other, it is sung by no other. The young mother sings it quietly, reassuringly, rocking herself, sometimes with her hands on her belly, or gently splashing her hands or feet in the water of her favourite stream or river, or rustling them through leaves, or warming herself at a fire. In a similar way she talks to the child, according it the intelligence, though not the knowledge, of an adult. There is no baby talk. What she says to the child is clear, informative, reassuring, and comforting."

In the first years of life habits of the body, mind and spirit become constructs of the personality. The habit of assuming responsibility cannot be acquired beyond a certain point. In the Montessori Prepared Environment for children from three to six years of age, the child is given the means and the opportunity to become responsible for itself, its environment and for others. It becomes adequate to take upon itself responsibilities not as a duty to be performed, but as the privilege of the human being able to perceive and respond to the exigencies of his milieu; responsibility not as an end in itself, made grey by shades of power, but as a means of contributing to the wholesome ecology of its environment, living and non-living, present and future.

THIRST ~ Thirst for knowledge of all life's matters is a mighty given in the human species. It is the expression of the *élan vital* common to all living things. It is the powerful energy which drives the child, from the very beginning of its existence, to fulfil its splendid, rich and multifaceted human potential for living and learning which, in the final count, are synonymous.

In the chapter named 'The Long Childhood' in **The Ascent of Man** Jacob Bronowski says:

"Think of the investment that evolution has made in the child's brain. My brain weighs three pounds, my body weighs fifty times as much as that. But when I was born, my body was a mere appendage to the head; it weighed only five or six times as much as my brain. For most of history, civilisations have crudely ignored that enormous potential. In fact the longest childhood has been that of civilisation, learning to understand that."

Civilisation is haltingly, hesitantly beginning to understand that enormous potential, and, paradoxically, it is perhaps the first time in the history of mankind in which the child is forced into universal *ennui*, becoming the victim of a conspiracy which condemns it to endless, soul-killing boredom. For a great part, the executioner of the child's spirit is the lack of essential companionship. The electronic nanny replaces conviviality. The little being who should be using, developing, rejoicing in the great powers with which it is endowed, is reduced to culling a cold mimicry of life from a screen instead of moving, touching, feeling, taking in all elements of its environment through its senses, building a treasury of rich vital experience as a foundation for its existence on earth.

The boredom continues. To quote Andrew Nikkiforuk in **School's Out**, a critique of contemporary schooling in North America:

"In the modern classroom, information poses as knowledge, images as ideas, attention as concentration, activities as continuity, and emotion as truth."

The child's thirst is never quenched, and its exuberant potential for acquiring essential knowledge at all levels of its humanity will shrivel, its spirit will become arid as the desert. A blight of tedium is spreading throughout the so-called civilised world and our children are endangered.

SOLITUDE ~

"The independence gained [in a Montessori classroom of children three to six years of age] leads also to an awareness of one's solitude as beneficial rather than as a source of loneliness, and therefore evokes respect for the solitude of others. This makes possible an interdependent society based on the dignity of the individual rather than on the need to cling to others for security and support."

As educators – parents – teachers, we tend to vociferate and interrupt the child's moments of communion with life and all its matters, with our earth and all its beauty. Instead, it is necessary to be companionably silent. Babies must be taken out to contemplate the stars in the silent comfort of their mothers arms to learn the solitude of their human condition and find it beneficial.

The child works at its own construction in solitude and silence and this becomes a condition for its spiritual well-being. It is in solitude and silence that we hear the music of

the spheres. There are times in our life when we find ourselves in the very depths of desolation and cry out for help because we feel abandoned and when we cease to call, the solitude and silence that unite us to all things bring peace and comfort and our spirit soars again.

COMPLETION ~ One of the tenets of Montessori pedagogy is that a child absorbed in, concentrated upon, a constructive activity must be allowed to complete the cycle of this activity. Obviously, it is up to the wisdom of the adult to recognise whether the activity is constructive or not. But if indeed the child is evidently following the directives of its very exigent 'inner teacher', an arbitrary interruption is nefast, for a source of vital energy is truncated. If these interruptions take place consistently, completion will not become a vital demand, the child's pursuit of perfection will be limp and frayed, its spiral path of self-construction devoid of points of arrival therefore lacking points of departure.

The three-year age mix in Montessori classrooms reflect cycles of development and this has many beneficial consequences. One of these:

> *"is the comfort of remaining in one environment throughout a cycle of development. There is a perspective both toward the future and toward the past. The young children see what work awaits them, the older ones can contemplate the path they have completed and by the time they have outgrown this first environment, before the restlessness sets in of confinement in a space become too small, they go on to become the younger one again in an environment where they can explore new dimensions of what they have made their own."*

In each cycle of activity, in each cycle of development, in each cycle of life there is a beginning, a process and an end. We may enter diffidently or impudently, cautiously or abrasively, hesitantly or with confidence, according to our nature. But to be growthsome, the process must inevitably lead to an awareness of completion and the bleak cleanliness of something integrated and therefore irrecoverable; return is impossible, that which lies ahead we do not know. And so the personality acquires completeness and becomes enduring until the final turn of the spiral is reached and we can look upon our life, find that it is complete, and without fear enter upon the ultimate unknowable adventure.

TRUST ~ The first task of the educator, is to trust and thereby become trustworthy. Mistrust and fear are evil tools in the hands of the poor educator, demonic weapons of "the lesser forces that cause dread". Montessori pedagogy, whether applied in the home or in the school, is rooted in reality, truth and infinite trust in the child's intelligence and the child's potential.

Montessori environments are logical in their multiple levels of order and explicit in their content. The material is presented with elegant economy of movement and without intrusive language, so that the child rather than imitating the movement involved, may internalise its purpose and recreate the activity that leads to this purpose. This is the merest sketch of the peaceful environment in which the child, trusted, can develop trust; unthreatened, can develop its will; uncoerced, can freely exercise this will to the point of achieving mastery and becoming capable of the joyful obedience that springs from trust elevated to become faith.

In **The Absorbent Mind** Maria Montessori describes this trust:

> *"The ordinary teacher asks only that she be obeyed. But the child, when allowed to develop in accordance with the laws of his nature, goes much further than this: further than we should ever have expected. He goes to the third level of obedience. This does not stop at the point where he just makes use of a newly acquired ability, but his obedience is turned towards a personality whose superiority he feels. It is as if the child had become aware that the teacher could do things beyond his own powers, and had said to himself, 'Here is someone so far above me that she can exert an influence on my mind and make me as clever as she is. She acts inside me!' To feel like this seems to fill the child with joy. That one can take direction from this superior life is a sudden discovery that brings with it a new kind of enthusiasm, and the child becomes anxious and impatient to obey."*

The sane and complete human being that transcends his own humanity and joyfully commends his spirit to a higher power — what greater form of freedom is there?

From San Lorenzo to the World ~ Montessori pedagogy has been understood as education for life, at best as education as an aid to life. It has not yet been perceived as a means of serving the glory of existence. That part of the gift San Lorenzo gave the world remains to be explored. A fascinating prospect indeed!

Fulfilling the Human Potential

Patricia F. Hilson

Paper presented by Barry Hilson

This talk was initially prepared by Pat and presented by her as a public lecture in Palmerston North (New Zealand) in 1992. She left notes of her talk, which form the basis of this paper. In the course of her live presentation she included several anecdotes – based on her experience as a mother and as an educator. While I can remember their richness, I cannot remember the details of those anecdotes and, regrettably, I am unable to include them in this paper. (Barry Hilson)

"No man can reveal to you aught but that which already lies half asleep in the dawning of your knowledge. The teacher who walks in the shadow of the temple, among his followers, gives not of his wisdom but rather of his faith and his lovingness. If he is indeed wise he does not bid you enter the house of his wisdom, but rather leads you to the threshold of your own mind." (Gibran, 1978)

The notion of human potential is not new in education. It has challenged philosophers since the times of the ancient Greeks. These thoughts of Kahlil Gibran give an expression to the notion which is particularly in tune with that of Dr. Maria Montessori. It shows respect and sensitivity for the uniqueness and individuality of the potential in each one of us.

More recently, in a more prosaic way, human potential has become the focus for an extensive study undertaken by the Harvard Graduate School of Education at the request of The Bernard van Leer Foundation of The Hague in the Netherlands.

The Van Leer Foundation, among other things, supports innovative projects that develop community approaches to early childhood education and child care, in order to help disadvantaged children to realise their potential.

The purpose of this particular study was to assess the state of scientific knowledge concerning human potential and its realisation. One of the volumes published as a result of this study is: *Of Human Potential* by Israel Scheffler (1985). The purpose of the book is to delve into the concept of potential and to remove it from its traditional context – with a view to advancing a practical theory of potential and its development. Such a theory, Scheffler hoped, would provide guidance in the field of education – particularly to policy makers.

Dr. Maria Montessori, in 1948, wrote a book on the same general subject called: *To Educate the Human Potential*. Indeed, human potential was a central theme of much of her educational writing. She had a dynamic view of human potential – a powerful quality – as yet, substantially, unrealised in most educational environments. She championed the cause for fundamental changes in the way education is provided so that it may better support the realisation of human potential.

You will not be surprised to learn that there is much similarity between Montessori and Scheffler, although the approaches and emphasis are quite different. There is much to be learned from both, and I wish to draw from both sources in my talk today.

To begin with therefore, let us look at what we mean by "human potential".

The Oxford Dictionary tells us that:

> Potential means ***potency or power.***
> Potentiality is described as: the state or quality of possessing ***latent power or capacity…capable of developing into…!***
>
> It is in fact: ***a power or capacity "to become…!***
> (The Shorter Oxford Dictionary)

A crucial question here for all of us though, is: "To become what?"

That question itself has potential – the potential to evoke a major, value-laden discussion. It is a question to which I will return later in this paper. For now let us press on with a deeper understanding of the concept of potential.

Scheffler (1985) identifies three important aspects which, he believes, have important bearing upon our concept of potential. He writes of:

- Potential as a **capacity** to become;
- Potential as a **propensity** to become; and
- Potential as a **capability** to become.

If such distinctions seem somewhat nit-picking to you then, I can only suggest that you read this book by Scheffler to see how a philosopher can draw out of such distinctions important implications for educational and social policy. Let me, in shorthand form, try to pick out the distinctions in a sort of hierarchy:

Someone with the '**capacity**' to become may or may not in the future achieve that capacity. That is, no categorical prediction of realisation is implied.

'**Propensity**' does make some form of conditional prediction that a capacity will be achieved; while '**capability**' recognises the existence of skills and perhaps effectiveness in achieving some performance or other relevant outcome.

It is not an exact fit, but I suspect that Montessori would view the new born as having capacity. The emergence of sensitive periods would probably be associated with propensities. Capability would describe that state where the child (or older, as the case may be) has had the experience of performance at least once.

Scheffler develops these three phases to explore pertinent aspects of growth and education. For instance, he draws our attention to such factors as:

- impediments which might block the achievement of a latent capacity;
- his concept of critical periods; and
- the concept of conditional propensities to acquisition of skills and effectiveness.

He seeks to explore how this progression can be optimised to promote the enabling of learning, and the self-development or empowering of learning.

This brings us to what Scheffler identifies as the three great myths regarding human potential, namely:

- the idea of fixed potentials;
- the idea that all potentials are harmoniously realisable; and
- the idea that all potentials are uniformly valuable.

Montessori would agree strongly with Scheffler's view that:

> *"the idea of fixed potential is a myth. Individuals may attain potentials they hitherto lacked – while the present lack of a given potential indeed precludes its realisation now, it does not preclude its realisation at a later time when the potential in question may have been acquired.*
>
> (Scheffler, 1985)

Surely this is the reason why the Montessori environment seeks to provide opportunities for the realisation of potential and to promote self-development of the child and the building of individual work habits. Like Scheffler she was acutely aware of the unpredictability of life and life experiences. Events and opportunities can have a profound effect – both on potentialities and on their realisation. The variables of human effort and effectiveness add further complexity. Presumably, that is why the Montessori approach seeks to prepare the child – to make it better able to interact with its world. That is, the Montessori environment is designed to help the child to develop concentration and self-motivation which will enable it to bring to bear human effort on points of interest.

Learning for the child occurs around 'points of activity'. These are not random. They are directed by inner sensitivities, which Montessori called ***sensitive periods***. Scheffler (1985) is concerned with a similar concept when he talks quite clinically about ***critical periods***:

> *"The fact that, in at least certain systems (e.g. visual, auditory, bird-song) appropriate levels of experiential input may be required during critical periods for the attainment of normal function is not in doubt."*
>
> (Scheffler, 1985)

Montessori's (1949) treatment is more child-centred. She believed that between the birth of the child and approximately six years the child's development is guided by periods of extreme sensitivity to particular aspects of the environment. The sensitivity stimulates the child to engage in activities which bring about the construction of human functions. For example, the characteristic of speech, co-ordinated movement, sensory refinement, order and cultural adaptation are brought into existence

through experience in the environment. Importantly, this is usually accompanied by a spontaneous interest on behalf of the child.

Montessori says that if the child is prevented from enjoying the experiences dictated to it by the sensitive periods, the sensitivity will vanish, "with a disturbing effect on his development, and consequently on his maturation" (Montessori, 1949). These unfulfilled periods will greatly inhibit the child's potential for later development.

There is, of course, another aspect. I was reminded of this when I looked at the thought for the day on a desk diary recently. I read: "To move forward a turtle needs to stick its neck out!" And so it is with the child! So much is experimentation – progressing into the unknown, and learning from the experience. Taking joy, comfort and reinforcement from repetition of an activity before, once more, sticking out the neck again. It is important that we empathise with the challenge that such experimentation poses for the young child and do our best to provide conditions which, at the very least, do not discourage it. Montessori took great care to foster the capacity for experimentation in the young child – but that is detail for another talk, at another time.

It is interesting that he chooses similar analogies to Montessori to describe his view of development. Like Montessori he rejects the Aristotelian view of the acorn-to-oak representation of biological development. Neither Scheffler nor Montessori sees growth unfolding in a wholly pre-determined way. In **The Absorbent Mind**, (Montessori, 1973), a volume which focuses primarily on the period of development between birth and three years, Montessori observes that the baby at birth has only limited mental and motoric powers. But there exist, within the child, potentialities which will determine his/her development. The child's possibilities, she says, are unlimited. The notion of unlimited possibilities in the new-born child is now widely accepted. Bowers (1985), in his book, **The Rational Infant**, draws on research observations when he concludes:

> *The new-born must be pre-set for many stimuli he will never actually encounter. The new-born human is set to expect a much wider range of possible inputs than is the older human. It is this openness that lets the baby react to humans of all kinds, speaking any language. With experience, or lack of experience, some items will fall out of the possible presentation set.*
>
> (Bowers, 1985)

Let us dwell for a while on three propositions which are contained in Bowers' observation. He notes that:

- the child's potential at birth is unlimited;
- the child's potentialities will find their form and content through experiences in the environment; and
- some potentialities will be lost due to lack of experiences.

These propositions seem remarkably close to those advanced by Montessori – almost 50 years earlier. According to Montessori, the child's human potentialities can only be realised within a social context. The prime representative unit of the social context in the first instance is usually the family. The principal agent of the family is, generally, the Mother.

Just in parentheses, I would like to highlight the different emphasis of Scheffler when he talks of the new-born infant:

> *"What the biology of the new-born infant leaves open at birth is, in short, filled out by culture, history, education and decision."*
>
> (Scheffler, 1985)

While there is no literal disagreement between the two, it is interesting to note the abstraction and generality of Scheffler's "social context." Montessori, in contrast, emphasises the role of family and the mother in her context of the young child.

Turning now to Scheffler's second myth that: "All potentials are harmoniously realisable."

According to Scheffler, educators and policy makers find comfort in clinging to this myth. It absolves them of the task of selecting and nurturing in the child those potentialities which should be realisable. He attacks the myth by pointing out that some potentialities are unlikely to be jointly realisable. As an example, he suggests that it may be difficult for someone to jointly fulfil potentials to be a neurosurgeon and prize-fighter. If one is to be preferred to the other, there must be a judgement embodying such preference and educators and policy-makers have responsibility in supporting such judgement.

Whether, however, that needs to be the choice of the educator or the policy maker or the parent --- or the choice of the child is a central issue. I would have little doubt about what

Montessori would advocate. Montessori saw great merit in developing the faculties of choice and will in the child. Her preference would favour the interest and choice of the child in choosing between potentialities. Her preference, also, would favour the child experiencing widely so that choice is made as far as possible on knowledge.

Scheffler dismisses his third myth that: "All potentials are uniformly valuable" as a rose-tinted illusion. He rightly points out that people possess potential for evil as well as for good. They are potentially considerate as well as callous, leading on through as many sets of opposites as you would like to describe the complexity of human behaviour. It forces us, he says, to take account not only of incompatible values but also of negative values. He appears to advocate that: "the educator's aim is to destroy as well as to strengthen potentials – to block as well as to promote their realisation."

(Scheffler, 1985)

My reading of Montessori implies a much less overt role for the educator or the parent and, conversely, a greater trust in the child as an agent in his/her own development. This is best expressed in Montessori's view of the development of **will and choice**.

WILL AND CHOICE

The child's early development is by and large unconscious. Learning during this time is spontaneous. In other words the child does not **will** itself to learn. If you have had any experience with little children, you will understand when I say their learning is spontaneous.

The child takes in impressions through a special type of mind which Montessori called an **absorbent mind.** Montessori uses the analogy of ***the camera*** to describe the functioning of the Absorbent Mind. Today I would like to read to you one of her anecdotes that illustrates some symptoms of the **absorbent mind**:

> *"One day I myself saw a child of about two, who had put a pair of shoes on a white bed cover. With an unreflecting movement, impulsive, non-measured, I took the shoes and put them on the ground in a corner saying "That's dirty!" and with my hand I brushed the cover where the shoes had lain. After this the child, whenever he saw a pair of shoes, ran to pick them up and put them in another place, saying "Dirty!" after which he would pass his hand over a bed as if to brush it, though the shoes had never been near it."*
>
> (Montessori, 1985)

One can see that this was more than mimicry. The child had seen and heard. The child had absorbed. The child had abstracted some key elements from the experience. The rituals he later followed played out those elements in a variety of situations. As Bowers (1985) notes, "Perception in the young infant is more general than that of an adult. The child has a propensity to perceive in general terms and a propensity to act in terms of what is perceived." The special mind is powerful and the impressions it takes in are long lasting. This has important implications for the role of the adult. Given the power of an absorbent mind the responsibility of the adult would seem to lie more in providing a positive and consistent example for the child. This would seem more constructive than to "destroy as well as to strengthen potentials – to block as well as to promote their realisation!" – as is advocated by Scheffler.

Typically, as the child comes to the third year, its learning comes progressively under the direction of the will. I would like to look at this aspect of development for a moment because, in my view, the emergence of the will is another modifier of critical importance in the conquest of potential.

Let us look at life as a series of achievements. To some extent, we tend to envy those who can achieve significant things with little effort. Possibly because the average person is conscious of the effort it takes to achieve something significant. But what does the effort consist of? You might call it concentration, or perhaps, stick-at-ability. Let's use the term **will;** that is: "the act of will that permits a focus of energy on one activity rather than a range of competing alternatives." (Oxford Dictionary)

In my view, it is of vital importance that the child develops this capacity of will at an early age. It is a process that requires patience and constancy by the adult. It is also important that the child is given ***space*** to develop his/her will.

If you think about this carefully, you will appreciate that alongside the development of will, we need to allow the child to develop and refine the faculty of choice. In the Montessori environment, we rely heavily on a very powerful agent as a catalyst for development of both will and choice in the child. This agent is the child's interest in activities in his/her environment.

If we accept the fact that (at least at a young age) there are few innate limits on potential, then one of the major roles of education is to give a breadth and richness of experience in terms of:

- points of focus which can engage the child's voracious interest; and
- an environment in which the child can come to terms with the interplay between choice and will.

This is the essence of Montessori pre-school education. While the content of the child's experiences is important, I must emphasise that Montessori education, more particularly at the pre-school level, should not be pre-occupied with content and curriculum as a set of facts to be learned. Rather it should endeavour to create an environment:

- rich in experience;
- where interest is fostered; and
- where choice and will are given opportunity to grow.

It seems to me that Montessori saw no particular merit in the adult choosing to promote one potential over another in the young child. Rather she sought to build the capacity of choice and will in the child so that he/she would be equipped to make such choices later. Similarly, with the role of negative potentials. Prior to the development of the will, the role of telling, encouraging or discouraging a young child is infinitely less effective than the modelling of appropriate behaviour.

SOME POLICY IMPLICATIONS

We have found many points of similarity and a few points of difference between Montessori and Scheffler. Scheffler's main analysis leads into public policy. He is interested in the policies which shape society at large, government and institutions. He is interested in policies which will:

- lead to barriers being removed so that capacities can be achieved;
- lead to acquisition of the "basic skills"; and
- lead to the development of enlightened policy-makers.

His writings lead me to think that Scheffler has an interventionist instinct in the development process. But above all, his scope seems to be "society at large", the State, Government and other institutions.

Overall, I am not convinced that Israel Scheffler's embryonic policies would produce outcomes of which Montessori would approve. But there is no doubting the importance of the public policy battlefield. It is good to see strong advocacy in this environment for the fostering of human potential in educational policies even if some of the directions and emphasis may not be "Montessori-compatible!"

For me, Montessori was more of an optimist in her view of the child in society. She seemed to focus on "getting it right" at the individual level. This meant getting it right at the stage of childhood where there is unique opportunity to help the child acquire the basics of will, choice and a sense of responsibility as the building blocks of a healthy society. She would have liked the quote from Scheffler:

> *"What opens and closes the life prospects of children determines the direction and quality of society itself."*
>
> (Scheffler, 1985)

If we were able to persuade the policy makers to this point of view, how would they best foster the development and health of society? If they accepted this responsibility, what sorts of changes would they make to the educational system?

This is the exact challenge that Maria Montessori accepted.

From her observations of what children did she concluded that the post-natal period, that is, between birth and six years, was a period of enormous construction during which the young child created the basic structures of its personality. She held strongly the view that education, especially at the pre-school level, but throughout the spectrum of the education process, should be designed to support the development of the human potential.

Education, as it was traditionally organised in her day, could not give that support, so she set about creating an educational environment that would.

THE EDUCATIONAL APPROACH OF MONTESSORI

She began by designing a specially prepared environment in which she placed materials designed to provide increasing challenge for the young child. As it was important for the child to learn about the culture, 'instruction' was necessary. The materials provide learning experiences to meet the needs of the child at each particular age/stage. The choice of materials which form the content of the classroom assumes that every child has the potential to learn in every area of human expression, whether in art, music, mathematics, writing or reading.

Central to this new learning environment would be the child's freedom to be active. This freedom in not permissive. It does not infer licence. It is, however, expansive. Children in the Montessori environment are given the freedom to choose activities from among those to which they already have been introduced. They may work with these materials for as long as they wish. As interest usually guides this choice, the child becomes engaged and deep concentration results. The child emerges from these experiences calm and deeply satisfied.

As the materials are self-correcting, over time the child develops a sense of his/her own abilities as well as confidence from the experience of achievement.

There are clear limits to the child's freedom. These limits are established around the good functioning of the group. Any action of a child which disturbs or interferes with the right of another child to learn, is discouraged.

In terms of the development of human potential, Montessori was aware that human potential could develop as much for the 'bad' as for the 'good'. She was clear that these negative traits should not find expression in the environment. She observed that when children were able to engage in purposeful work, not only did these negative behaviours become less prevalent but also children became more socially aware and helpful to those around them.

This pro-social response is the result of an inner development brought about through the deep satisfaction of purposeful activity. This is the process of education which Montessori saw bringing about a peaceful world.

To support the development of the child's self-knowledge, competition as a management technique is not used in a Montessori classroom. Competition, rewards and punishment externalise the learning process to the extent that children are conditioned to rely on the teacher's evaluation of their performance. In this process the student develops the idea that the teacher is the determiner of what is right. The teacher's evaluation is what the child comes to rely on. In other words self-evaluation is not exercised and the child abandons himself/herself to the judgement of others. Inner peace becomes more elusive because the development of self-knowledge is externalised.

These are some of the important aspects of her brilliant and purposeful response to the challenge. I have searched the bibliography of Scheffler's interesting little book in vain for acknowledgment of Montessori's work. I can only believe he would have been even more enlightened if he had been drawn to her insights.

CONCLUSION

To recapitulate therefore, I would like to leave you with the view that potential is an essential human quality, a power to become, which belongs to the child. It is for the child to fulfil. As parents and educators, there is much we can do to support the process, but ultimately, it is the conquest the child must pursue for itself. We can not do it for the child. This reminds me to address the question I postponed earlier in this talk – namely: "human potential refers to the latent power to become, but – to become what?" I am not going to say – it's none of our business, because that attitude would never describe the legitimate concern and good will of every parent and educator. But I have found some inspired words with which, I suspect, Maria Montessori would have agreed enthusiastically. Once again I quote from Kahlil Gibran, his powerful and comforting metaphor where he speaks to parents:

> *"You are the bows from which your children as living arrows are sent forth. The Archer sees the mark upon the path of the infinite and He bends you with His might that the arrows may go swift and far. Let your bending in the Archer's hand be for gladness. For even as He loves the arrow that flies, He loves also the bow that is stable."*
>
> (Gibran, 1978)

So the "stable bow" lends support by providing an environment rich in experiences where interest is fostered, where the freedom and security to experiment is nurtured and where choice and will are given an opportunity to grow. Put another way, where the child can build the foundations of self-knowledge and self-esteem which will sustain him/her throughout life.

Above all the specifics of organised human knowledge, these are the qualities which are of most enduring value. These are the qualities which Maria Montessori so keenly recognised and bequeathed to us in her educational policy, an understanding and an approach dedicated to the fulfilment of human potential.

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Tribute to Patricia Hilson

by Renilde Montessori

We live with people we love in a state of hour-by-hour, day-by-day immediacy. When they become ill, this immediacy acquires a deeper, anxious, more poignant sense of the here and the now. We see their beloved faces marked by time and pain, their bodies become frail and we suffer with them, for them, for ourselves.

When they die, an astonishing thing happens. We find that they have left us a gift – the essence and image of their entire life, the life we shared with them, the life before we knew them.

In the beginning we mourn, we grieve, we despair, we are angry, we are desolate. The essence and the image are a torment because they are woven into our very being and yet intangible.

With time, a gentle disentanglement takes place. It seems the image and the essence of those we lost reacquire wholeness and coherence, and, once again complete they settle into a companionable orbit, shedding benevolent radiance upon our existence.

Such is my image of Pat Hilson. As long as those who knew her live, she will be with us, a beacon in Australia's Montessori movement, lighting the path she traced. This particular path has remained untrodden for a time but since her pursuit of excellence in education was timeless, a fallow movement can only be beneficial, allowing space for reflection and reassessment of goals.

Let us dedicate this conference to Pat, welcoming her presence in our hearts and minds.

Renilde Montessori
August 1998

Tribute to Patricia Hilson

by John O'Halloran

Whether aware of it or not, everyone has a philosophy of life, even if they do not live by it in all respects. But with Pat Hilson, what she professed and what she lived were one and the same: a philosophy founded on respect for the human person, an understanding of human needs, and the belief in the perfectibility of the person – child and adult. It is quite natural, then, that Pat should have achieved great things in Montessori.

Pat has described her exploration into Montessori's ideas as a voyage of discovery, and it commenced during her studies at Graylands Teachers College in Perth. The journey since was literal as well as metaphorical: it took her to London in 1972 where she obtained her AMI Diploma in Early Childhood Teacher Education and established her own preschool. Next, it carried her to Bergamo where she was awarded the Diploma in Elementary Teacher Education and accepted into the Trainer of Trainers programme, which culminated in her appointment in 1990 as an AMI Director of Training in Australia.

Meanwhile, the journey continued. Pat returned to Perth in 1980, taught in one preschool, set up another, and was instrumental in the establishment of the MSWA. With her move to Canberra in 1982, Pat gave workshops there, as well as in Perth, and taught music at Canberra Grammar. But a teaching career was not Pat's ultimate goal – she had, as she said, a vision for Montessori in Australia, and that vision included securing the transmission and development of Montessori's ideas throughout Australia for all time. So it was that Pat was active in the establishment of the Montessori Teachers College of Australia (then the Sydney Montessori Teachers College) in 1983 and was Trainer-in-Training of the first course (1983-84). Pat was involved in all five succeeding courses, as Course Co-ordinator (1986), Assistant Principal (1985) and Principal and Director of Training (1990, 1992 and 1993).

The tangible benefits are that, in all, 79 students graduated with their AMI Diploma in Early Childhood Teacher Education from these courses. As for the intangible benefits, Pat said, in her 1993 address to directresses,

> *... They are the most powerful and wide-ranging. When you throw a stone in the water, there is only one stone, but the ripples flow out in ever-widening circles. So it is with the Course and the work you and I, and the Montessori parents and organisations do together.*

In this, Pat was speaking about the College but the words apply pre-eminently to her, for she was a teacher, whether a directress in a classroom or a trainer of future directresses. The children in the classroom may not have realised her quality as a teacher, but all 79 graduates from the courses she conducted or was involved in, and anyone who has read her work or heard her speak, will know what an inspirational teacher Pat was. Her ability to inspire was far more than crafting an eloquent speech: it was a function also of a keen intellect, penetrating insights and sensitivity to what was happening in the world, backed up with rigorous study and wide reading.

In between her course work, Pat proceeded with her Masters Degree in Education from the Canberra College of Advanced Education with the submission of her thesis 'From Oracy to Literacy'. The enduring importance of this work is that it explains and justifies, on a foundation of painstaking research in Montessori classrooms, the Montessori approach to the acquisition of literacy by young children. The depth of thought revealed in the thesis proves that Pat could have made a yet greater contribution to Montessori and educational scholarship if she had been able to devote more of her time to a systematic exposition of her ideas.

But Pat saw that her most important work was in the training of those who would in the future go out and make Montessori philosophy and practice of education a force to be reckoned with in Australia. Although Pat recognised the importance of her role, she did not seek personal advancement: she well understood that too much reliance by a community on an individual is dangerous and debilitating. Thus she was a strong supporter of Montessori organisations and, reflecting her constant desire to strengthen the position of Montessori professionals, she herself established the Montessori Professional Group, which had the specific objectives of supporting Montessori professionals in their classroom practice and of promoting Montessori philosophy.

Somehow Pat found time to be involved in other areas as well. Most will be aware of some part of this, but few will know the whole – her work included consulting to schools and directresses, submission-writing to governmental and other bodies (with some conspicuous successes), speaking at conferences and workshops, and advising on their design and programming. Most of Pat's prodigious effort was expended without financial reward of any kind.

How does one describe one who has achieved all this? Words are hopelessly inadequate, but two qualities should be mentioned. The first is integrity. By this I mean more than just honesty (and there are few who are as committed to the truth as was Pat), but a wholeness: the development and integration of all aspects of personality, the harmony of intellect and will. It was this integrity which gave Pat's words and actions such force and authority. Pat has shown the way for us by insisting on and articulating the principles of Montessori philosophy with confidence and persistence, and without compromise. There is in this nothing that is narrow, but a clear vision of truth, and the willingness to submit to its dictates.

But if Pat was fierce in her defence of the integrity of the Montessori philosophy, no one could wish for a more loyal or caring friend or a more sympathetic counsellor. In the address to directresses from which I have quoted above, Pat speaks with evident warmth and affection about her 79 students and reveals her intense loyalty to them. Many who read this – not only College alumni – have been the beneficiaries of Pat's wise advice and her time, unstintingly given to all who called upon her.

The other quality I single out for mention is Pat's spirituality, harder still to define or characterise. It is an aspect of Montessori which absorbed Pat from the beginning and she saw in it the key to an understanding of the essence of Montessori philosophy. Pat returns to this idea in her last address, and affirms that the quality which makes Montessori education fundamentally different from traditional education is in the spiritual relationship between the adult and child; a relationship which requires the directress to be open to the revelations which the child can impart and to be able to use them as a means of the directresses' ongoing spiritual growth. Pat demanded this quality of the directresses and of herself, and it was never more visible than in her last illness. Although she was desperately ill, that life of the spirit shone through more brightly than ever.

Pat exemplified many other qualities besides – many of them touched upon in the beautiful and moving eulogy delivered by her husband Barry at her Requiem Mass. The many who were her friends will long remember her grace, her courtesy, her generosity, her sense of humour and her ringing laugh, her hospitality, her appreciation of the things of the mind and spirit, and her love for her family.

Pat loved life, and had so much to live for, but she faced the leaving of it, calm and accepting, secure in the knowledge that she had done what she could towards the fulfilment of her vision, though she saw much more to be achieved. And so, early on that winter's morning of 25 July 1996, Pat completed that journey of discovery which was her life. Despite its untimely end, it had a wholeness and perfection in which we rejoice. For us who keenly feel her loss, her spirit remains to guide us along the road she has pointed out to us.

John O'Halloran
August 1996

The Mind and the Hand:
Implications of Recent Research on Montessori Theory and Practice

Pamela Nunn

A Greeting from Jane Healy

"Welcome to this exciting and important conference! I regret I am unable to be there with you, but I am confident that you will return home re-energised in your efforts to do good things for children and re-affirmed in your professional expertise. As Maria Montessori understood so well, learning arises from body, mind, and emotions. Now brain research empasizes anew the dynamic linkages between these three. In the next two days, I hope each of you experiences stimulation for these aspects of your own learning. Don't forget, adult brains can continue to grow and change through a lifetime — perhaps teachers' most of all! Best wishes."

My brief today is to look at the link between the mind and the hand. How is the developing intellect intertwined with movement?

We know from our practical experience that "help me to do it myself" is the optimal way for young children to learn.

Why is that so, and how does it happen?

We will revisit the astute observations of Dr. Maria Montessori on this subject; she placed such emphasis on movement didn't she?

We will also give a nod to the educational psychologists of 30 and 40 years ago, and then spend some time reviewing the complex current research of the 1990's. At the conclusion, it is only valid that we ask how does this knowledge impinge upon our daily classroom activities?

However, this morning should not be one full of inward looking questions. Doubt plays no part here today. The purpose of this session is one of validation, affirmation, and optimism that what we hold true of Montessori philosophy is reinforced in writing and research of today.

We should come away with a refreshing satisfaction, and an obligation to try even harder, and stick more firmly to our dearly held beliefs of child development. For those of us who work in classrooms across Australia as guardians of young human beings, we must be reassured daily by those same trusting children, full of potential, and deserving the best we adults can offer. For surely, the child is the very reason we keep on searching – trying to affirm in research that which is before our eyes every day.

Maria Montessori believed that "the hand is the instrument of the mind". What did she mean?

The human hand serves such a unique function. It is astonishing to count the number of phrases in general speech giving reference to the actions of the tactile hand. It obviously reflects the dominance of our hands in our every day practical life. Consider the phraseology, when mastering a task:

"I have a grip of it" or "to grasp a subject" or "to take hold of an idea". "Can you handle it?" we ask. "I am going to tackle a problem", "grapple with difficulties", or even "what a touching story".

The hand is also such a social tool. Our social gestures are almost a language of their own (particularly when driving in Sydney). Our hand is an organ of expression. We carry, bathe, eat, offer, and greet according to the customs of our society. Our hands are instruments of our social behaviour, clearly expressing the temperament of the owner.

Historically, man's hand has followed his intellect, his spiritual life, and his emotions, and the marks it has left throughout civilisation betray his presence – in artefacts, temples and in art.

Changes in man's environment are brought about by his hands. All our implements, from the most primitive to the most delicate, are made for manual use; almost every machine is built to be worked by hand. If man had only used speech to communicate thought, if all wisdom had only been expressed in words alone, no traces would remain of past generations. It is thanks to the hand – the companion of the mind – that civilisation has arisen. The hand has been the organ of our gift of inheritance.

We are unique among the animal kingdom in having 4 appendages and using only 2 for locomotion. Our arms and legs develop independently and serve different functions. The power to walk and balance develop so regularly that all humans resemble one another in the way we use our feet, but noone can tell what any given human will do with his or her hands! Who can predict the skills of a baby?

What does guide development? From **The Absorbent Mind,**

"The child has an internal power to bring about the creation of himself. He goes on perfecting this by practice."

Man is like a person born to enormous wealth. By force of will, the mind can propose and direct development. Nothing is pre-ordained, but everything is possible!

In broad terms, culturally, man has always used his hand to express himself, from cave dwellers to you and I. All art forms stem from the use of the hand and are prized in all cultures. The work of the hand reveals much about that culture. Consider the strength and technology of the pyramids, or the fine sensitivity to detail of wood carvings.

In individual child development, the development of the cerebellum is essential for achieving balance to enable the child to be upright on two legs, thus freeing the hands from crawling. The hands are now able to concentrate on manipulating everything in the environment. This work of the hands gives accomplishment to the commands of the mind.

So the child, through manipulation, offers his brain awareness of softness, hardness, warmth, cold, smoothness, roughness, pressure and weight, sharpness, stickiness, fineness, thickness, geometric form and shape and so much more. From E.M. Standing (1957):

"The unconscious impressions gathered in the first three years are the stuff out of which is woven consciousness itself, with all that it implies of reason, memory, will and self knowledge. The work of the hands plays an essential part in building up conscious intelligence."

Through this intelligent purposeful movement of the hands, the child is able to classify, order, and learn abstract concepts through concrete materials. During the absorbent mind, that specific period from birth to six years, the child sends *every* impression to his mind which indelibly records it. Our sensations of the world around us are thus *the idea of it as conveyed to us* by the tactile hand.

It is tempting to only consider this obvious gathering of impressions through the senses as assisting cognitive development, but the value of movement goes deeper than just helping in the acquisition of knowledge. It is the basis for the development of personality. It is not enough that the child should *see* the things we wish to teach him, we must present them in a form that solicits movement. It is not enough for her to *hear* the things that we wish her to learn; it must be followed by a creative movement.

We take our hands so much for granted! Prof. David Katz in 1925 wrote, "The versatility of the human hand corresponds to the free movement of the human intellect."

We possess in our hand an organ that can distinguish thick from thin flexible surfaces with an amazing subtlety. We take a piece of paper between finger and thumb, and use it like a pair of callipers for measuring thickness. Many people can discriminate with astounding accuracy differences in one hundredth of a mm. between the very thinnest of papers.

Our hand acts as an efficient thermometer. Metals are recognised by their coldness, wool by its warmth. Does this bring to mind the thermic tablets with their subtlety of sensation?

Should you be unable to determine the material of which an object is made, are we not able to tap it with a finger nail? The resulting vibration will supply our tactile sense with the desired information even if our ears have been blocked to the sound.

The following is almost a poem to the hand. Gerhart Hauptmann wrote:

"the hand can fill the place of every instrument, and by its unison with the intellect, it renders the latter everywhere supreme."

No wonder Maria Montessori regarded the deprivation of any one of the child's senses being as a lesser obstacle than deprivation of the use of the hands.

No wonder the principle of movement or activity is included within every area of the Montessori prepared environment.

But people still question. How does bodily movement come into the concept of mental development? Aren't we talking about the mind? And when we think generally of intellectual activity, don't we always imagine people sitting still, almost motionless?

For the answer we look to the child.

In childhood, a boy or a girl is building the conception of self and surrounding life on his perceptions and on her responses to stimuli. They are developing their intelligence through powerful activity and organising the content of their experience according to the order they find in their environment. In order to know the world, we must project upon it our touch, the self-involvement which can only be accomplished through movement.

I quote Maria Montessori (1917) on the relationship between movement and cognitive development:

> *"The beginnings of the development of intelligence are dependent upon the infants ability and motivation to put itself in relationship with the environment. As this relationship is established it brings about self-realisation."*

And from E.M. Standing (1957):

> *"The child works to perfect himself – using the environment as the means. The child is in a constant state of transformation. He is progressing, step by step, towards a more advanced state of being, each new stage of development is marked by a new phase of this inwardly creative commerce with the environment, which we call work. So profoundly does the adult notion of work differ from the work of the child, it is only the limitations of language that obliges us to use the same word."*

The essence of independence is to be able to do something for one's self, whether you are 18 months or 80 years.

Recently, I was with a not-quite-2-year-old Evie trying to take something out of a drawer way above her head, all the time warning me off by saying, "I can do it myself". After quite a while she turned around and said very matter of factly, without a trace of frustration, "In fact, I can't do it myself". What learning, and self-awareness! Children achieve independence by making effort! Our natural inclination is toward helping this effort, but our philosophy teaches us never to give more help than is absolutely necessary. In this quest for independence, the adult who keeps on helping, becomes an obstacle!

Dr. Montessori based her pedagogy upon the fact that any learning situation must include the principle of movement as an essential factor. Within our prepared environments – be it in practical life, sensorial, maths, language, and the cultural areas, the idea of activity, freely chosen by the children, is an inviolate rule. Movement cannot be and is not, set apart from cognitive function. I borrow these words from Constance Corbett. She says, "All direct and indirect learning situations, formal and informal, provide means for the children to move, to be active, in order to sustain interest and internalise knowledge." Free choice, that is intelligent direction of movement, is decision making. This choice strengthens the will.

During the learning process this movement, essential for intellectual development, must be purposeful and goal directed. "If there is no intelligent aim to the movements of children, then they are without internal guidance and soon become tired and disinterested."

Of course, the way to keep children interested, is to satisfy their needs. Discerning observation will alert us to those emerging sensitive periods, pointing us to the critical need of the moment. The essence of a sensitive period in human development is a "burning intellectual love between the child and his environment. As such, it is an animating psychic factor leading to immense mental activity." If the environment provides sufficient stimuli, actively sought by the child at a specific time in their development, cognitive growth will flourish. Conversely, obstacles put in the way of any sensitive period will not only result in a loss of potential, but in psychic damage. Remember the dropped stitches? "With each sensitive period that we miss, we lose an opportunity of perfecting ourselves in some particular way – often forever."

Montessori challenged the educational thought that viewed man as divided into two parts. The intellectual and the physical. She stated that the

full development of psychic powers is not possible without physical activity:

> *"One of the greatest mistakes is to think of movement by itself, as something apart from the higher functions. Mental development must be connected with movement and dependent on it…If movement is curtailed the child's personality and sense of well being is threatened. Movement is a part of mans very personality and nothing can take its place."*
>
> (Paula Polk Lillard, 1972)

Broadly stated, intelligence equals activity, and it is activity – purposeful movement – that produces cognitive growth.

At this stage let us quickly review:

What do we have?

We have an upright child equipped with two inbuilt tools of learning, with amazing properties, and all the other senses to boot. We have a stimulating environment.

Will optimal learning take place?

"Not good enough!" said Maria Montessori.

The encounter with the stimuli must be active, purposeful and full of effort.

Not enough! Repetition must occur.

Still not enough! It must be at an optimal time for full potential, and this is what the research confirms.

And yet still! It must be spontaneous and freely chosen.

We all know that it is easy enough to keep a child's hands busy, but to draw out the spontaneous action of the child is our aim. If we substitute our will by suggestion or coercion, we have robbed the child of the right to construct his own personality. The question of spontaneity, whether a child acts freely in choosing his own work, goes right to the root of Montessori education.

Literature from 30 and 40 years ago including Piaget 1952, Benjamin Bloom 1964, Bruner 1964, Hunt in the 1960's and Dewey 1956 – all in various ways affirm the notions of:

- learning accomplished through 'doing' in an enriched environment;
- developing consciousness expressed through movement ; and
- matching stimuli of the hand with the child's position on the cognitive growth continuum.

What of more recent research in the 1990's?

It is with optimism that we find in recent scientific and technical research validation of Maria Montessori's theories and practice from 80 years ago, which was then drawn directly from her acute observations of children.

When we are confronted with theories and recent research, we are amazed anew at Maria Montessori's discoveries and deep understanding of the child. As we shall see, Montessori theories gain support from research in the areas of cognitive or neuro-psychology, developmental psychology, animal physiology and neuro-anatomy. But then again, this is not really surprising as Montessori's view of intelligence was gained through her own training in philosophical anthropology, biology and psychology.

We come to Jane Healy. In her 1990's book **Endangered Minds – Why Our Children Don't Think** she registered areas of discontent from teachers ranging from lack of perseverance, impulsiveness, inability to listen and carry ideas forward, lack of motivation and disorganisation – all areas essential for children's futures, and she asked are we valid in suggesting that this may be due to inadequate cognitive pathways set down in early childhood. Jane Healy writes. "experience and environments change children's brains. Part of the brain's very physical structure comes from the way it is used." There is little definitive proof of these subtle neurological changes, but there is plenty of circumstantial evidence.

Jane Healy suspects, as we do, greater television viewing associated with less time spent reading and less time in active hands-on learning, is a negative influence. Early brain development, she says, needs quality interpersonal interactions and correct stimulation to establish cognitive pathways. Children need someone to show them how to work with paint, clay and musical instruments, someone to nurture them and read stories to them, to walk in nature, and care for their pets. Sadly, "we are looking at an absence of these things in many children's lives."

Although cultural and generational change is inevitable, "environments remain the sculptors of growing minds both before and after birth."

What makes people different?

- in the words we comprehend;
- in our differing abilities to read a map; or
- in our capabilities to remember a telephone number or figure out change at the shop?

Plomin and DeFries in 1997 worked with actual children, rather than animals, in their field of behavioural genetics. Their research helped confirm the significance of environmental factors which count for as much variance in human behaviour as genes do. These men studied identical twins and adoptive children and their parents looking at heritability; that is, the genetic contribution to differences among individuals. If intelligence is about 50% heritable, then environmental factors must be just as important as genes in generating differences among people. Moreover, when genetic factors have an especially powerful effect, as in mental handicaps, environmental interventions can often fully or partly overcome the genetic determinants. Jane Healy talks of 're-potting the seedlings'.

Theorists, researchers and educationalists all acknowledge "The basic genetic architecture for our brains lies at the heart of all learning and much of our emotional behaviour. When these inherited patterns interact with the child's environment, plasticity or changeability of the human brain guarantees the variation in children that we see. The final pattern is determined by the way each individual uses that unique brain." Scientists and teachers alike know that "what children do, the ways in which they think and respond to the world, what they learn, and the stimuli to which they decide to pay attention, shapes their brains. Not only does it change the ways in which the brain is used (functional change), it also causes physical alterations (structural change) in neural wiring systems…" In an experiment to illustrate this, a rat who ran over textured stimuli to get to his food each day had a greater brain size, 11% larger cortex, than another rat with the same food, but in impoverished conditions for mental growth. Further, when the rat was challenged with problem solving to get to his food, his cortex size was 25% greater. The experimenters discovered changes in gross weight of the brain and thickness of the cerebral cortex due to stimuli and active use of neural circuits. "So environments shape brains….there are profound differences in the structure of the brain due to the stimuli taken in by the senses."

To help us make sense of some of this research, and being no expert myself, I will refer to Dr Montanaro and Richard Gregory's **Oxford Companion to the Mind**. The brain is continually at work receiving, processing and storing information. This enables us to relate and communicate with the environment and with ourselves. Even when we are asleep or unconscious, the brain operates at low amplitude. Now, there are around 16 billion brain cells, and here is a little background detail on these nerve cells or neurons. Neurons are the largest cells in our body and are considered to have three parts, the cell body, the dendrites and the axon. The short and intertwined parts like the branches of a tree are called dendrites; the long extended ones, axons. Some of these can be as long as the distance from the brain to the foot. Axons enable the interchange between nerve cells and all parts of the body. Every part of the body is reached by the axons which are capable of bringing messages from the periphery to the centre (the brain), or from the centre to the periphery. Nerve cells also share information through the dendrites which reach out to many other cells, establishing networks of information which allows for more accurate and rapid work. Dendrites meet other cell connectors at points called synapses, where major exchanges of information or energy take place. It is astounding to see the number of dendrites (indicating inter-relationships and shared information) at birth and then compare the brain cortex after several months.

All the neurons in the central nervous system of man are present at birth. As the baby grows, they enlarge and grow, the dendrites spread further, and the axon lengthens; but neurons, unlike most cells, do not divide, or reproduce. So they are irreplaceable; and any neurons that we lose from accident, disease, substance abuse or pruning are lost forever and we are so much the poorer.

Our brain works by neural fields – that is a group of up to a million or so linked neurons operating on the same frequency. We have a near infinite number of neural fields available and no end of potential states to draw on. Like an engine idling, our neural fields are abilities ready to fire into action when called on.

Every cell works by emitting electrical voltages or currents. Chemical transmitters in the cell, drive information along electrical pathways, sending information where it is needed. These pathways are not mystical. I have it on good authority they can be seen under a microscope. Especially in the first years of life, the brain shows a great capacity for developing very specialised functional circuits. Montanaro says many educators are not yet sufficiently aware of those 16 billion nerve cells present in the newborn brain, and tend to be unconvinced about the urgency of letting them (the cells) get to work immediately. The dendrites and the axons, as we have seen, grow rapidly after birth. They constitute the basic structure needed to process all future information. This explains why different environments produce human beings with different basic brain structures.

Here is a new idea to think about: Most neuro-psychologists (working with brain structure and function) believe that at certain times in the development of the brain there is great competition for neural connections.

Let us go back to the foetal brain for a moment. In the months before birth, the first cells form the 'hard wired systems' which will be responsible all our lives for:

- our reflex movements;
- our physical drives;
- our balance; and
- our instinct for self preservation.

Later developing areas of the cortex (but still before birth), are the control panel for:

- processing information;
- receiving sensory stimuli; and
- organising and association.

These later areas, so important for planning, reasoning and using language to express ideas, are the most pliable or impressionable of all. Their development depends upon the way a child uses his or her brain at different stages of development. These abilities of reason, planning and problem solving, and creativity, emerge as a result of violent competition for neural connections. We have more than we use. The brain literally 'prunes out' and disposes of its excess neurons.

It may seem logical that the more neurons the better, but this is not the case. Because there is a limited number of available connection sites, the mortality rate for neurons is staggering.

Even before birth, 40 to 60% of cells die off because they can't find a home. As the brain forms, the cells which develop first arrange themselves in the inner layer of the cortex – later arrivals must go beyond to form the outer layers. These final layers of the cortex hold the potential for the highest order – latest developing mental abilities, but these cells have the hardest job finding available connection sites.

The cells that do not connect are lost, and this is part of the reason that we are unique individuals and why all children do not learn the same way. As an offshoot here, consider this malleable, growing foetal brain, and, armed with the knowledge that toxins can cross the placenta: what damage then, can be caused by lead and heavy metals, solvents and pesticides, alcohol, smoke and drugs – all capable of causing neurological changes before birth!

Back to Jane Healy. She writes, "In development it is now well known that there are certain critical times when an organism is ready to deal with certain stimuli." Surely she speaks of sensitive periods! "If the stimuli is not available at the critical time, the brain structures that would have mediated them will not function and will die." You've all heard of 'use it or lose it'. How does the brain naturally hone itself into an efficient processing unit? The researchers call it 'synaptic pruning' – for us it is: what gets shaved and what gets saved!

"A major task during the years of childhood is to prune the mass of potential neurons into networks of connections that are useful and automatic for the mental skills that the child is being encouraged to develop.

In a simple analogy, a neuro-anatomist, Dr Scheibel, described an immature brain as somewhat like a large tree, crowded with many little birds singing weakly at the same time, so that no individual song may be heard. As the brain matures, gradually eliminating some of the connections and retaining others, the tree contains fewer but larger birds with strong clear songs, well separated so that each can be distinctly heard.

The adults task is to make a variety of stimulation available, at the same time putting

careful consideration into which choices children are encouraged to make." Jane Healy is validating our prepared environment.

I found this idea of synaptic pruning so relevant to our discussion of cognitive pathways laid down in childhood by active learning.

The neural pruning idea was repeated again in Joseph Chilton Pearce's 1992 book, **Evolutions End – Claiming The Potential of Our Intelligence**. He says, several times in a child's development the brain 'cleans house'; it releases a chemical that dissolves all unproductive or unused connections, leaving the productive, developed neural fields in tact.

The trimmed-up neurons will put forth new dendrites and axons as needed to establish new fields for stimulus responses. (Remember the role that the hand is playing in feeding in stimuli.)

A neural field's imperviousness to this house cleaning chemical seems to involve a fatty protein called myelin. As learning takes place, myelin forms an insulating sheath around long axon connections of the neural fields and muscular nerves. Myelin is impervious to the chemical used in house cleaning; its sheathing somehow helps preserve that particular network, making the ability permanent.

And, it seems to assist in conducting the energy being exchanged between neurons, which speeds up the information flow. The more myelin, the more efficient that neural field.

At first many connections may be necessary, requiring great concentration on our part. As learning develops, fewer connections can do the same job. An initially slow, clumsy operation becomes smoother and goes on 'automatic pilot' when the many neural fields involved have myelinated enough to become new intelligence or ability at our disposal, ready to fire into service when needed.

Marjorie Wollacott, a professor of neural physiology and Chairman of the Department of Exercise, Movement and Science in Oregon, writing about neural pathways said, "We literally mean that during an action, a specific set of neural circuits is stimulated; and every time the circuit is stimulated, the connections, or synapses between the neurons in that circuit, become stronger." So, if we perform a particular action every time there is a certain stimulus, a particular habit is born.

Repetition may stimulate myelination. Researchers have shown that in the earliest language development a baby in utero moves the same muscle in response to the same phoneme in the mothers speech. The more frequent the response, the more myelin forms. The thicker this myelin sheathing – the quicker the information can be relayed, requiring less energy for its conduction – the more firm and lasting the learning, and the more efficient and compact that particular neural network becomes.

That is why our primary language, though always more powerful, takes up far less room in the brain than a secondary language. It is also why practice makes perfect, and why when once locked in, or myelinated, a learning is generally life-long _ like riding a bike or as my dad said, "Milking a cow, you don't forget how."

So we see that neural fields are brought into play by usage and are made permanent by the extent of that usage.

Or in Jane Healy's words:

> *"Each baby brain comes into the world uniquely fitted out ready to pursue knowledge, but how well that happens depends on the mental traffic that trains the brain to think and learn. For children, habits of the mind soon become structures of the brain, and they gain their habits, directly or indirectly, from the adult culture that surrounds them. Learning environments both at home and at school can partially rearrange neural diagrams."*

In our belief that the hand is the instrument of the mind, we must agree.

Our very sense of self is naturally 'embedded' in a learning, until that learning becomes autonomous, or partly so, by myelination of the neural fields. Any serious learning requires 'all hands on deck', total attention and energy, and our self ego, which directs the energies of the mind, temporarily identifies with the task, or is embedded in it. Once maturation of the learning process is achieved. our personal awareness is freed. We can stand back from the new ability, use it at liberty and move onto other things. This cycle of psychic embeddedment and then freedom from it, plays a critical role in our lifelong development. So long as we are still caught up and embedded in learning, as in childhood, we can't grasp the possibility of any higher stage of learning.

Before we become quite bamboozled, let us do a quick retake:

- we begin with many neurons;
- use creates connections;
- neural fields are strengthened by use;
- myelin forms with repetition; and
- myelin protects neural networks from the brain's regular house-cleaning (or synaptic pruning).

Our brains evolve individually according to what is useful and adaptive for our own particular environment.

But this does not mean we are victims of whatever stimuli comes along! The individual has to "do something with it", be active, for brain function to occur and connections to be made. Active involvement rather than passive response is the brain food to develop new synaptic connections.

For Example, Dr Jane Holmes Bernstein (a clinical neuro-psychologist) tells us of a famous experiment with identical twin kittens: which demonstrates the relationship between brain function and activity.

Imagine this: The two kittens were each put in a large circular container, painted with black and white vertical stripes. This was their only visual stimulation during their sensitive period for visual development – just as their eyes opened after birth. One kitten rode in a small basket which was attached to one end of a revolving balance beam. The other kitten was in a second basket attached to the opposite end of the beam. His legs, however, protruded from the basket. As he walked around, the beam revolved, and his brother had a free ride. Both, of course, has the same visual stimulation of the vertical stripes. But, later it was discovered that visual receptor cells in their brains had developed differently, even though they had experienced the same scenery. The kitten who merely rode along was functionally blind for vertical stripes. Only the kitten who had his feet on the floor, knowing where he was, aware of his position on the floor relative to the vertical lines, developed the brain connections. So, experience shapes brains. But you need to interact with the experience – it is not enough just to be in a stimulating environment.

Physical manipulation with their hands is one of the main ways in which children interact with experiences.

Of course here we are, back to where we began – the link between the mind and the hand.

There is a huge amount of research reinforcing not just an enriched stimulating environment, but activity in it. Unfortunately, much of it is animal research, for example the rat and the kittens. And much is not only unsavoury, but I would have thought unethical. It repeatedly shows that merely making visual experience of a complex environment, and not allowing them to interact with it, has little behavioural effect.

Watching is not enough. Jane Healy asks of herself when she is struggling to 'make' a student learn something, "Who's brain is growing today? Who is interested, curious and touching?" Children need stimulation and intellectual challenges, but they must be actively involved in their learning, not responding passively while another brain, (the teacher or parent) laboriously develops new synapses on their behalf!

Joseph Chilton Pearce says, "Nature's imperative, her developmental rule, is that no intelligence or ability will unfold until given the appropriate environment." We are born into the world like a garden that has been sown, but the seed must be nurtured and nourished by activity in the appropriate environment.

Pearce says the character, nature and quality of the model environment determines the character, nature and quality of the intelligence unfolding in the child.

Do we think then that large doses of passive television watching aids brain development? Jane Healy devotes an excellent chapter to this end. Good language and good problem solving require active involvement and persistence and television in early childhood produces passive learners and reduces vigilance.

For all those parents who ask you why we don't have computers in our preschools, read Jane Healy.

Computers do offer instant gratification, individual attention promptly reinforcing children with a sense of mastery, BUT the problem is that tender young brains need broad horizons, not over-built neural pathways in one specific area. The main job of the brain of the preschooler is to learn the principles by which the real world operates and to organise and integrate sensory information. This brain needs much more emphasis on laying the foundations

in attention and motivation than on jamming the storehouse full of data that makes it look smart to adults. The last thing that today's children need is more bits of learning without the underlying experiential framework to hang them onto.

Dr. Phyllis Weikart, an American expert on motor development, warns that physical learning must take place before children start dealing in abstractions. One must precede the other. How well this reinforces Maria Montessori's observation, which we put into practice daily, that much concrete manipulation is the essential grounding for abstract learning.

We have placed a lot of emphasis on the activity of the hands. C. Best, a researcher, in hemispheric function, suspects that that the ability to activate and coordinate the work of both hemispheres of the brain, may be even more important than developing individual systems in either side. Visual stimulation must not replace physical hands-on activity like running, kicking, throwing, building, climbing, working with clay, sewing, folding and cutting. Two sides of the body, and hence two sides of the brain, are used in these activities creating connections across the hemispheres. "The corpus collosum, the thick bridge of fibres connecting the hemispheres, is one of the brains latest maturing parts. It helps us with flexibility of ideas, creativity, and analytical thinking. Poor development of this critical link between the hemispheres may result in learning and attention problems." To summarise, it is physical activity that develops the fibres bridging the two hemispheres.

We all understand the importance of capitalising on sensitive periods. Jerome Bruner talks of readiness to learn, Piaget of critical periods. Once the critical period is lost, it may be very difficult to learn the skill with full effectiveness. In the case of missed sensitive periods, the right stimulation may be unavailable when the brain is ready for it. What of the reverse? What of the wrong stimulation before the brain is ready? It is a symptom called the 'hurried child'. Doctor Sandra Scarr warns that timing is the issue. Sets of neurons in the human brain get ready for some types of learning at different points of development. "Too much, too early may be as detrimental as too little, too late."

This applies to people who would wish to hurry the learning of their children along – you know the ones, holding academic expectations for which their children's brains are not yet prepared.

One of the first essentials for any adult wishing to help small children is to learn to respect the different rhythms of their lives. It is futile to hustle the work of the child. Nature has fixed his program. He cannot be 20 before he is 20. To become a woman of 20 must take 20 years. Remember, "process, not the product".

There is even talk of experimental stimulation of the brain, artificially whilst still in the womb. Well, to the latter we must reply that the foetus receives a great amount of stimulation from its mother's and its own movement, the sound of voice and heartbeat. Nature created a perfect environment, and to try and engineer pre-natally, could have disastrous consequences.

External pressure to produce learning or intelligence, violates the premise that a healthy brain stimulates itself by active interaction with what it finds challenging and captivating in its environment.

Jane Healy summarises:

> *"The quiet spaces of childhood have been disrupted by media assault and instant sensory gratification. Many children have been yoked to hectic adult schedules and assailed by societal anxieties. Many have been denied of time to play and work with their hands, and the opportunity to pursue mental challenges that are the real building blocks of intellect. Schools must lead the way, acknowledging children's developmental needs as they guide them firmly into personal involvement with the important skills and ideas that will empower them for the future. We can't slow the pace of adult life. Preschools and primary schools can't alter changing family patterns or eliminate media influences. We can accept that brains learn in different ways and on different schedules and be sensitive to the fact that we need diversification of learning and flexible timetables of mastery. We adults can stand firm as advocates of mental growth."*

In 1993 Annette Haines, an AMI teacher trainer in Missouri, presented a paper looking at numerous studies of brain function. Neuro-scientists using PET scans (Positive Emission Tomography) and Magnetic Resonance Imaging are mapping the brain. Their research, Annette Haines concludes, "seems to substantiate what Montessori could only intuit from her observations of children."

A wide range of evidence now places Maria Montessori's thoughts in the centre of current

theory. Both Neuro-biologist Mark Rosenweig (University of California 1965) and Wolf Singer's 1990 research at the Brain Institute in Frankfurt suggest that "early primary learning is an experience-dependent process of self-organisation, which serves an adaptive function." Surely this is the 'absorbent mind' to which they refer!

Singer confirms that a child's mind is different from that of an adult and that different learning processes are in effect during the first five years.

> *"During pre-natal development, the infant's brain grows as much as any other organ. After birth, however, brain development differs radically from the development of other organs because, with the activation of the sensory-neuron network, electrical activity is added which results in a self-organising dialogue between the genes and their environment."*

Citing countless more studies in the fields of bio-social science, neuro-biology and artificial intelligence, Annette Haines concludes that in the areas of the absorbent mind, sensitive periods and planes of development, Maria Montessori's ideas remain "neither outdated nor inaccurate and provide a coherent and plausible theory which has profound implications for education."

If we believe that the hand is the instrument of learning, then our educational theory and practice should reflect this.

Do our child rearing practices and our classrooms allow children the best chance to fulfil their potential?

If we adults close the paths of activity to children, we become the mightiest impediment to their development. We quelch the child's capacity of judging and acting according to his own personality. It's a form of stealing by us – domination by a stronger ego.

A final checklist of practical conclusions for us:

- take care not to equate good with quiet, or active with disruptive;
- take care not to hurry or force learning;
- practice acute observation – always be aware of the sensitive periods for learning;
- allow time for calm reflection;
- encourage repetition – it strengthens neural pathways;
- restrict yourself to being the presenter of work for the hands of the child;
- always active, concrete, broad activities precede verbal, abstract, specific work;
- I know it is often out of our hands, but, guard against over-regulation causing children's environments to be excessively safe, but unvaried in activity;
- Remember your vital role – early childhood patterns set life-long modes of learning;

It seems appropriate to close with the words of Jane Healy:

> *"The environments we provide for children, the stimuli with which we encourage them to interact, and the ways in which we demonstrate for them the uses of a human mind – these are the means at our command for shaping both their brains and our cultural future."*

We must give no more to the eye and the ear than we give to the hand.
Maria Montessori

There is nothing in the intellect which was first not in the senses.
Aristotle

The environments we provide for children, the stimuli with which we encourage them to interact, and the ways in which we demonstrate for them the uses of a human mind – these are the means at our command for shaping both their brains and our cultural future.
Jane Healy

It is in this period that he seizes things by his own activity, and lays hold of his mental world as if he were gathering it with his two hands.
Maria Montessori

There is not one general fixed intelligence. There are multiple intelligences and it changes with what you take from the environment.
Robert J. Sternberg 1998

The versatility of the human hand corresponds to the free movement of the human intellect.
David Katz 1925

The essence of a sensitive period in human development is a 'burning intellectual love – a drama between the child and its environment.
Maria Montessori

Process, not the product.
Maria Montessori

To have found one quarter of the answer to his own questions by his own effort, is of more value to the child than to hear it all, half understood from another.
Friedrich Froebel

The hand can fill the place of every instrument by its unison with the intellect; it renders the latter everywhere supreme.
Gerhart Hauptmann

The hands which he employs for work are more intimately connected with his intelligence than any other parts of the body. They are the instruments of man's intelligence.
Maria Montessori

Heritability describes what *is* rather than what *can* or *should be*.
Plomin and DeFries

It is as if the child, having absorbed the world by an unconscious kind of intelligence, now lays his hand to it.
Maria Montessori

The 'history' or expression of our individual experience feeds back into the general neural fields giving rise to that experience. Instant by instant, we reap what we sow, individually and collectively.
Joseph Chilton Pearce 1992

Movement is the secret for holding the attention of the child.
Maria Montessori 1939

The child is driven to touch, taste, smell, listen to and look at an event to "fill in" a visual stimulus. In this way neural fields organise as structures of knowledge.
Joseph Chilton Pearce

Nature's agenda for us is to participate in the creative process. Products, such as information, answers, thoughts and things, are cheap; process is priceless.
Joseph Chilton Pearce

Mans mind does not spring from nothing; it is built up on the foundations laid by the child in his sensitive periods.
Maria Montessori

We are really talking about how to teach them, not just how to unearth a wiring diagram.
Jane Healy

The adult community at large must decide to wrap up the growing brains of our children in mental garments of language, reflection and thought.
Jane Healy

Can we conceive of anything more sacred or more wonderful than the development of this essentially human movement of the hand of the child… expressing the inner life.
Maria Montessori

DISCLAIMER:

As my role is one of reviewer, I acknowledge that research matter presented in this paper is not my original work, rather it is in the form of re-statement of recent research and conclusions from the work of those authors represented in the bibliography. All credit lies with those authors. *Pamela Nunn*

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Grace – the Felicity of Being

Renilde Montessori

It has been said that the child comes into the world in a state of grace. Grace — a word rich in spiritual meaning, a word many of whose acceptances are applicable to the child. The child charms, the child provides unmerited divine assistance to man for his regeneration and sanctification, the child is disposed to kindness and clemency. Above all, the child loves and inspires love.

Love is a term much maligned, besmirched and muddied. This is to be deplored.

In **The Secret of Childhood** (Chapter IV – Where Adults Impede – "The Intelligence of Love") Maria Montessori says:

> *"The whole labour of life, which fulfils itself through its laws and brings things into harmony, reaches consciousness under the form of love . It is not the motor impulse, but it is a reflection of the motor impulse, as planets reflect the light of the sun. The motor is instinct, the creative urge of life. But this, in bringing creation to being, tends to make love felt, and therefore love fills the consciousness of the child. His self-realisation comes about in him through love."*

It is said, "The child is born of love." Perhaps, perhaps not; and if so, with bizarre misconceptions of what is meant by love. Doctors' waiting rooms abound in pamphlets bearing jarring titles such as "Safe Love".

One day, when life's essential values emerge from the absurd chaos in which evolving humanity finds itself, we may laugh, ruefully and with compassion, at the inane and shallow mores of the second millennium, characterised by a gamut of mean, lewd, petty interpretations of the primordial energy we call love.

Love, cloaked in grace, is the child's endowment. Those who call the child into the world, and those who make themselves responsible for ensuring the excellence of its existence in this world, must seek within to find again that old, forgotten grace with which to meet the pristine, unsullied, infinitely generous grace of the child.

How long will it take humanity to see the new-born child in all its dignity, how long until we learn to appreciate in this miraculous being the powerful force of life, until we allow ourselves, delightedly, to be swept along with the great vitality generated by this companionable, funny, tender, demanding little person? Instead, we dig in our heels and put all our energies into retaining, restraining, stultifying the vigorous life we ourselves have engendered. We smother it with the obfuscated ignorance of instinct run dry, replaced by a cacophony of information, so much and so deafening that we can no longer distinguish good from bad from nonsense from outrageous.

Babies, children, the young, do not provide information, they present us with life in its essential form. We must become adequate to recognise again and heed those ancient, perennial directives which once urged us to live, when we ourselves were in a state of grace and the felicity of being was strong within us.

Instead, something dreadful is happening to us. We become more or less willing victims of an onslaught of things and fashions, which we can withstand or not depending on our capacity to discriminate the good and useful from the superfluous and overtly damaging.

Particularly where our children are concerned, our nearsightedness verges on the pathological. The children give us love, we give them things. The children ask for our companionship, we give them television and computers. The children demand that they be allowed to walk, to run, to move, to explore their splendid universe, we paralyse them in vehicles, in cages, in restricted soul-killing environments. The children invite dialogue, we give them food, a bottle, a pacifier to compensate for a lethargic indifference that renders us inert. Above all, the children demand meaning, and they are given none and so their spirit shrivels, they do not know their world, they do not know themselves.

They come to life disposed to love and their love is not allowed to find expression. They are condemned to the bleak desolation, akin to hell, of ceasing to love – grace withered, the felicity of being destroyed. These are the children born to endless night.

A sombre picture, but for a great number of the world's children it is a true picture, true enough to awaken our alertness, an alertness dulled by the horrors of heinous crimes committed against

other great numbers of children — rape, incest, murder, mutilation, prostitution, every possible violation of their defenceless young bodies, their mind, their spirit. These overt crimes are bruited and the call to action on their behalf has sounded. The call to action against the covert crimes has not been voiced for the sinister reason that they are perceived to be virtues.
What to do?

Accept the children's gentle invitation to follow with them nature's firm and clear directives, to bask in the benevolent glow of their inherent grace, to pursue with them the felicity of being.
As parents, as educators, we tend to be ponderous – devoid, in fact, of grace. In everyday terminology, we need to lighten up, to rid ourselves of superfluous preoccupations, to rid the child's environment of useless things. From the very beginning of its existence we must allow ourselves to enjoy the child's company, recognise its dignity, respect its freedom, and above all, have faith in the wholesomeness of its vigorous endeavours. We have to admire its efforts, rejoice in its achievements and learn not to intrude with our anxieties, our undue expectations, our fears —for these are all obstructions to the sanity of its interaction with the environment.

As Maria Montessori says, "the child learns through spontaneous, meaningful activity". The ability to recognise the meaning in the child's activity is a fascinating aptitude well worth pursuing. Observation is the fundamental art required of all scientists, most certainly of all educators, and most particularly of all parents.

'Yes', we object, 'but it takes time'. Indeed. Yet time, the sense of endless time, is a condition for allowing the felicity of being to flower. Haste, where children are concerned, is ugly and damaging. For them, because they are following life's rhythms and must not be impeded from doing so. For us, because it makes our perception ragged and tatters our soul.

A child who is allowed the freedom to learn all the essential disciplines of its environment through spontaneous activity, driven by 'the creative urge of life', will know itself. A child who is given the absolute assurance that its existence has profound meaning to those who gave it life, will never have to search for meaning. A child who is allowed to participate as a contributing member of its family and every milieu it further encounters, will become responsible for itself and capable of assuming responsibility for others. Such a child will grow strong, and free, and hardy, its initial grace intact, its felicity of being an ineradicable given. It will become an individual not needy of a group to give it power and purpose, but a fully functioning, independent element in an enlightened, interdependent society.

In **The Absorbent Mind** (Chapter XXIV – Cohesion in the Social Unit) Maria Montessori gives the following description:

> *"The example of a society where social integration exists can be given: it is the cohesive society of young children, achieved by the magic powers of nature.*
> *We must consider it and treasure it where it is actually being created, because neither character nor sentiments can be given through teaching: they are the product of life.*
> *Cohesive society, however, is not the same as the organised society that rules the destiny of man. It is merely the last phase in the evolution of the child, it is the almost divine and mysterious creation of something resembling a social embryo."*

This is the embryo of the enlightened, interdependent society towards which as a species we are stumbling, erratically, but most certainly following evolutionary directives in the same manner that each child follows the directives which urge it towards its own construction.

Humanity evolves in the magnificent environment that is our earth, the earth which brought us forth and to which we shall return, content, if our life has been well lived.

St. Francis of Assisi, in one of the most exquisite songs of praise ever created, thus celebrates the earth:

> *"Laudato si', mi Signore, per sora nostra madre terra, la quale ne sustenta et governa, et produce diversi fructi con caloriti fiori et herba.*
> [Be praised, my Lord, for sister our mother earth, who sustains and governs us, and produces diverse fruits with colourful flowers and grass and thus our death.]
> *Laudato si', mi Signore, per sora nostra morte corporale, da la quale nullu homo vivente po skappare.*
> [Be praised, my Lord, for sister our physical death, from whom no living man can escape.]"

There is an extraordinary companionableness in 'sister our mother earth', without which the joy of living would not exist and in 'sister our physical death' without which there would be no evolution. The grace of our existence springs from love for 'sister our mother earth' and the comfort of knowing that we are sustained and governed by her, however much we may be misled into thinking it is we who govern her.

The grace of our existence also lies in the sure knowledge that we are finite and no living human can escape 'sister our physical death'. The felicity of being is contingent upon a deep awareness and joyful acceptance of these two 'sisters' whom St. Francis, with all the humility of his spiritual wisdom, chose to celebrate.

Deep awareness and joyful acceptance – two human phenomena whose development is allowed, helped and encouraged, in splendidly explicit silence, by a Montessori prepared environment for children three-to-six years of age, provided that those who prepare this environment are themselves fully aware of its potential for becoming a *milieu divin,* an ambience which provides all elements necessary for the children to construct themselves and, together, create the embryo of a perfect human society.

The Montessori prepared environment, if well understood and implemented, is itself deserving of silent fanfare, not only for its uncommon common sense, but also for an aspect which has consistently been disregarded and overlooked.

Montessori pedagogy has been held culpable for not taking into account the child's emotional development. The withholding of unsolicited praise, of uncalled-for caresses, is perceived as a lack of warmth and nurturing. The visible expression of 'any unnecessary help is a hindrance to development' is considered a form of malice.

Another source of the prevalent misconception that children's emotional life is disregarded, is the austerity of the environment which nevertheless contains, implicit and intelligible, all physical, intellectual and spiritual properties, abstract and concrete, aesthetic and scientific of the phenomena of human existence, thus giving the child's inherent love of life the possibility to become rooted in truth and reality through meaningful, spontaneous activity.

The prosaically termed 'Exercises of Practical Life' contain in essence all the elements of the domestic household, and these translate into the greater human household with all the extraordinarily complex, varied, multifaceted ramifications of 'Care of the Environment, Indoor and Outdoor', 'Care of the Person', 'Grace and Courtesy' and 'Movement'.

The Sensorial Materials give the child the possibility of individually recreating and becoming intimately knowledgeable about the abstractions it took humanity hundreds of thousands of years to reach; to acquire habits of the intelligence such as observation and classification which are the basis of all science; to make aesthetic decisions.

The Language Materials allow the children to enrich and explore language – that specifically human tool, the instrument of collective thought, absorbed passionately and insatiably since the very beginning of their existence, making their own its poetry, its scientific exactness and precision, its beauty and vitality – an investment in enchantment for their entire life.

The Math Materials elevate sensorial classification to number and measure, converting it into a transmissible science with a myriad applications. They offer the tranquillity of dealing with absolutes, and the peace – or disquiet – of infinity.

Each piece of material is unique, isolating one activity, one concept, never to be repeated in any other piece of material, so giving luminous clarity to the message, the information, the exercise it contains. The child is given the possibility of uninterrupted concentration, of voluntary and consistent repetition, the sense of endless time without which there is no learning, no abstraction, no incarnation and thus no creation or recreation.

In this deceptively simple environment with its discreetly named areas – Practical Life, Sensorial, Language and Math – the seeds are sown for every aspect of human endeavour – the arts and architecture, music and dance, theatre and literature, science and technology, etc., etc., etc.

Never to be forgotten is that the stereotypical Montessori prepared environment known as the 'Casa dei Bambini' is the result of delicate, precise choices made by many generations of children, of all races, of all nationalities, of every socio-cultural origin, beginning with the small group gathered in Via dei Marsi, in the Quartiere San Lorenzo, in Rome, in 1907.

Our premise is that children are in a state of grace. Grace is life's given, not ours to give. As parents, as educators, we must perceive our children's grace to be a sacred trust, and heed the silent mandate to ensure to the utmost of our ability, with the intelligence of love, their felicity of being – thereby becoming worthy of the unconditional benevolence with which they accept us – their parents, their educators.

The Company of the Elect

Renilde Montessori

In past decades there has been much snideness and vituperation about Montessori's elitism, its perceived imposition on the children of middle-class values. Some years ago the very title of this conference, "*Grace and Courtesy – a Human Responsibility,*" would have been sloughed off as insufferably precious.

But times change, cycles turn, values discarded as bourgeois conventions are rediscovered, found to be essential and fundamental to the human condition and reinstated, like furniture once considered passé being brought down from the attic and reverently refurbished. The persistent rediscovery of ancient mores is a leitmotif in human evolution without which the music of the spirit would be an amorphous mumble.

There are, however, those among us who always tend to reach out for the good and the wholesome, for the beauty which they find in all of creation; who are always disposed to admire, to appreciate and to celebrate with their entire being that which the world has to offer. These are the children.

It takes great and consistent effort to destroy this tendency, but in the long run we manage to do so with remarkable efficiency, even though, in spite of us, many children retain their joyous vitality, perhaps with an early autumn tinge of melancholy.

A young princeling comes to mind who, with the greatest courtliness, showed visitors around the dank, dark and grotty basement which housed a well-known, very expensive, highly respected bilingual day-care centre in Toronto. "Please come this way. See, this is where we keep our books. And these are our blocks. If you will follow me, this is the art corner." The furniture was scuffed, the carpet filthy, the books tattered, the blocks covered in a patina left by many unwashed little hands, the art a conglomerate of snippets, dirty egg-cartons, dribbled glass paint pots ... an environment for the elect? Indeed, no. And yet the little boy presented it to the horrified guests with the graciousness of an accomplished host, far outshining that of the adults in charge who were unkempt, loud, rude and inhospitable to guests and children alike.

This is a sad little vignette depicting one out of thousands, probably hundreds of thousands of what Maria Montessori called "refugee camps" for young children. No doubt there are as many excellent day-cares, crèches, and day nurseries directed by cheerful, affectionate, intelligent people as there are horrors run by indifferent mercenaries with uneducated personnel. The fact is, that the latter are a crime against the child, therefore a crime against humanity and should not exist. And yet it is noteworthy how many professional educators, child-minders, teachers, are indifferent to children; indeed, they do not like children. The ultimate tragedy is that of parents who do not like their children, and they abound. Even more dangerous are those who like their own and no others.

When we look dispassionately at our past and think of all the people who educated us, who minded us as children, who taught us — of how many can we truthfully say they liked children? The ones who did like us, who enjoyed the mirth of existence with us, shine golden in our memories.

This makes one wonder why so many people who do not like children have them, why so many people who do not like children become teachers.

Until very recent times we were still blindly following nature's mandate to perpetuate the species. We are becoming aware that the species has multiplied to an alarming degree, abounding in sufficient numbers to destroy its habitat. We have the knowledge and the power to take a hand in helping nature keep our perpetuation within reasonable bounds. We are acquiring thereby the interesting obligation to reconsider ourselves as potential parents, and to discover the true nature of the child so that we may best educate it.

Until very recent times there were few professions open to women, and teaching was one of them which was a somewhat meretricious but understandable reason for

becoming a teacher. Now that there are professions galore, teaching can become a choice among many others; indeed, it can be taken up as a vocation which is as it should be. Again, this calls for a new awareness of what education entails, the immense responsibility it carries, the great demands it makes upon our wisdom, our endurance and the quality of our selfhood.

Parents and educators must now consciously assume the function of acolyte to nature and this requires a knowledge of the child which in earlier times was not a prerequisite either to become a parent or a teacher.

In **The Absorbent Mind** (Chapter XXVII – The Teacher's Preparation) Maria Montessori says, "...Let us always remember, when we present ourselves before children, that they are '*of the company of the elect*'". The reason we are enjoined to remember this is precisely that it requires us to question and confirm our worthiness as educators.

Maria Montessori once pronounced with great severity, "It is your duty to be beautiful." For some odd reason beauty has seldom, if ever, been considered a necessary asset for people in charge of children. This is a dreary symptom of adults' lack of awareness of and respect for their dignity. Not only their dignity, but also their aesthetic sense. Their spirit is alight with the joy of existence. Their inclination to find things beautiful is abundant and generous precisely because they are *"of the company of the elect"*, persons belonging to a specially privileged group, those chosen for the salvation of the species. So we wear scruffy sneakers and sweat suits.

We dress up for people we consider important, for occasions we consider momentous. What people are more important than our children, which occasions more momentous than the time we spend with them, helping them, encouraging their efforts to fulfil their pristine and powerful potential? We have learned to prepare an exquisitely clean, orderly, beautiful intelligent environment for them. Many of us still have to learn that the pivot of this environment is the exquisitely clean, orderly, beautiful, intelligent educator within it, obviously taking into consideration that the human being is an entity composed of body, mind and spirit. Physical, mental and spiritual cleanliness, order, beauty and intelligence are the disciplines required if we are to merit the privilege of calling ourselves educators. And, potentially, these disciplines are vivid within the child for us to observe, for us to relearn thereby becoming adequate to teach.

In **The Secret of Childhood** (Part II – Chapter I –The Task of the Teacher) Maria Montessori paints a scathing picture of the arrogant, proud and angry tyrant, possessed of all truth, who obviously neither loves, nor likes, nor respects children and is therefore iniquitous and unworthy of *the company of the elect.*

In **The Absorbent Mind** (Chapter XXVII – The Teacher's Preparation) she gives wise and sensible advice to the opposite of the foregoing — the young, inexperienced teacher, hapless, helpless in front of the first group of children in her charge, whom she is prepared to love, like and respect, but does not know yet how to direct. She has, however, a good chance to achieve excellence if helped and become worthy of *the company of the elect*.

There are many unworthy types of educators Maria Montessori does not mention — among others, the intrusive pseudo-psychologist; the emotional parasite; the paraphonic iceberg. Unworthy, because their motives in working with children are self-serving and one of the pre-requisites for any educator is to be able to set the self aside.

In **The Absorbent Mind** (Chapter XXVII – The Teacher's Preparation) Maria Montessori writes:

> *"To serve the children is to feel one is serving the spirit of man, a spirit which has to free itself. The difference of level has truly been set not by the teacher but by the child. It is the teacher who feels she has been lifted to a height she never knew before. The child has made her grow till she is brought within his sphere.*
>
> *What is the greatest sign of success for a teacher thus transformed? It is to be able to say, 'The children are now working as if I did not exist.'*
>
> *She will be able to say: "I have served the spirits of those children, and they have fulfilled their development and I kept them company in their experiences."*

The most appealing statement in the above quote is, "I kept them company in their experiences." It brings to mind another individual who should be included in the list of the iniquitous — the chum teacher.

There is an elegance in companionship between young and old, between child and adult; there

is implicit a mutual respect, a recognition of different experience, the comfort of authority for the child, the tenderness of responsibility for the adult. Chumminess implies a totally inelegant, poke-in-the-ribs, chortling type of relationship. We may be equals, but we are not peers, and it is ungrowthsome and disorderly to pretend we are for we then no longer deserve respect and the children are deprived.

Children are deprived in many ways, of many rights, of many privileges that are their due.

> *"The great task of education must be to secure and to preserve a normality which, of its own nature, gravitates toward the centre of perfection. Today, instead, all we do is to prepare artificially men who are abnormal and weak, predisposed to mental illness, constantly needing care not to slip outwards to the periphery where, once fallen, they become social outcasts. What is happening today is truly a crime of treason to mankind, and its repercussions on everyone could destroy us. The great mass of illiterates, which covers half the earth, does not really weigh upon society. What weighs upon it is the fact that, without knowing it, we are ignoring the creation of man, and trampling on the treasures which God himself has placed in every child. Yet here lies the source of those moral and intellectual values which could bring the whole world on to a higher plane. We cry out in the face of death, and long to save mankind from destruction, but it is not safety from death, but our own individual elevation, and our destiny itself as men, that we ought to have in mind. Not the fear of death but the knowledge of our lost paradise should be our tribulation."*
> (**The Absorbent Mind –** Chapter XXIII – Cohesion in the Social Unit)

If we see the children as being of *the company of the elect* , we ourselves shall gain in dignity by giving them the freedom that is their right and they will attain the disciplines of their human condition in their time, place and culture.

If we see the children as being of *the company of the elect*, they will grow in the knowledge that they are worthy and no material poverty will ever darken the radiance of their spirit.

If we see the children as being of *the company of the elect*, they will together create a cohesive, peaceful community, promise, ever less fleeting, of a peaceful world where our species, young and troublesome as it is, can mature and become wise.

We shall not be there to see it but we can leave with the peaceful conviction that generation, after generation, after generation, after seven generations, after seven times seven generations, in aeternum, children will be born and these children will all be of *the company of the elect*. We are beginning to perceive this. Is it not cause for hope that knowledge and understanding of the child may become a given in our collective unconscious?

Principles of Montessori Education

Sue Birdsall Tineke van Gasselt Felicity Young

INTRODUCTION

The Montessori method of education which was developed in the early years of this century grew out of the work of Dr. Maria Montessori (1870-1952) with disadvantaged children. From her early education experiments in which she used the learning materials of Itard and Seguin, she went on to adapt her ideas to the education of normal children. In the first "Casa dei Bambini" in Rome (1907), she experimented with and refined these "materials of development" and went on to expand her ideas further into a fully articulated approach to education, first for children from three-to-six years and later for the six-to-twelve years age group. In addition, she outlined an educational approach for twelve-to-eighteen years olds, and together with her close collaborator Adele Costa Gnocchi, developed materials and guidelines for the first three years of life. In Australia there are currently Montessori classrooms for children between eighteen months and twelve years of age.

Maria Montessori did not start out in education as her chosen field. Being the first woman to graduate from Rome University with a Medical Degree, her approach to education was that of a scientist which resulted in her using observation as the basis for her ideas. It was not until the middle of this century, almost fifty years since her work in Rome began, that she wrote her major work, **The Absorbent Mind**. This book documented her observations from the work she did with children from all over the world.

Maria Montessori's work crystallised phenomena about children's development that had been hitherto unrecognised. She realised that children come into the world with a potential for development and not, as was believed in her day, 'a blank slate'. She also recognised that the brain develops according to certain critical periods which she called "Sensitive Periods", in which certain skills or capacities apparently require stimulation in order to develop. Maria Montessori developed ideas way ahead of her time and many aspects of her work are only now being fully recognised.

PRINCIPLES OF MONTESSORI EDUCATION

The Montessori approach to education is concerned foremost with the development of human potential. To achieve this, a fundamental principle is to **follow** the development of **the child**. Montessori observed that each child has his or her own unique pattern of development to follow and by creating opportunities for the child to reveal this pattern, it becomes possible to understand what each child needs to develop fully as a human being. A Montessori educator is concerned with supporting and nurturing the development of each individual child in all aspects of life. This process is helped by the fact that each child has an intense creative motivation towards self-actualisation and inner guides and powers which enable him/her to seek out what is needed for developing his/her potential.

In the first stage of life, from birth to approximately age six, the child has the power of an **absorbent mind —** a special power to absorb all the details of the world around him or her and to incarnate them. Initially, this process happens unconsciously. Then gradually, from the age of 2 to 3 years old, it becomes a more conscious process when the child comes to select what will best assist his or her development. From the age of approximately six years, the child has the power of the **reasoning mind** which guides his/her interactions with the environment from then on.

Another inner guide children have is what Montessori referred to as "**Sensitive Periods**". These occur throughout the formative years and are special sensitivities to acquire particular skills and knowledge more easily than at any other time in life. Each sensitive period is marked by children showing strong spontaneous interest in certain aspects of life around them and are most noticeable in the first six years of life. According to Jane Healy (author, lecturer and consultant in applying brain research to learning situations in the classroom and home), it is now confirmed by neuroscience that if the child's developmental needs are not met during these **critical periods**, we may close down some of these developmental windows.

The **Sensitive Periods** Montessori observed in children between birth and age six are:

- ***Language*** (prenatal – age 6);
- ***Movement*** (prenatal – age 4);
- ***Order*** (birth – age 5);
- ***Interest in small details*** (18 months – age 3);
- ***Sensorial exploration*** (birth to age 6);
- ***Tactile exploration*** (age 2 – age 3);
- ***Grace and Courtesy*** (age 4 – age 5); and
- ***Mathematics*** (from age 4 onwards).

Sensitive Periods that manifest themselves after the age of six include:

- Exploration of the wider society outside home and school;
- Social Interactions;
- Intellectual Development;
- Abstract Thinking, i.e., development of the imagination; and
- Development of the moral sense.

A further principle of Montessori education is that Maria Montessori realised the importance of the **link between mind and body** for harmonious physical and mental development. As an illustration of this belief, Maria Montessori called the hands "the instruments of intelligence." She recognised that the human mind is designed for growth and that this growth is dependent upon stimulation from the environment. Each experience resulting from the child's active interest in the people and objects in his or her environment contributes to the child's process of self-construction by building the mind and personality. There is emphasis in the Montessori approach to education on the mind and body forming an integrated whole and development occurring as a result of the child's spontaneous interaction within a structured, or "prepared environment".

An important concept in Montessori education is that of the "**prepared environment**". In an environment prepared to cater for the developmental needs of a child, Montessori believed that children will direct their own development by incarnating the environment, i.e., making it part of themselves. Montessori in **Education and Peace** speaks of this force as a "love for one's environment". She stated:

> *"The love of one's environment is the secret of all man's progress and the secret of social evolution.... Love of the environment inspires man to learn, to study, to work."*

A perfect example of the first 'prepared environment' is the womb. In that environment, especially created by nature, all the child's needs for optimal development at that particular stage of life are met. Similarly, the term 'prepared environment' is used to describe a Montessori classroom. Each one always contains those elements that are considered essential for optimal development according to the child's sensitive periods and psychological characteristics, prevailing at the time. A Montessori 3-6, 6-9 or 9-12 environment (or classroom) is especially prepared to take into account the needs of children in each of these age groups. Each environment is also designed so that children can **develop at their own pace** and direct their own learning.

Observation of the children and their development, by the adult involved, is the key for assisting children to obtain the most from their interactions with each prepared environment. The Montessori classroom is prepared to assist each child develop independence and mastery of his/her environment. Only the assistance *needed* by a child is provided. This was expressed by a pre-school child once as "help me to do it myself". Any unnecessary aid is felt to hinder, not promote, development. The classroom has been set up in such a way that it enables the children to operate independently as much as possible for their stage of development.

The adult who facilitates the learning in a Montessori classroom is called a **directress or director** rather than a teacher. His or her main role is to prepare the environment, observe the children and, as a result of his/her observations, assist the children to interact meaningfully with the environment. The adult does not directly teach the children who will teach themselves given that the environment has been prepared correctly. Renilde Montessori in "The Timeless Spirit" – a paper prepared for the 1988 Association Montessori Internationale (AMI) International Study Conference, says of the adult's role as educator:

> *"At one and the same time, we follow our children, we guide our children, and we walk by their side, matching our steps to theirs."*

The materials found in Montessori classrooms, are not "teaching aids", but enable children to be in charge of their own learning. The **Montessori equipment** has been carefully designed for a specific purpose, which is the development of an ordered mind. They are

designed to isolate the quality of the concept they embody, are child-sized, concrete, attractive, precise, manipulable, real and generally self-correcting. Task completion, repetition and opportunity to develop concentration are all inherent in the materials. They enable independent use by the child , offer challenge and encourage cycles of activity.

Each Montessori classroom (except in the birth-to-three period) comprises children of a **three year age range**. For example in a 3-6 classroom (Montessori pre-school) three, four and five year olds learn together and teach each other. This promotes a caring community of children who help each other, allowing opportunities for the development of responsibility, independence and the awareness of others' needs. A Montessori primary school follows on from the pre-school with classes for 6-9 and 9-12 years olds.

The exception to this rule is the birth-to-three age range due to the vast difference in development between a newborn baby and a three year old. In Montessori centres for children under three, there is usually one environment referred to as "**Nido**" ("nest" in Italian) for children up to the age of twelve-to-fourteen months who have learned to walk independently. Another environment called, "**Infant Community**" then caters for children between the stage of independent walking and readiness for the 3-6 environment.

Montessori classrooms generally have an atmosphere of cheerful orderliness and purposeful work which enables children to concentrate and operate independently. Social cooperation and taking care of the classroom environment develops as children satisfy their own developmental needs. **Self-discipline** gradually develops as children in an atmosphere of **freedom within limits** are given freedom to choose an activity, work with it as long as needed, repeat it as often as they wish, choose where they carry out the work and to move and communicate freely. Each freedom has as its limitation **respect** for the rights of others and respect for the activities and the environment.

Although Montessori stressed that each child has his or her own unique pattern of development, like others such as Erikson, she also observed universal patterns that govern the developmental stages of all human beings. She called these universal stages "**Planes of Development**". She saw each plane of development as being composed of approximately 6 years, with sub-planes of 3 years each. Separate planes of development operate from birth to 6 years, then from 6 to 12 years, from 12 to 18 years and from 18 to 24 years. The first three years of each plane she saw as a period of creation and the second three-year period as the period of further refinement and consolidation. For example, coordinated movement is mastered within the first three years of the first plane whereas further refined and precise movements are mastered in the period between age 3 and age 6.

In each plane of development children learn differently. The primary aged child will learn in a very different way to the preschool aged child, hence each needs a differently prepared environment and an adult to support and promote their learning and development. Learning is not vertical but different at each plane of development though the knowledge and skills acquired in the previous plane are utilised and built on in the succeeding plane. Education was seen as a life-long process by Maria Montessori, a process that starts at the beginning of life. She coined the phrase, "**Education must be an Aid to Life".** From this principle it follows that education can only be effective if it is carried out in harmony with the child's developmental needs, i.e., **in harmony with life**.

This paper will now describe the prepared environments for the first two planes of development covering the period from birth to twelve years of age and conclude with the ideas outlined by Maria Montessori for the third plane of development.

THE PREPARED ENVIRONMENT FOR THE CHILD BETWEEN BIRTH AND THREE YEARS OLD

Maria Montessori recognised, as so many others since, that the experiences during the first three years of life have a lasting effect on the rest of our lives. She gave a special name to this period and called it the time of the "**Spiritual Embryo**". This name implies that there is a relationship with the embryonic period of pregnancy, a period during which all foundations for subsequent physical development are formed. Maria Montessori believed that in the first sub-plane of development the mind absorbs information that is used as the foundation for subsequent mental development. It becomes clear then that the quality of care a child receives during this period needs to reflect

recognition of his/her physical as well as psychological needs. For the prepared environment this means it is not only important to have materials and activities to help children accomplish certain levels of skill, but the way in which these levels are mastered and the way the child is approached during these processes influences the way the child comes to perceive him/herself. As mentioned earlier in this paper, the diversity of needs of the child during the first three years of life calls for more than one 'prepared environment'. The sensitive periods that operate are: movement, language, sense of order, sensorial and tactile exploration and interest in small details.

In the period immediately following birth, which is considered as the biggest transition we ever make in our lives, the child needs assistance in making this transition smoothly. This is achieved by giving the child continued contact with those aspects that were familiar prior to birth, such as the sound of the mother's voice, heartbeat and breathing pattern, sounds of the environment that were absorbed in utero (such as familiar music and other voices) and contact between the baby's face and hands (the hands are often placed on the cheeks in utero). It also helps if the birth takes place in dim light and the baby is born/bathed in water of body temperature.

The first two months of life are considered to take care of the period of transition. It is referred to by Montessorians as the "**symbiotic period**", i.e., the period during which both mother and baby fulfill each others needs. Gradually the baby's interest will shift from the immediate family to the world beyond that. Initially, the prepared environment basically consists of the mother, father and siblings. As in nature, it is considered the father's task to shield mother and baby from undue influences so that the process of transition can take place in a relaxed and supportive manner. By the end of the symbiotic period, if conditions have been favourable, the baby sees life after birth as just as good or possibly even better than before. This results in having an optimistic outlook on life which means the baby has learned that the environment can be trusted to meet his/her needs. This **basic trust in the environment** is also described by Erikson (1972) when he talks about the "eight ages of man".

The next step in the baby's development process is to achieve basic trust in him or herself. The sign that the baby is ready to start exploring the environment beyond the immediate family can be observed when during feeding time the baby's focus is no longer only on the person who feeds him/her. The baby has learned to recognise people who smile at him/her and starts to want to grab hold of things that up until now have only provided visual stimulation. The hands are studied intensely as if the baby knows that his/her work is just about to begin. Around the time a baby can hold things in the hand and bring these to the mouth, the first teeth usually start to appear, the saliva changes consistency to now include the enzymes needed for digestion of more complex carbohydrates and the time has come to very gradually introduce the baby to food other than milk. This time in the baby's development is seen by Montessorians as the first step towards independence, and if it is not recognised but dealt with at a later time in life, it will not have the same benefits for the child psychological development. Throughout the birth-to-age-three period physical changes go hand in hand with points in time when changes need to be made to the prepared environment. The first weaning meal in a 'Nido' is made into a very special occasion by giving the baby a table to sit at (supported), set beautifully and making sure that the meal can take place without this special occasion being interrupted. It is important that the same person who has been feeding the baby, gives the **first weaning meal.** Like in the symbiotic period, this ensures that although a new step is taken the familiar part of the previous stage still continues. The distance created by the little table between adult and child are symbolic of the baby having taken the first step on the road to independence. Over the next 6-9 months the range of foods will increase and the texture of foods will gradually go from smooth to chewable bits. This process is guided by the baby's responses to the foods introduced. Established routines such a feeding and bathing greatly contribute to the baby's feeling secure and they take into account the sensitive period for order.

To accommodate the increasing urge for mobility, the baby's prepared environment. whether it is at home or in a Montessori 'Nido' needs to contain a special "**area for movement",** i.e., a mat or rug on the floor in front of a horizontal mirror. This area gives the baby opportunities for **freedom of movement** at his/her own pace and within the range of his/her own abilities. Such opportunities are not always provided by commercially available aids such as bouncinettes, walkers, playpens, wind-up swings, etc. A newborn baby when given the space can rotate its body 360 degrees already so

giving the baby both a bed on the floor, rather than a bassinet, and an area for movement near the rest of the family during the day allow for unrestricted movement — the basis for optimal development of co-ordinated movement later on.

The area for movement in front of the mirror will next need to be expanded with equipment that **aids crawling** and **reaching the erect position**. Crawling aids are no different than what is provided in toy shops for children this age, and it is not always necessary to buy special equipment for pulling up and cruising along if there is enough child height furniture in the house such as coffee tables and ottomans. In a 'Nido', rods are provided for pulling up or walking along without adult help. In addition, a specially designed "walking bridge" is often found; a piece of equipment that helps children practice their emerging walking skills safely without adult help. Just before that stage, or concurrently, there is a brief period when children will need practice to walk or stand up while holding on with one hand only. This is provided by having chests of drawers, sliding doors and other materials that need knobs or handles for operation within the baby's reach.

These attempts to become mobile and to learn to stand up that usually occur in the period between 6 and 12 months, are closely linked again to the child's psychological development. Adults caring for the child must understand that once a child reaches a certain level of development, the child must be given plenty of opportunities to practice those newly mastered skills, otherwise not only is the child's physical progress restricted but also his/her psychological development is hindered by our making it seem as if we do not approve of this extra mobility. Maria Montessori says:

> *"His impulses are so energetic that our usual response is to check them. But in doing this, we are not really checking the child but nature herself, for the child's will is in tune with hers, and he is obeying her laws one by one."*

It is clear to see why this period of early mobility is so crucial for establishing self esteem and confidence and is a prerequisite for what Erikson called **"basic trust in the self".**

Once the child can walk independently and he/she no longer needs the hands for stability, the time has come to further explore the skills that require the hands working together. At this point the child transfers from the 'Nido' to the 'Infant Community' if the child is cared for outside the home.

A Montessori 'Infant Community' is primarily designed as a 'home away from home', a special place where children's emerging language and motor skills are catered for by providing activities that closely resemble routines in a home setting. By the time the child enters the 'Infant Community', he/she has reached what could be described as the **"norm of the species".** The child has those qualities that make him/her uniquely human, i.e., speech and the upright posture. Now is the time to introduce the child to more aspects of the world that he/she will become part of when grown up.

In the **language area** of the room the child is given opportunities for vocabulary enrichment. Initially, very familiar classified objects will be presented, sometimes real objects such as fruit or vegetables, and the precise names are given. This work is repeated as often as the child wants. Repetition of work initiated by the child is seen as an indication that there is more to be mastered by the child, something the adult can not always perceive as accurately. Gradually the language enrichment work will include not only three dimensional objects but also pictures of those objects — initially identical pictures and later on matching (non-identical) pictures. The range of groups of objects and cards will move from very familiar objects to less familiar ones. The last steps in the language program for children in the Infant Community is learning words from nomenclature cards and recognising objects by touch (which builds on the Sensitive Period for the stereo-gnostic sense). Both these activities are further built on and expanded in the Montessori 3-6 environment.

Language is of course not restricted to what is provided in the language area. The correct use of language with children of this age, who are in the period of forming the basis of their literacy skills, is an enormously big responsibility for adults in charge. Songs, poetry, stories and discussions are all part of language enrichment as well. Acknowledging children's communication attempts as often as possible will help them perceive themselves as important and helps to strengthen their psychological development at the same time. The language materials are all reality-based as a child in this early stage of development needs materials that help the child to make sense of the world he/she lives in.

The belief that children need to have the physical and psychological freedom to develop

according to their own inner clock is demonstrated by a prepared environment, be it at home or in the 'Infant Community', where adults in charge show confidence in allowing the child an appropriate level of independence in the knowledge that children have the innate desire to spend their waking hours doing something constructive. Activity and becoming more coordinated in the process, was seen by Maria Montessori as equally important for the young child's intellectual development as eating and sleeping is for physical growth. She used the term "**psycho-motor development"** and said:

> *"Therefore, it happens that if a child is prevented from using his powers of movement as soon as they are ready, this child's mental development is obstructed.*" **(The Absorbent Mind)**

The opportunities for psycho-motor development in the prepared environment of the 'Infant Community' include, first of all, exercises to improve **eye-hand(s) coordination skills**. Many chances to repeat and practise these skills are offered in the room as well, such as opening and closing containers, squeezing pegs for hanging up wet laundry, applying paint or glue, using scissors, folding, simple sewing, etc.

In addition, the child is introduced to **Practical Life Activities.** These activities are further expanded and refined in the 3-6 prepared environment. Practical Life Activities centre around tasks that are concerned with **looking after the self** such as hand washing, grooming, dressing/undressing and storing clothes. They also centre around tasks that are needed for **looking after the class room** (or house) such as dusting, sweeping, mopping, watering plants, dish washing and cloth washing. Another important part of the practical life area includes activities related to food preparation such as chopping, peeling, brushing, stirring, kneading, table setting and serving food. As mentioned before, in the 'Infant Community' Practical Life reflects what happens at home, so similar opportunities can be provided at home. These activities again provide many ways to nurture physical as well as psychological growth while the child is becoming more co-ordinated, develops concentration span, vocabulary, love for the environment, self esteem, inner security and independence. The Practical Life Activities are provided for the **benefits of the process** not for the outcome of the activities.

Practical Life Activities which may lose their attraction to us later in life are of great interest to children this young. Children derive deep satisfaction from these activities, more so than from toys that merely entertain. The activities provide children with an opportunity to learn the cultural habits of their society and give them 'grown-up' tasks at a manageable level. It is a wonderful way of validating children. According to Montanaro (1991), when mobility and dexterity develop in such a way that the needs of the growing child are respected, physical and mental activity go hand-in-hand and the young infant starts to see the world as place where needs are met and initiative is rewarded with personal satisfaction. Such an environment fuels a **positive self image** and gives the child confidence and greater self awareness. The Practical Life Activities are aimed at helping the child develop these characteristics and, at the same time, forming a perfect link to help the child's transition from home to being cared for outside the home, albeit an 'Infant Community' or a Montessori 3-6 classroom.

THE PREPARED ENVIRONMENT FOR THE THREE TO SIX YEAR OLD CHILD

During this stage the most sensitive periods are in operation, the majority of which started during the birth to three stage. These sensitive periods occur in six main areas: language; movement; sensorial development; order; acquisition of social customs and behaviour of the culture; and mathematics. An environment of prepared activities designed to foster development in each of these areas is presented in such a way as to stimulate children to spontaneously choose the activities that will enhance their own individual development at any particular time. This environment also takes account of the power of the "absorbent mind".

Movement

The refinement of co-ordinated gross and fine motor movement is particularly fostered by the **Practical Life** area. Young children are urged by nature to develop control of their movements as this is essential to their self-development. The practical life activities offer opportunities to cater for this urge. By mastering co-ordination of bodily movements, in particular the hand, children are able to engage in activities that will further develop their intellectual and social capacities.

Purposeful activities which are drawn from real life and which assist the mind and body to function together in an integrated way can be found in the Practical Life Area of the classroom. Many of these activities are already familiar to the children from their home

environment. They involve pouring, sweeping, polishing, scrubbing, washing, preparing food, ironing, arranging flowers, gardening and taking care of animals. Real objects are used — a real iron, knives, china, glass, brooms, mops, among others.

The intense interest the children have in doing these activities promotes very careful, concentrated, co-ordinated movement where mind and body are working together for a developmental purpose. As children learn how to care for their environment and themselves in a responsible way, self-esteem and independence also develop.

Language
"Language acquired during the period between birth and three years is refined and elaborated during the pre-school years" (Hilson, 1990).

Not only is spoken language refined and extended, but the children are offered the opportunity to expand into written language as well. **Oral** language which developed from birth to three continues to be expanded through songs, stories, poems, games, conversation, pictures and sets of vocabulary cards. The vocabulary cards classify and order familiar aspects of the child's daily experiences and also stimulate interest in and classify the natural world of spiders, whales, plants, fishes, shells, etc. As one of the child's major natural urges or sensitivities is to label and name his/her world, there are enormous opportunities for enlarging oral vocabulary at this stage of development.

A very sensitive period for **writing** can emerge between 3 and 4 years of age. Multi-sensorial activities which indirectly prepare a child for writing utilise visual, auditory and tactile experiences. These include:

- the letters of the alphabet in sandpaper form;
- games to help children hear and analyse the sounds in language;
- moveable letters which enable a child to write using his/her own creative invented spellings; and
- design activities to foster use and control of a pencil.

These writing activities in turn provide indirect preparation for **reading.**

Oral and written language activities are also provided in another area of the classroom which is referred to as the "**cultural** area" represented by geography, botany, zoology, physical sciences, art, music and history. The activities in this area introduce the child to an understanding of the cosmos which is elaborated on in greater detail under the prepared environment for the 6-12 year old children.

Sensorial Exploration
The first six years of life are characterised by a heightened sensory awareness. From an early age, children are developing a sense of **order** and actively seek to sort, arrange and classify their many experiences. In the 3-6 classroom, specifically designed activities give the children concrete experiences in the abstract sensorial dimensions or qualities by which we make sense of the world, such as colour, size, shape, length, weight, sound, pitch, texture. The sensorial activities assist the child in understanding and classifying his/her world and then make the world even more meaningful to the child through the precise language that is then attached to these activities, such as loud/soft, long/short, rough/smooth, large/small, circular, cubic, etc. For example, a set of ten red rods which are identical except for their exact variations in length, through manipulation, give a child concrete experiences of and help him or her to understand and classify the abstract quality of length.

The sensorial materials provide a means for a growth in perception and knowledge that forms the basis for abstraction in thought.

Order
The need for order is vital to a child's development. During the pre-school period, mental structures are in the process of formation and the child needs external order to support this development. Order assists the child to develop an understanding of relationships and to make sense of the world. The prepared environment is structured and ordered with many activities presented in a sequential manner. The steps or movements within each activity are carefully analysed and presented clearly and sequentially so that the child can see each step involved. The order in the environment also proves a security for the child and provides greater opportunities for independence.

Customs and behaviour of the culture
"The major social task of the young child is adaptation to its culture" (Hilson, 1990).

This development occurs mainly during the preschool years. A clearly defined sensitive period for what Montessori called **"Grace and Courtesy"** occurs between the age of 4 and 5 years old. At this time children are particularly interested in the manners and customs of their society and culture. Many activities are provided in the practical life and language areas of the classroom to familiarise children with cultural aspects of the environment, and games are played to give children the skills to interact in a socially positive way with the other people in their classroom and local society. Group and individual social responsibility are developed and supported.

Mathematics
The child's **"mathematical mind"** is nurtured early in the Montessori pre-school environment. The three fundamental mathematical structures of classification, sequence and topology are explored using concrete materials which the child manipulates to come to an understanding of mathematical concepts and relationships by him/herself.

THE PREPARED ENVIRONMENT FOR THE SIX TO TWELVE YEAR OLD CHILD

The child in the second plane of development (age 6-12) differs physically and psychologically from the child of the first plane of development (0-6). The loss of baby teeth is one of the first indications that the child is entering a new stage of development. The child between age 6 and age 12 is physically stronger, the body is longer and leaner and movement is freer and more agile. The child's hair becomes thicker and straighter, losing its baby softness. This child seeks challenges, whereas before he/she sought comfort.

Psychologically, the child in the second plane of development is characterised by three main traits. These are:

- the need to '**go out**', to escape the enclosed environment of school or home;
- the passage to abstract thinking; and
- the birth of moral sense.

The child has a need to make contact with wider society — to 'go out'. The child feels confined by the limited environment of home and school; he needs experience in the real world. It is vital that children of this age group are given opportunities to go out. Montessori says:

> *"A child enclosed within limits however vast remains incapable of realising his full value and will not succeed in adapting himself to the outer world."* **(From Childhood to Adolescence)**

When children go on excursions, they discover that they are responsible and independent in wider society. The children are fully involved in the planning of an outing,, i.e., the budget, timetabling and phone calls to establishments.

Children at this stage of development seek to establish relationships with others. There is a move away from ego-centricity towards exploring group dynamics and interactions with others. Montessori wrote about the **"herd instinct"** of this age. The child is drawn to his/her peers and wishes to belong to a group or gang. Clubs are formed, with leaders, rules and laws. Children are loyal to the group and often the rules imposed on and by the group are much stricter than those that adults would impose. The child is learning how to become a social being in a miniature version of society; it is preparation for the future and for his/her role in adult society. In the primary classroom, the directress encourages group work and new presentations are now given to a group of children.

The child in the second plane of development experiences a sensitive period for the **intellect**. The mind of the 6-12 year old child operates differently from the child between birth and age six as the former has the capacity to learn at a conscious level. The child at this age wants to explore intellectually rather than sensorially. He/she is interested in abstract concepts. Montessori devised materials for this age group which reinforce concepts but do not rely on repetition of the same activity. For example, in mathematics, multiplication can be explored parallel to using the 'large bead frame', 'checkerboard', 'bank game' and 'golden bead frames'. These Montessori materials allow the child to work towards abstraction and reinforce the processes of the operation.

This is a time for sewing the 'seeds of culture' as the child is psychologically ready to think abstractly. The child is interested in exploring the reasons **why** things are, the way they are. Questions asked start with "Why", "How", "When" whereas previously questions started with "What". This older child has a desire to explore cause and effect and to investigate and research all he/she encounters. The primary directress recognises that this child is capable of using his/her imagination to move through time

and space. This is referred to as the power of the "**Reasoning Mind**". Montessori (1976) writes:

> *"The world is acquired psychologically by means of the imagination. Reality is studied in detail, then the whole is imagined".*

The child in the second plane of development is given great lessons and impressionistic charts which appeal to the imagination and spark his/her own research and investigations. Montessori referred to this approach as "**Cosmic Education".** Cosmic Education enables the child to understand the relationship between humanity and the universe. The concept of Cosmic Education is that the universe operates to a predetermined plan where all creation, including humanity, have a part to play. Mario Montessori (1976) writes:

> *"To the older child we must give not the world but the cosmos and a clear vision of how the cosmic energies act in the creation and maintenance of our globe."*

He emphasises that each element of the universe has a job or "cosmic task" to do which contributes to the good of the whole. Humanity represents a new form of life in the cosmos with specific tendencies and needs and the skill to transform the environment. Mario Montessori (1976) stresses that an integral part of cosmic education is to give the child:

> *"...a clear vision of how, through work, the naked and feeble man, he was on his appearance upon the earth, became the supraman who has built our present civilization."*

Cosmic Education allows the children to develop a sense of awe and gratitude for the universe, their role in humanity and the work of people who came before them.

The "**Moral Development**" of the child is a slow process that occurs from birth as the child needs to learn values like any other knowledge. In the second plane of development the child is naturally oriented towards behaviour and the judgements of actions. The child seeks to distinguish what is good from bad and to establish a guide in his mind regarding behaviour. The child wishes to find out about consequences of actions and he/she will judge the actions of others. The child is interested in the adult's opinion; however, it is important that the child finds answers through his own means (not being told by an adult). Conflict resolution and group discussions of problems are the 'grace and courtesy' lessons for this age group. The development of the moral sense is important as it provides a technique to live and adapt as a social being.

MONTESSORI'S IDEAS FOR THE TWELVE TO EIGHTEEN YEAR OLD PERIOD

Montessori recommended a period of time to be spent in the country, away from the environment of the family. While there the adolescent should work in the country, not as an agricultural labourer but on a study of civilization through its origins in agriculture. The sale of produce would bring in the fundamental mechanism of society, production and exchange, on which economic life is based. These two areas of study would provide the adolescent with the opportunity of learning, academically and through actual experience, what are the elements of social life. Montessori suggested the adolescents live in a hostel which they would learn to manage and establish a shop to sell agricultural and village products. In the discussion of the adolescents and their needs, Montessori said it was impossible to give anything but a general plan for their studies and work; that a program could only be developed from experience This concept she called "**Erdkinder"** (German for *land children*).

She outlined ideas for a proposed educational syllabus which she felt should not be restricted by the curricula of existing secondary schools. According to Stephenson (1988), the proposed syllabus was divided into three parts:

- the opening up of ways of expression;
- the fulfillment of those fundamental needs that are formative forces in the development of the soul of man; and
- theoretical knowledge and practical experience to make the individual a part of civilization of the day.

First, she proposed free choice of all kinds of artistic occupations including music, language and art. Some activities would be for individuals, some for groups.

Second, she recommended: moral education for spiritual equilibrium; mathematics (because without education in mathematics it is impossible to understand or take part in the special forms of progress characteristic of our times); language, for help in establishing understanding between people.

Third, general education classified in three groups:

- **t**he study of the earth and living things;
- **t**he study of human progress and the building up of civilization; and
- **t**he study of the history of mankind.

The study of human progress should bring the adolescent to understand that machines have given people on earth powers far greater than are natural for them and, therefore, a new morality, which is both individual and social, must be our chief consideration. The powers of human beings and the greatness of civilization should be presented in a form that will demonstrate the responsibilities towards humanity that individuals incur when they assume powers so much greater than those with which they are naturally endowed.

Unfortunately, Montessori herself did not live long enough to draw up the syllabus in detail, but there is much work being undertaken by Montessorians in the USA and Europe today to develop a model for 'Erdkinder'.

CONCLUSION

Montessori saw education as having an even wider purpose than the development of each child. She saw the child as an agent for change. She felt if education followed the natural development of the child, then society would gradually move to a higher level of cooperation, peace and harmony.

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Honouring The Parent

Dr. Maurice Balson

"If we are to have better children, parents must become better educators."

(Rudolf Dreikurs)

INTRODUCTION

The primacy of the family in the education of children and the essential role of the school in assisting parents in their vital role has long been recognised by Montessorians. Indeed, one of the first parent educators, Maria Montessori, felt it her obligation to educate parents towards a better understanding of their children, even requiring in her inner-city school in Rome, that parents confer weekly with their teachers.

Current Montessorians have continued the tradition of parent education by sponsoring home-study groups and parent meetings at school. Aspects of child development; types of parent-child relationships and their effect on the child; the need for freedom, limit-setting and order in the child's life; the characteristics of a stimulating home environment; the rationale for the learning materials in the child's Montessori classroom; the teacher's role and her expectations and the means of fostering transfer to life outside the classroom — all are typical topics for discussion.

The importance attached to parent education is not surprising given the Montessorian belief in the importance of the early years in terms of future personality development. It is no coincidence that the majority of Montessorian schools are geared to the young child of three to six years old. It is the firm belief of Montessorians that it is during these years that the individual's future, both as student and adult, are determined. "By the age of three, the child has already laid down the foundation of his personality as a human being (Montessori, 1964: 7). This is a belief shared by Adlerians and is reflected in the writing of Dreikurs (1954: 9).

> *"It is impossible to understand any adult without information about the first four to six years of life, which are the formative years. In this period, every person develops concepts about himself and about life which are maintained throughout life, although the person remains completely unaware of the premises he has developed for himself and upon which he acts."*

In today's society, the need for parent education has never been more apparent. Increasing levels of adolescent suicide, drug taking, homelessness, violence, AIDS, crime, and the breakdown in parent-child relationships — all suggest that parents are not prepared to meet their responsibility for raising responsible and co-operative youngsters. Professor Phelan, a professor of paediatrics at the Royal Melbourne Hospital, believes that emotional and behavioural problems in children are now involved in 50 percent of children's illnesses seen by family doctors. Behavioural management has become a major problem.

There is, however, an abundance of parent education available in Australia. Little systematic information is available concerning the bases and nature of the burgeoning parent education programs currently operating. It is clear that most of them have no theoretical orientation or an organised, structured program. If Fine's (1980: 5) definition of parent education as "instruction on how to parent" is accepted, then the majority of programs do not meet his criteria of being systematic and theoretically based.

Despite the ample provision of parent education programs, the number of parents reporting difficulties in the management of their children is increasing. This is not surprising given that the majority of individuals offering parenting programs have no professional training or experience and that many of the programs, rather than assisting parents, have the effect of de-skilling parents. One example is the "Parentline" recently established in Victoria. By endorsing the values of control, compliance, rewards and punishment, the use of star charts and the like, the program endorses strategies which are totally contrary to the development of responsible children, are disrespectful and do nothing to improve parent-child relationships.

Parents who receive and implement the TIP sheets sent to them by Parentline will need to arm themselves with an ample supply of butcher

paper to prepare the job roster sheets, the swearing behaviour chart, the lying behaviour chart, the time out record book, the sleep diary, the homework behaviour chart, the bedwetting behaviour chart, and other behaviour charts which are recommended. These will require an ample supply of stars, stickers, stamps and points which will be traded for money, food, TV watching, staying up late or video hire. Space in the kitchen will be at premium as the charts have to be visible. Space in the house will also be at a premium as time out requires a room which is "uninteresting, yet safe, with good lighting and ventilation". Quiet time used "when your child does not do as you have asked", also needs space, cots and playpens when appropriate. Timers are needed at meal time to signal a meal is over. Parents who take their children shopping will require self-inking stamps, stickers, stars or dots to place on their children's hands for every aisle passed if rules are followed. Do we have such little respect for children or for their parents that we have to burden them with these ridiculous and antiquated strategies which, while appropriate in the past, have no relevance in a democratic society which wishes to establish relationships between people based on social equality, mutual respect, self discipline and shared responsibility? That State governments would spend millions of dollars on such programs is beyond comprehension. Far from honouring parents, they debase both parents and children.

What then do we offer parents to assist them in their vital role? Why do we need to offer any parent education at all? Our own parents never attended courses on parenting nor did they read books on the topic. They knew what to do. They simply followed the practices of their own parents. As long as society remained stable, parenting was not seen as a difficult task.

The autocratic society which has characterised Australia for many years endorsed the superiority of parents over their children and permitted them to make all decisions about how children should behave. Rewards and punishments were the control techniques used by parents. "Because you have done what I wanted, I will reward you." "Because you have not done what I wanted, I will punish you." Co-operative children simply did what their parents asked. Generation after generation followed the same practices and the autocratic model served our parents well — as it did the teachers, the whites, the males and the managers.

CHANGED PATTERNS OF PARENT-CHILD RELATIONSHIPS

In our own time, we have seen the collapse of the autocratic social system and the acceptance of a democratic approach to human relationships. The changes came quickly and their results were devastating for all branches of society. This is the first generation of parents which has no tradition for raising its children. With their traditional techniques of raising children rendered ineffective by these vast social upheavals, parents face the dilemma of not knowing what to do with their children and of having little available help which is attuned to the new democratic society in which we live.

How parents relate to their children depends on the values which parents hold. The democratic society to which we belong, endorses the following values which underpin our relationships with each other.

(1) SELF DISCIPLINE

Traditionally, parents have taught children to be responsible through the use of rewards and punishments. Parents decided which behaviours they would reward and which behaviours they would punish. As a result, children learned that the parents were responsible for their behaviour. As parents were relatively powerful figures, they exercised considerable control over their children. However, when parents were not present, children behaved badly because they had not internalised self discipline. Witness the current levels of behavioural problems in adolescents — drug taking, crime, alcohol abuse, violence and reckless driving. They are behaving irresponsibly because they have not been taught to be responsible.

Parents want their children to behave well, not because of threats of punishment or promise of rewards, but because children choose to behave well. That is, children choose to be responsible not because of pressure from above but because they are stimulated from within to do so. The only way in which this can be achieved is to offer choices, apart from dangerous situations, and ensure that consequences follow the choice.

Self discipline has been consistently endorsed by Montessorians, who believe that external rewards and punishment have no place in learning and that "an inner change in behaviour cannot be accomplished by pressure from without" (Fleege, 1979: 181) and that children

need to experience freedom and inner control at all stages of their development.

(2) SOCIAL EQUALITY

Consider the concept of 'social equality' which has become a dominant value in our society. What does it mean to say that women have obtained a position of social equality with men, students with their teachers, or children with their parents? It means simply the right of self-determination, to decide one's own values, behaviours, and future. There is no suggestion that children are as wise, experienced, strong, or knowledgeable as their parents; yet they do have the right to self-determination. Why is it no longer acceptable for males to tell females how to behave? Because they do not have the responsibility to do so. Similarly, teachers should no longer prescribe student behaviour because they also do not have that responsibility. Parents are now learning that they are in a similar position. It is important to realise that the only person for whom one is totally responsible is oneself. While parents have a responsibility and an obligation to provide guidance and leadership for their children, they do not have the right to impose their beliefs and values on children. To do so, violates the concept of respect, a crucial value in democratic society.

As a general principle, all misbehaviour is a compensation for inferiority. When parents place their children in a position of inferiority through pampering, coercion, perfectionism or rejection, they must expect an uncooperative response from a child. When parents accept responsibility for their own behaviour, permit children to make choices and to experience the consequences, family relationships improve dramatically.

(3) CO-OPERATION

When parents are asked to compare the personalities of their first two children, the majority report that there are considerable differences. This reflects a competitive family. In a competitive family the differences between the children are striking. Such is the effect of competition that in a competitive family, given a description of just one child, the author can describe the behaviour of the others with 80-85 per cent accuracy. In a co-operative family the author's success rate is negligible.

One rarely finds a difficult child who does not come out of a competitive family. The author recently met a family which comprised mother, father and three adolescents: June 14 years, Terry 13 years and Val 12 years. June was remarkably successful at school and with friends while Val was a brilliant athlete and particularly helpful at home. The father was ambitious and wanted his son to be successful academically. Terry was stubborn at home, refused to co-operate, had no friends and was failing badly at school. What was his problem? He lived in a highly competitive family and judged himself to be the loser. He could not do as well as his sisters or as well as his father wanted him to do. But he certainty made his presence felt.

To help the family, it was necessary to change the father's attitude and to change June's behaviour. Instead of gloating over her academic success, she offered to help Terry with his homework one night each week while father backed off his unrealistic demands. In some three or four weeks, Terry began to change. He is now doing well at school, has friends and is a pleasant person at home – all because the family had become co-operative. The greatest myth in this world is the myth of competition; it destroys many children and leads to much unhappiness. In a competitive society man becomes man's enemy. There is hardly any rivalry possible without competition.

(4) SHARED RESPONSIBILITY

Given a difficult child in the family, whose responsibility is it to correct the child? Most parents would agree that it was their responsibility, particularly the mother, and that the other two or three children in the family are not involved. This is a mistake.

It is important to recognise that the most important influence on a child is not mother, not father, but the family. As adult domination diminished, the influence of the family became more important. A family does not consist of five individuals but one group of five. Problems become 'our problems', solutions are found within the family, decisions are made by the family, and 'we', 'us', 'ours' replace the 'me and you' approach. In many cases, it is necessary to change the behaviour of a parent or another sibling before a troublesome child can be assisted. Refuse to examine a socially isolated human being.

When children are asked the question, "Whose job is it to run your family?" they usually say "Mum's". This indicates that they see themselves as having no responsibility for contributing to the family. The reason children do not pick up their toys, go to bed or tidy up their rooms is that they do not see that it *is*

their responsibility. "It's Mum's job to make me pick up toys. I have no responsibility." The tragedy is that children have won their freedom, but they are without responsibility because they are not required to be responsible. Very few children are expected to make a daily contribution to the running of the family and many of their responsibilities are assumed by parents. As a result, we are raising a generation of irresponsible children.

(5) MUTUAL RESPECT

It is not sufficient for parents to love their children but they must also respect them. Respect implies the right of the child to make decisions. Autocratic parents love their children but they do not respect them because they do not allow them to make decisions. "You will get up when I tell you. You will eat what I serve you. You will go to bed when I say so." No choice is offered to the child.

Permissive parents also love their children but they do not respect them. While they permit their children to make choices, they do not follow through with any consequence. They allow children to watch unlimited TV, come home whenever they wish, take whatever money they need and go to bed when they feel like it.

It is interesting to note that parents who pamper their children, dominate their children or set impossibly high standards always do so in the name of love. For example, the pampering parent believes that: "I love the child so much that I want her life to be a paradise". The perfectionist parents believe that: "I love the child so much that I want him to amount to something important". In both instances, the child will perceive the parent as acting disrespectfully, placing the child in a position of inferiority, and will respond in kind.

As all problems between parents and children are symptoms of faulty relationships, the challenge parents face is to relate to children in ways which respect them, which treats them as social equals, which promote self discipline, co-operation and in which they are prepared to share responsibility. This as opposed to traditional autocratic relationships based on values such as competition, external control, lack of respect, sole responsibility, social inequality and reward and punishment.

THE NEED TO UNDERSTAND CHILDREN

Whereas parents of previous generations had little need to understand children, today's parents need a framework of human behaviour which will help them in their parenting role. Autocratic parents simply told their children what to do and were powerful enough to ensure compliance. Children today are not so easily controlled and are aware that adult domination has diminished. Montessori recognised the need to understand children when she wrote, "In order to educate, it is essential to know those who are to be educated." (Montessori, 1913)

The personality theory reflected in this paper is referred to as “Individual” or “Adlerian Psychology”. It is a view of people which recognises them as active decision makers, as purposeful and goal-oriented individuals, cognitive, creative, holistic, relatively free to determine their own behaviour, understood only within their social environment, and unified and consistent in all of their behaviour. It is a framework which has much in common with the teachings of Maria Montessori.

Fleege (1979: 179) observes that, "Most Montessorians feel comfortable with the ideas of Alfred Adler." Space precludes a full description of the principles which parents can use to understand their children. Readers are referred to Balson, M. (1993, 1994) for a fuller discussion. Some of these principles are:

(1) BELONGING IS THE BASIC MOTIVATION

- Children are social beings who need to 'belong', to find a place in the group.
- All behaviour problems are social problems reflecting faulty relationships between people.
- There is no hereditary or biological basis of behaviour. Faulty behaviour represents faulty decisions. The psychology of "use" is more useful than the psychology of "possession”.
- Corrective strategies should aim at modifying motivation rather than modifying behaviour.
- Refuse to examine the socially isolated human being. The child must be viewed in the context of the family.
- A child's ability to co-operate and to contribute is a measure of mental health.

Readers will see that the emphasis on the social nature of children is supported by Montessorians who believe that: "Man is a social being

by nature and consequently requires a social environment in which to learn and develop." (Fleege, 1979: 164)

(2) INDIVIDUALS ARE CREATIVE AND SELF DETERMINING

- Individuals 'make' themselves by the way in which they interpret experiences.
- People decide what they will do rather than being a victim of forces.
- Heredity and environment are not the cause of behaviour because they are interpreted differently by each individual.
- There is no person who cannot improve the quality of life simply by making better choices.
- Individuals have the power to move in any self-determined direction.
- The most important influence on children's lifestyle in the family constellation is the child's interpretation of birth order. Each child has a special position within the family and this plays a significant part in the growth of his personality.
- It is not what happens to us which is important, but how we feel and react to it.

Again, the emphasis on self-determination is a strong belief of Montessorians, who see individuals as initiators of actions, active beings, not passive S-R mechanisms. "Man's behaviour is not so much dependent upon what happens to him but rather upon how he interprets the stimuli and the consequent meanings and feelings thereby generated within." (Fleege, 1979: 165) Creativity is also recognised by Montessorians, who believe that every child is born with the potentiality of being creative and that education aims to encourage creativity in every child.

(3) INDIVIDUALS SHOULD BE VIEWED HOLISTICALLY

- Children are indivisible and are more than the sum of their parts.
- It is impossible to understand isolated acts of behaviour.
- Children can be understood when the pattern of their behaviour is determined.

As opposed to reductionism (the approach adopted by behavioural modifiers) or to dualism (as advocated by the Descartian view), Montessorians support holistic psychology and believe that the "psychosomatic unity of man must be recognised to understand effective learning. Man is body and mind functioning as a unity." (Fleege, 1979: 164)

(4) ALL BEHAVIOUR IS PURPOSEFUL

- Behaviour consists of 'pulls from the future', not 'pushes from the past'.
- Behaviour is not caused but is purposeful. The force behind every human action is its goal.
- Ask not, "whence?" but "whither?".
- When a child refuses to behave appropriately, don't ask the question, "why?" but "for what purpose?".
- Goal striving is the essence of personality.
- Inappropriate behaviour results from faulty decisions rather than from causes such as faulty emotions, single parent family or poor housing.
- People only do what they decide.

EVERY MISBEHAVING PERSON IS A DISCOURAGED PERSON

- There are no bad children, only discouraged children.
- All misbehaviour in children is due to a loss of self-confidence.
- Human failures are the consequences of feelings of inferiority, rather than being the cause of such feelings.
- Inferiority feelings are faulty evaluations and stimulate children to overcompensate through misbehaviour.
- Parent-child relationships which tend to be discouraging in the effects which they have on children are overprotection, overindulgence, rejection, authoritarianism, excessive standards, pitying, inconsistent discipline, hopelessness, disparagement, denial of feelings and competition.
- Striving for superiority is a mistaken idea about having a place and status.

PROMOTING RESPONSIBLE, INDEPENDENT AND CO-OPERATIVE CHILDREN

Three major strategies are suggested for parents who wish to develop cooperative, independent and responsible youngsters. These strategies are consistent with the patterns of relationships between parents and children discussed earlier and, with the view of children as social beings, self-determining, holistic, purposeful, creative and cognitive.

(1) ENCOURAGEMENT

The most important principle which a parent should learn is this:
"Every misbehaving child is a discouraged child."

Behind all forms of inadequate and disturbing behaviour are discouraged children who feel that, as they are now, they are not much good. To be a child means that you are smaller, weaker, less able, slower, and more inexperienced than parents, older children and some siblings. Yet many parents refuse to accept children's current levels of performance and constantly dwell on their imperfections and shortcomings. While all children are capable of improving, our focus on their deficiencies is disastrous and has the effect of providing further discouragement which hinders subsequent improvement.

Many children give up in despair because they feel that they cannot be as good as their parents want them to be or as good as other children. They lose faith in their ability to cope with the demands of the various situations, such as schooling, friendships and home, and turn to disturbing behaviour in their attempt to salvage some semblance of respect and self-esteem. We all have the power to make some changes in our own behaviour. Each of us can do something about our lives to make them better, to become more effective, to change ourselves. Why don't we? We are discouraged. To help children believe in themselves is the basic task of the parent and the teacher.

The basic motivation behind all behaviour is the wish to belong, to feel accepted, to be able to play a constructive role in the group. Only when children feel that they belong to the family, and that they are useful and important members of it, can they function adequately, contribute, and cooperate. All initial behaviour of young children is viewed as their attempt to find their place within the family through constructive activity. They try to feed themselves, to dress themselves, to amuse themselves and attempt many other tasks which children must learn. If these initial attempts meet with encouragement from parents, children develop the courage and confidence to continue learning and to tackle the more difficult tasks ahead. However, if these initial behaviours of children, imperfect as they must be, meet with frequent criticisms by parents for reasons such as 'too slow', 'too messy', 'not good enough', children begin to lose confidence in their ability to learn the tasks expected of them and turn to various forms of misbehaviour because they believe that they cannot belong through constructive activity.

Many individuals hide their sense of inferiority behind exaggerated superiority. Arrogance, boasting, nagging, deprecating others, intense emotions, not listening, conversation about oneself, exaggerated demands on self or others, vanity and unusual dress — these are all signs of inferiority.

It is important that parents view children's misbehaviour as a product of discouragement rather than as the behaviour of a naughty child, an aggressive child, a lazy child, a spoilt child, or a stupid child. The purposeful nature of these latter behaviours is clear, but their need arises from a series of discouraging experiences which destroy children's basic belief and confidence in their own abilities. Children are not psychologically sick but are discouraged. Montessori was correct when she wrote (I964: 22): "I differed from my colleagues in that I instinctively felt that mental deficiency was more of an educational than a medical problem." By identifying and removing the sources of a child's discouragement, we can begin to stimulate a child into more socially acceptable and personally satisfying forms of behaviour.

Encouragement in the school system is paramount. So central **is** it that Adler (1930: 84) wrote:

> *"An educator's most important task, one might almost say his holy duty, is to see that no child is discouraged at school, and that a child who enters school already discouraged regains his self-confidence through his school and his teacher."*

Basic to both the Montessori and Adlerian systems is the conviction that every child is born with the desire to learn and that it is necessary to provide an encouraging learning environment which is free from obstacles such as reward, punishment and competition which destroy intrinsic motivation.

(a) What are the sources of discouragement?
- mistake-centred approaches;
- conditional acceptance;
- sibling competition; and
- methods of training – spoiling, overprotection, pampering, rejection, perfectionism, inconsistent parenting.

(b) How to encourage children?
- build on assets and strengths;
- minimise mistakes and deficiencies;
- acknowledge effort and improvement;
- emphasise the activity not the result; and
- separate the deed from the doer.

Essentially, encouragement involves the ability to accept children as worthwhile, regardless of any deficiency, and to assist them in developing their capacity and potentialities (Dreikurs and Grey, 1968). Specifically, the person who encourages will:

1 Accept and have faith in individuals (as they are, not their potential);

2. Expect them to handle their tasks and show this by your actions;

3 When confronted with misbehaviour, separate the deed from the doer;

4. Confirm the fact that mistakes, defeat, or failures are common to life and not catastrophic;

5. Emphasise the joy of doing and the satisfaction in accomplishment rather than evaluation of how one is doing;

6. Recognise progress and provide ample encouragement for genuine effort;

7. Show confidence in the child's ability to be competent and avoid comparisons with others;

8. Allow for differences such as rate of learning, patience, neatness or interest;

9. Never **give** up on the child, no matter how persistently he/she tries to defeat the encouragement process; and

10. Avoid praise, which is the enemy of children. (Dreikurs: 1968)

(2) DEVELOPING RESPONSIBILITY

Parents have traditionally rewarded children for appropriate behaviour and punished them for inappropriate behaviour. Such techniques were appropriate in an autocratic family but have no place in a home characterised by self discipline, mutual respect and social equality. The only way for a parent to develop responsibility in children and yet maintain good relations is through the use of natural and logical consequences. This is the basis of self discipline.

The most powerful technique which is available to parents to stimulate responsible behaviour is the use of choice and consequences. The basis of this approach is that all behaviour is shaped and maintained by its consequences and that individuals will not continue to behave in ways which distress only themselves. Why is it that children learn to respect a hot stove, a sharp knife, a slippery rock, a snarling dog, or a bicycle that tilts too far to the side? It is because they always experience the consequence of their behaviour — they are burnt, cut, bitten, or hurt. Who brings these consequences about? Children do by behaving inappropriately. As a result, they quickly learn more skilful means of coping with these situation; this is learning which has required no parental interference and no use of external rewards or punishments.

There are two types of behavioural consequences: natural and logical.

(A) Natural Behavioural Consequences

These consequences are a product of the natural environment and do not require the intervention of another person. For instance, a child who refuses to eat becomes hungry; a child who leaves off a warm jacket in winter becomes cold; a child who puts shoes on the wrong feet will have toes pinched; a child who stays up late at night will be tired the next day.

(B) Logical Behavioural Consequences

These consequences result from activities within the social rather than the natural environment and require the intervention of another person, usually an adult. A child who gets up late in the morning will experience the consequence of lateness at school; a lunch box left home remains at home; a cricket bat left outside and stolen is not replaced; library books not returned deny the borrower the right to use the library; a child who slaps a baby sister is not allowed to play in her sister's room; a child who does not practise is not selected in the team; while children who come in late for meals miss out. In all cases, the consequence must logically relate to the behaviour. Parentline gives the following example of a logical consequence. "Warren, you have not washed the dishes. You will go to bed 15 minutes early tonight." Logical? Respectful? Designed to win co-operation?

Many parents find it difficult to differentiate between punishment and behavioural consequences. Here are several important differences:

PUNISHMENT	BEHAVIOURAL CONSEQUENCES
1. Parents responsible for the child's behaviour	1. Children are responsible for their own behaviour.
2. Parents decide what a child will do.	2. Children decide their own course of action.
3. Expresses the power of the parents.	3. Express the reality of the natural or social order.
4. Involves no element of choice for the child.	4. Provide children with choices.
5. Unrelated to the particular behaviour.	5. Logically related to the behaviour.
6. Is always personalised and implies a moral judgment.	6. Impersonal and involve no moral judgment.
7. Concerned with the past and is retaliatory.	7. Concerned with the present or future and are non-retaliatory.

Consider the application of behavioural consequences to a typical eating problem.

June is a poor eater and has to be reminded, coaxed, and cajoled into eating despite the fact that mother frequently cooks June's favourite foods and has a special dessert for her at the end of dinner as a reward. Mother should use natural behavioural consequences. Food is presented and no comment is made about June's eating. Those who finish their first course receive 'seconds'. June, who is not eating her first course, is presumed to be 'not hungry' and receives no second. At the end of the meal, all dishes are removed. Nothing has been said to June about her poor appetite. The consequence is that June will become hungry. When she complains to mother about her hunger, mother might say, “I am sorry that you are hungry, but you know what to do about it.” Natural consequences will soon ensure that the eating problem is overcome.

I have always been impressed with the Montessorians view of the relationship between freedom and order. Discipline and freedom go hand-in-hand in a Montessori school and at all stages children develop inner discipline and grow in assuming responsibility inherent in the wise use of freedom. Freedom without order is permissiveness. Order without freedom is external control. Freedom with order promotes inner discipline. It is only through the use of choices and consequences, through freedom and order, that children can be taught responsibility.

(3) FAMILY MEETING

With the development of democratic patterns, the authority of the adult has weakened and has been replaced by the authority of the group. There is no one person who knows what is right for another or who has the right to enforce compliance. Parents should see that their role now is that of a leader rather than that of a 'boss', a role which will require them to emphasise stimulation from within, rather than pressure from without, in their relationship with children.

The success of parents depends largely on their ability to integrate or unite the respective members of their families. At present, many families are characterised by competition and lack of unity. Parents still feel that they are personally responsible for controlling the behaviour of all children in the family. They deal with each child individually, rewarding and punishing as the occasion arises. They fail to see that the behaviour of each child is influenced by the behaviour of the others and that any corrective effort will fail unless it involves all members of the family. It is not one or two parents who are responsible for three children but one group of four or five which is responsible for all members within the group. The family is much more powerful in influencing behaviour than are parents. Therefore, it becomes necessary for parents to learn to use the family to help with the behaviours of children. It is never mother's problem, father's problem, Sally’s problem, or John's problem; it is always our problem, an approach which accepts shared responsibility rather than sole responsibility.

The most effective means for parents to attain a cohesive family, one in which members feel, "This is my family" and are willing to take

responsibility in it, is the use of a family council. The family council is a name for a family discussion group which meets regularly to discuss issues which are of concern to the family. The type of issue raised may concern the rules for living together such as: bedtime, household chores, family outings, television viewing, meal times, pocket money, family purchases, and general routine matters. The essential point is this: Children need rules, but they want a voice in making them.

Apart from establishing routines, the other important area which is raised at family council concerns the individual problems of members. All members of the family have the right to raise a problem which they see involving the family. Mother raised this problem: "I am annoyed by the continual fighting over television watching. Every night seems to be the same as Bill and Jenny squabble over who is to select each new program. What can we do about it?" After some discussion, it was agreed that the children will alternate, with Jenny selecting the pre-dinner programs on Monday, Bill on Tuesday, and so on. If the procedure did not work out satisfactorily, it would be raised again at the next family council.

The family meeting gives children an experience in the democratic way of life and provides valuable experiences in learning to make decisions, to take responsibility, and to become aware of the feelings and concerns of others. It is a remarkably uniting experience and brings members of the family closer together as they share the responsibilities of their home and their family.

CONCLUSION

How then do educators honour parents?

(1) They recognise, affirm and support the primacy of families for the education of their children.

(2) They assist parents to develop an understanding of their children and to acquire strategies for promoting responsible, co-operative and independent youngsters.

(3) They provide children of parents with a school environment which models patterns of teacher-child relationships appropriate for a democratic society, and they assist in the development of independent and normalized children who are prepared to co-operate and contribute to their environment.

To honour parents as suggested above, I find the model and methods developed by Montessorians to be ideally suited. We are all greatly indebted to Maria Montessori for her original formulations and for those who followed her and have worked to make the Montessori method a dynamic, evolving process of growth, change and expansion which now functions among so many diverse personalities and organisations throughout the world.

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Mario Montessori
1898 – 1998

Mario M. Montessori was born in Rome, on March 31, 1898. He was the son of Maria Montessori. He was also her friend, defender and champion, her constant companion and the mainstay of her work.

The Montessori ethos does not admit icons, although the tendency to create them has had to be vigorously fought down like a persistently recurring demon since the inception of the Montessori Movement. Having said this, and in spite of it, throughout the coming year AMI will celebrate the centenary of Mario Montessori's birth with quiet festivity and in the understated manner which best suits his personality. He was a man of extraordinary physical, intellectual and spiritual strength, totally dedicated to Maria Montessori's work.

There was a leitmotif of tragedy to Mario Montessori's life which eschews sentimentality and it is not our intention to sweetly meander down memory lane. The people who lived and worked with him are becoming more and more scarce. A virtual shrine in his remembrance would be out of context and an irritant to those who did not know him.

Why then are we celebrating the 100th anniversary of his birth?

For three reasons. The first, because, as the ultimate Montessorian he was, he created a most Montessori construct – the Prepared Environment, tangible and intangible, within which Maria Montessori could best fulfil her potential. This eventually metamorphosed to become AMI.

Secondly, in acknowledgement of the invaluable contribution he made in the development of Montessori materials and methodology, in uninterrupted dialogue with Maria Montessori; and thirdly, and this as a call to action to present and to future generations of Montessorians, in recognition of his preoccupation with carrying forth the Montessori Movement in all its dimensions.

Above and beyond these reasons there is yet another. We tend to forget that life is a joyful affair and must be lived festively. No better example exists of a life festively lived in spite of global and personal vicissitudes than that of Mario Montessori.

AMI celebrates. Do join us.

Renilde Montessori

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Portrait of Mario M. Montessori

Mario Montessori – a simple man, an innocent man. An extremely generous man, a shy man, an exuberant man. A contemplative man, but an active man! A controversial and complex man. A man who loved life passionately and remained young till the day he died.

He loved the earth: what was hidden in it; what lived and grew on it. He loved the sky, the sun, the clouds, the moon and the stars. he loved the wind, the storms and the sea. He loved to fight the elements. He loved to ride, to row and to swim. Always impeccably groomed, he liked good clothes, and as a young man sported spats and hats and fancy waistcoats. He loved giving extravagant presents – never one rose but at least sixty! He loved food; he loved to cook; he loved to drink and smoke. He loved pretty girls, music and song: there was nothing ascetic about him, though he chose to live an ascetic life.

He was a born teacher. He loved children and especially tiny babies whom he called the miracle makers, and with whom he held long conversations, which the newborns, staring at his lips, followed with fascination.

But all his many loves were nothing compared to his love for his mother and her work. An all encompassing love which dominated his whole existence. His dedication to her was a conscious and free choice, not a result of mother/son attachment. After all, he was almost 15 years old when he first knew and lived with her – too late in life to grow a subconscious Oedipus complex. She has no place in his absorbent mind period. There could be no question on either side of being unable to sever the umbilical cord. He lived for her, with her, but not through her. The amazing thing about this man with no real scholastic or academic background was the clarity of his total understanding of the working of her mind. His intuitive intelligence and openness of spirit allowed him to keep abreast with her quantum leaps from the first to the nth dimension – even sometime arriving just ahead, thus enabling her to soar even further. Nothing she deduced, developed or stated ever surprised him. Thanks to him, she never suffered the isolation common to genius, never became static. But he was not just a very bright sounding board for her ideas; he helped her to clarify them and give them shape, enabling her to continue developing her unique mind to the end. As she grew older, he took more and more of her workload on himself organising the courses, examining students, lecturing on material, practical life, etc. He coped with all the details and unexpected complications during training courses. By protecting her from all the practical details, he enabled Maria Montessori to concentrate fully on her creative work. He presented her with new ideas not only reactions. As the years advanced, their complicity became total. Without him she would have grown frustrated by the lack of understanding, retreating into her spiritual isolation, unable to cope and fight alone to preserve the purity of her work. By his understanding, his enthusiasm and belief in the significance of her cosmic vision for the development of mankind, he became a pillar of her work. He continued her fight after she died. Against all odds, all struggles for power, all intrigues, he continued the fight for the child – the child, father of man.

Mario Montessori, my father, was an extraordinary man.

Marilena Henny Montessori

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Extracts from Maria Montessori's Last Will and Testament

(Translated from the Italian by Baiba Krumins)

"...I declare that it is my wish that Mario Montessori be the general executor of this my Will.

...With regard to my property, I declare that this belongs both materially and spiritually, to my son:

that is, to him belong by right not only the material goods of every kind or sort that I may eventually possess at any time of my life until the end; but to him belongs by right also, everything that may accrue from my social and intellectual works, either because they were inspired by him or because, from the time that he was able to act in the world, they were undertaken with his actual and constant collaboration, since he totally dedicated his life to helping me and my work.

Therefore he is the sole heir to my work, and the only one qualified to be entrusted with the safekeeping and preservation of my work; and thus the legitimate and rightful successor to the work that I have embarked upon and that I hope he may continue and successfully complete, for the benefit of that humanity that together we have loved, finding in our shared ideals and actions the highest solace of our lives.

So be it: and may his children bring him consolation; and may the world render him justice, according to his merits, which I know to be great and sublime.

Revoking all preceding Wills, I declare this to be my last and only valid Will.
I sign with my name.
Maria Montessori

And so may friends and all those who benefit from my work, feel their debt toward my son!..."

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White Australia Has A Black History: Understanding Where Aboriginal Kids Come From

Charles Davison

I'm very pleased to be invited to speak at this conference. First of all, in the important tradition revived by the Council for Aboriginal Reconciliation, I acknowledge the Eora people who belonged to and cared for this land for thousands of years and then were among the first to suffer the often fatal impact of the British invasion.

I speak as President of the NSW Aboriginal Education Consultative Group Incorporated. The AECG is a community-based, incorporated organisation of volunteers in local and regional AECG's across the state. The AECG is recognised as principal adviser to the NSW Minister for Education and Training on Aboriginal education and training in NSW. Over 21 years we have developed partnership with government schools and TAFE (now the Department of Education and Training) and all sectors of education and training. We also advise educational publishers, students at all levels and the general public about Aboriginal education.

Obviously our main priority is the appropriate education of Aboriginal people. In that sense Aboriginal education and the AECG are about changing the system to get a fair go for Aboriginal people. But Aboriginal education must be, also and essentially, educating all students, and all Australians, about Aboriginal Australia — our history and our cultures; our way of seeing; our issues now and where they come from. In this sense Aboriginal education is telling the truth about this country. This is why, when the AECG rewrote the Aboriginal Education Policy with the Education Department, we made sure that the policy is for **all students, all staff, all schools.**

The AECG is totally committed to reconciliation based on justice. We say you can't have reconciliation without justice. We see education as absolutely fundamental to reconciliation. This is why it is our policy that Aboriginal Studies must be mandatory for all students in Years 7-10. As I speak we are negotiating mandatory Aboriginal perspectives in K-6 HSIE, which we regard as critical because this is where children learn about their society and the world.

Reconciliation has a lot to do with history and history with reconciliation. It is about acknowledgement of what has happened. It is not about guilt, but it has to be about shame. If Australians can be proud of Phar Lap and Don Bradman, then Australians can be ashamed of Myall Creek and the calculated inhumanity of so many government policies this century, especially taking the children away and breaking up Aboriginal families. Because, as the "Bringing Them Home" video says, "We are family people."

History is incredibly important. You need to understand that, in the words of the 1988 NAIDOC slogan and posters ever since, "White Australia Has A Black History". History in this country is not something abstract that happened somewhere else. In this country history is what has happened to Aboriginal people.

MY STORY

If I tell you my story, it may help give you some idea where a lot of Aboriginal people are coming from. My father was born in Uralla, Anaiwan country; my mother was born in Manilla and grew up in Guyra in Gamilaroi country. I was born at the old Crown Street Women's Hospital and spent my childhood at La Perouse in Eora country; then went to school at Liverpool in Gandangara country. I mention these countries because it is important for other Australians to realise that there is another map of Australia. Another word you need to learn is Koori, the name us blackfellas in most of NSW use to refer to ourselves.

I left Lurnea High School in 1970 in Year 8. Like most Aboriginal people of my generation, and still too many Aboriginal students now, I was an early school leaver. One of the key issues of reconciliation is understanding the level of Aboriginal disadvantage. And one of the main areas of this disadvantage has been education. Everyone knows how important education is to life chances. But think about

these facts in terms of life chances: in 1970 there were just 3 Aboriginal HSC students in this state; until 1972 school principals had the power to exclude any Aboriginal student; in 1980 the Aboriginal retention rate — that means the number of Koori kids who started Year 7 and finished Year 12 — was 6.4 out of every hundred. Aboriginal retention (and life chances) have improved in the years since, but are still much less than half the national average.

After this abbreviated schooling I worked for some years in a range of jobs in Sydney and the north coast, then settled in Taree in 1975 and worked for ten years with Manning Base Hospital: two years as gardener's assistant, three years as storeman, then five years as boiler attendant. On the way I got my first qualification, a Boiler Attendant's Certificate. The job was 24-hour shift work, and in the long slow times I faced the prospect of spending the rest of my life watching gauges. So I decided to use that time and gained entry as a mature age student in the Associate Diploma of Aboriginal Studies at the University of South Australia, studying by correspondence. About two years into this course, I gained the opportunity — and the confidence — to leave the hospital and work for my community, with Aboriginal youth. And looking back I suppose what gave me that confidence was being able to succeed at university level in that course.

So in 1988 I started as Adolescent and Parent Support Worker with the Biripi Aboriginal Medical Service (Biripi is the name of the people and country of Taree) working with Aboriginal youth in Taree who were considered 'at risk' and 'in need of care,' especially the streetkids. And I bet you didn't know there were street kids in Taree. I enrolled in the Associate Diploma of Social Welfare at the University of Western Sydney Macarthur campus. Now we hear a fair bit these days about special programs for Aboriginal people. But what enabled me to finally complete my diploma in 1993 was the Aboriginal Rural Education Program. AREP was a block release program which brought me to Sydney for two-week blocks of intensive face-to-face lectures then back to my community to work on assignments. With my family commitments (four kids to feed), my work in Taree, and the responsibilities I had in the community, there was no other way I could have gained that qualification. But for that special program, I would not be talking to you today.

In my work with Aboriginal youth, I realised that the key to real solutions to these issues is education. So I got involved in education and joined the AECG, and later was employed by the Department of School Education as Aboriginal Community Liaison Officer. Then in February this year I was elected president of the AECG. And here I am.

A PERSONAL VIEW

Let me tell you something of my experience as an Aboriginal person living for over twenty years in a NSW country town, experiencing and witnessing racism at the grass-roots level. I spent a lot of time as advocate for young people in Taree, and was involved in many discussions, meetings and forums to resolve issues or argue the effects of racism in the community. I have seen Aboriginal children and adults stand at shop counters and not get served. Friends and relatives of mine have rung the real estate to apply for housing in town, only to arrive and find that the home they had inquired about was said to be already taken, or not available for some unbelievable reason. There have been countless incidents of racism in schools, on the sporting fields, in the pubs and clubs, down the main street of town, in the print, radio and television media and in the community in general. The unfortunate thing is that many people choose to ignore racism or are so used to what is the normal way that they just don't recognise it as racism.

Non-Aboriginal friends have told me what they hear from people, some professional, some in positions that are supposed to provide support for people from low socio-economic backgrounds, which by definition tends to include most Aboriginal people. I've heard of comments like, "If you ignore them long enough, they'll leave the shop," from shop owners or their staff. I know about unwritten policies not to employ Aboriginal people "because they are bad for business" — reinforcing the institutional racism that still exists today, particularly in so many country towns like Taree. Over the 22 years I lived in Taree, I could count on one hand the number of Aboriginal people who have served behind the counter of any business in Taree. As I once said on Radio National, "Racism is alive and well in Taree." As it is in many country towns — and in the cities.

One other example. I'll never forget the farewell when I left Manning Base Hospital: all the usual positive comments, best wishes for the

new job, etc. But what sticks in my mind is what a co-worker said to a friend of mine — the sort of remark that is not at all unusual in country towns: "There goes another black activist!" Obviously that remark hurt, but I guess little did that person know how true his words were. Because that is what I was and what I am and it's why I'm here today. People might also care to think about why there are so many so-called black activists — because jumping up and down so often seems to be the only way to change things. Some of the things I challenged over the years were the 98% Aboriginal unemployment rate in Taree, Aboriginal kids being barred from supermarkets because, "We've had trouble with your lot"; developing Aboriginal Studies resources for all students; challenging racism in education, and working on strategies to stop child abuse.

CHANGING SYSTEMS

Why we are about changing the system in Aboriginal education is because the system never included us in the past. And the same has applied to all other systems in this country over the last 200 odd years. Australian systems have been based on White Australia. Education is so important for reconciliation simply because so many other Australians know so little about Aboriginal Australia. This is not their fault. So many other Australians have grown up in White Australia and learnt little or nothing (or lies) about Aboriginal Australia in their education. So many other Australians have never met Aboriginal people. So many still have little or no contact with Aboriginal people in their daily lives. Until recently generations of Australians could live their lives in the cities and never meet Aboriginal people. This is why the regional forums across NSW leading up to last year's Reconciliation Convention all stressed that the biggest barrier to reconciliation was ignorance and the greatest need was education. It is important to think about that — the biggest barrier is ignorance of Aboriginal Australia, and the greatest need is education about Aboriginal Australia.

Reconciliation means learning our shared history — understanding that White Australia has a black history. This is not only the atrocities and the calculated inhumanity of government policies of the past. There is a positive side to Aboriginal people being part of Australian history. First, there is the oldest living culture on earth. There is also Aboriginal guides opening up this country; Aboriginal people who built the outback cattle industry; the black diggers; Aboriginal artists and writers; Aboriginal sports stars, now and in the past.

Thinking about the Aboriginal history of this country, a good place to start is the dates of Reconciliation Week, 27 May to 3 June. 27 May is the 1967 Referendum; 3 June is the day the High Court put an end to terra nullius, 'land belonging to no one', that White Australia was based on.

The 1967 Referendum was when Aboriginal people were for the first time to be counted as citizens in our own country. People need to be aware that we had been excluded from White Australia: written out of the constitution, no vote, excluded from the pension, barred from the public service, not to be recruited in the armed services from 1909 to 1951; living 'under the Act', which meant not having the rights that Australian citizens took for granted.

What I want you to think about is that even after the referendum to count us in the census, we still didn't even exist in this country because Australia was still White Australia. The White Australia Policy was not formally abolished until December, 1972. This was a migration policy, to keep coloured people out of White Australia. But at the same time it defined Australia as White and denied the existence of the coloured people in Australia; that is us, Aboriginal people.

To illustrate what White Australia was about, I want to read you what the Western Australian Chief Protector of Aborigines told the first Native Welfare Conference in Canberra in 1937. This was the meeting that came up with the assimilation policy to make us Aboriginal people the same as White Australians. Think about the mindset this statement represents, the mindset of assimilation and White Australia — and how much Australia has changed. What Mr. Neville told the conference was:

> *"We have power under the act to take any child from its mother at any stage of its life…are we going to have a population of one million blacks in the Commonwealth or are we going to merge them into our white community and eventually forget that there were ever any Aborigines in Australia?"*

The point is that White Australia was racist by definition. You can't even say "White Australia" without talking about racism in the same breath. Now that may sound a bit tough but it's the truth. And as the Premier rightly said in Parliament this year, recognition of the

true facts, the hard realities, is essential to reconciliation.

Now think about the implications of the fact that White Australia was abolished less than 26 years ago. That might seem a long time ago. But think about it this way. Most people in positions of power or influence or authority are more than 26 years of age. So that means that people in power in Australia have grown up to a greater or lesser extent in White Australia and with those attitudes and values and that frame of reference which simply excluded the people of this land by definition. It's the frame of reference that is racist and must change if Aboriginal people are to not just get a fair go but be part of this country as we have a right to be. Education is the key to this. As Linda Burney has said,

"If reconciliation is to be achieved — if any worthwhile indicator of progress is to be visible by the so-called cut-off date of 2001 — what all education has to be about is changing the frame of reference of mainstream Australia so that Aboriginal issues are no longer out there on the margins somewhere, but part of the main agenda, integral to all the main debates in Australia."

History and education about history are fundamental to reconciliation. I want to read two quotes to illustrate this. First, a quote from the speech by Paul Keating in 1992 to launch the United Nations International Year for the World's Indigenous Peoples. That was a really important speech for Aboriginal people — the first time a Prime Minister of Australia admitted in public what had really happened in this country. Acknowledgement means being able to put yourself in the other person's shoes. As I read you extracts from that speech, I want you to think about what you know of our shared history, while I repeat the Prime Minister's words, and put yourselves in the shoes of the "I" and the "we." What the Prime Minister said was:

"…and as I say, the starting point might be to recognise that the problem starts with us non-Aboriginal Australians.
It begins, I think, with that act of recognition. Recognition that it was we who did the dispossessing.
We took the traditional lands and smashed the traditional way of life.
We brought the diseases. The alcohol.
We committed the murders.
We took the children from their mothers.
We practised discrimination and exclusion.
It was our ignorance and our prejudice, and our failure to imagine these things being done to us.
With some noble exceptions, we failed to make the most basic human response and enter into their hearts and minds.
We failed to ask — how would I feel if this were done to me?
As a consequence, we failed to see that what we were doing
degraded all of us…."

That is perhaps a little confronting, though of course it is true. The Prime Minister then went on to invite other Australians to imagine how they would feel if what happened to Aboriginal people happened to them:

"As I said, it might help if we non-Aboriginal Australians imagined ourselves dispossessed of the land we had lived on for fifty thousand years —and then imagined ourselves being told that it had never been ours.
Imagine if ours was the oldest culture in the world and we were told it was worthless.
Imagine if we had resisted this settlement, suffered and died in the defence of our land, and then were told in history books that we had given up without a fight.
Imagine if non-Aboriginal Australians had served their country in peace and war and were then ignored in history books.
Imagine if our feats on the sporting fields had inspired admiration and patriotism and yet did nothing to diminish prejudice.
Imagine if our spiritual life and denied and ridiculed.
Imagine if we had suffered the injustice and then were blamed for it."

Mr. Keating also said,

"The report of the Royal Commission into Aboriginal Deaths in Custody shows, with devastating clarity, that the past lives on in inequality, racism and injustice."

Now I want to read from the report of the Royal Commission, which stressed self-determination as the solution to the issues and history as the root of the problems. The Royal Commissioner wrote:

"I include in this report a chapter of that history. I do so not because the chapter adds to what is known but because what is known is known to historians and Aboriginal people and it is a principal thesis of this report that it must become more known … the first is the deliberate and systematic disempowerment of Aboriginal people starting with dispossession from their land and proceeding to almost every aspect of their life. They were made dependent on government or non-Aboriginal pastoralists or other employers for rations, clothing, blankets, education, living place and living conditions. Decisions were made

about them and for them and imposed on them .... Aboriginal people were made dependent on non-Aboriginal people.
So that, for a complex of reasons, the non-Aboriginal population has in the mass, been nurtured on active and passive ideas of racial superiority in relation to Aboriginal people and which sits well with the policies of domination and control that have been applied .... The relations between Aboriginal and non-Aboriginal people were historically influenced by racism. Often of the overt, outspoken and sanctimonious kind; but more often, particularly in later times, of the quiet assumption that scarcely recognises itself. What Aboriginal people have largely experienced is policies nakedly racially-based and in their everyday lives the constant irritation of racist attitudes. Aboriginal people were never treated as equals and certainly relations between the two groups were conducted on the basis of inequality and control."

(National Report Royal Commission into Aboriginal Deaths in Custody)

Both these quotes are hard words, but they are the truth. As we all know, there have been complaints about so-called "black armband" history and children being taught that Australia has a racist and bigoted past. But, as I said before, we are not saying that there is nothing to be proud of, only that there is also much to be ashamed of. And again I repeat, it is not about guilt, but it has to be about shame. And, if you think about it, it might be better to have a black armband than a white blindfold.

The more recent living history report that has perhaps had even more impact than the Royal Commission is "Bringing Them Home," the report of the Human Rights Commission National Inquiry into the separation of Aboriginal and Torres Strait Islander children from their families, the Stolen Generations inquiry. Few would be unaware of this report and the impact it has had on the public, as shown recently by the scale of the first national Sorry Day, ceremonies across the country and over a million signatures in thousands of Sorry Books.

As I said at the start, history is important. It is where the present comes from. As the Governor-General of Australia, Sir William Deane, said in the inaugural Lingiari Lecture two years ago:

"The past is never fully gone. The present plight, in terms of health, employment, education, living conditions and self-esteem of so many Aborigines, must be acknowledged as largely flowing from what happened in the past. The dispossession, the destruction of hunting fields and the destruction of lives were all related .... True acknowledgement cannot stop short of recognition of the extent to which disadvantage flows from past injustice and oppression.

...There will be no true reconciliation until it can be seen that we are making real progress towards the position where the future prospects — in terms of health, education, life expectancy, living conditions and self-esteem — of an Aboriginal baby are at least within the same area of discourse as the future prospects of a non-Aboriginal baby. How can we hope to go forward as friends and equals when our children's hands cannot touch?

...I am convinced that until true reconciliation with its indigenous peoples is reached, Australia is a diminished nation."

And as Linda Burney said in her major speech, "Education Is The Key":

"For Australia to be able to say that it has truly grown up, reconciliation must be embedded in our social makeup; it must be integral to all our agendas at all levels, from the local level of individual action right through to national commitment to change. In the end what we all want, and what Australia needs to be, is the vision of the Council for Aboriginal Reconciliation:

A united Australia which respects this land of ours, values the Aboriginal and Torres Strait Islander heritage, and provides justice and equity for all."

That's enough telling the truth about this country. Now I want to focus on Aboriginal students in schools.

Everyone knows our youth are our future. The NSW Government Statement of Commitment to Aboriginal People points out that, "Although they represent less than 2% of the population, Aboriginal people make up 32% of youth in custody and 14% of adults in custody." In other words, the proportion of Aboriginal youth in various forms of official custody is more than double the adult custody rate, which led to the Royal Commission into Aboriginal Deaths in Custody. This is simply frightening and it is why new ways of doing things, collaboration of agencies and negotiated strategies are so important in the area of youth.

We are now dealing with the implications of "Keeping Our Kids At School," a major report on truancy and suspension of Aboriginal students in NSW schools. The report shows alarming gaps between the perspectives of school staffs and our communities on what is

happening in terms of Aboriginal perspectives and what needs to be done. The statistics of Aboriginal retention are still not good enough. The figures on suspension and exclusions of our students are even worse — up to 4 and even 6 times the rates of other students.

There are high incidences of non-attendance of Aboriginal students; some for cultural reasons, some truancy. We have anecdotal evidence of Aboriginal students in NSW who feel that education and employment are not for them —which reminds me of Taree where there were no Aboriginal kids working in the town anywhere. We have other anecdotal evidence of schools making a real effort for Aboriginal students, but to no avail because Aboriginal youth feel there will be no jobs for them so what is the point. In the context of 30% youth unemployment across the country, and even higher in some regions, and the persistence of racist attitudes in some areas, this is understandable.

We have an Aboriginal Education Policy and an Anti-Racism Policy, but we still have evidence of schools seeing rules as more important than racism; there are still instances of Aboriginal students who react to racism and are disciplined or suspended or both, while the other students who provoked the reaction getting away with it. And, as you would be aware, all of this needs to be put in the context of the socio-political climate of the last two years since the March 1996 election: the rise of One Nation, the right wing coming out of the woodwork, a political climate where it is suddenly OK to say anything; Aboriginal people feeling under siege, and on the outer. All of this needs to be understood.

We need new insights to change the way things are done in schools. In particular, schools need to learn how to treat older Aboriginal boys who still tend to feel they are treated like children in some schools. We would hope for real collaboration between agencies in providing attractive and relevant options for the many Aboriginal youth who leave school early because the curriculum seems to offer them nothing. The availability of attractive VET curriculum is a key to resolving this. We need alternatives for some of our kids who find the schooling system alienates them to the point where they find it impossible to participate. This may not just be for our kids, but may work better for young people of other cultures, and for all students. Many people say there is no such thing as Aboriginal pedagogy, just good teaching practice. This wouldn't be the first time the mainstream has benefited from Aboriginal initiative.

Some years ago Aboriginal kids in western Sydney defined a good teacher as, "someone who likes us and is fair." You might think that's not much to ask, but anyone in Aboriginal education can tell you it has not been the story in our schools in the past, or even the present in too many cases. Our kids need to be able to feel that the school belongs to them as much as to any other students. When we started to rewrite the Department's Aboriginal Education Policy in 1995, the key message loud and clear from all consultations was that Aboriginal students **must have the right to be Aboriginal.** That also may seem really obvious, but again, it has not been the case in the past. Too many people in schools still think that our Aboriginal students are not really Aboriginal.

To illustrate the experience of too many of our kids in normal schools, right from the start, some years ago a researcher observed teacher-student interaction over a year in a kindergarten class in a school in Adelaide. Three obviously Aboriginal students in that class started the year bright-eyed and eager. By the end of the year they were traumatised, the teacher saw them only as trouble and the other students ostracised them. The point was that the teacher was not racist; she was merely just as ignorant as most other teachers of where Aboriginal kids come from. And like most Australian teachers she failed to recognise the cultural background of these kids because of the widespread assumption that Aboriginal kids in urban classrooms cannot really be Aboriginal — if they live in the cities they must have been somehow assimilated. This is the 'real Aborigine' syndrome, the idea that real Aborigines live in the central desert or Arnhem Land, etc., etc.

This brings me to considering how Montessori and Aboriginal education may converge and be able to help each other. One of the things so many mainstream teachers have trouble with in dealing with Aboriginal kids is precisely the autonomy and cooperative learning styles, looking after sibling and friends and helping each other, that Aboriginal kids bring to school. It is interesting that these are to some extent what Montessori is about. It is also encouraging to see that Montessori is about empowering children and helping them to teach each other; this again lines up with the cooperative learning that Aboriginal kids bring to school from their cultural background. The freedom of movement of the Montessori

classroom is again something that is consistent with the autonomy that Aboriginal kids bring to school. So in all these ways Aboriginal education and Montessori are on the same wavelength. In this context it is worth repeating what I said earlier, that some educationists say there is no such thing as Aboriginal pedagogy, just good teaching practice. And of course the point about Aboriginal pedagogy is that it has stood the test of time and experience for up to 100,000 years and more.

In too many of our schools there is too little evidence of real understanding of Aboriginal communities or where Aboriginal students come from. This is because most teachers and school administrators have grown up in White Australia and learnt little or nothing or lies about Aboriginal Australia. And it is because of the failures of teacher training over the years. More than twenty years of reports have called for mandatory Aboriginal Studies in teacher education courses. The AECG is proud to have been Principal Consultant to the national project, "Teaching the Teachers", which was started by the late Oodgeroo Noonuccal in 1991. Teaching the Teachers is a model mandatory Aboriginal Studies subject for primary pre-service teacher education courses, with a range of resources. Last year at the Australian Reconciliation Convention, the Director-General stated that Aboriginal Studies should be considered as an employment pre-requisite for all teachers. Universities and systems have had enough time. Mandatory Aboriginal Studies for all teachers needs to happen now.

I want to finish with two stories about my work at Taree that have shown me how we can make a difference and have given me hope. The first is about an Aboriginal boy who, like many of our kids, found the transition from primary school to high school difficult and dropped out after about two weeks. He got into bad company and wound up in Worimi Detention Centre. The Koori Youth Program was running a Streetkids in Distress project, trying to help streetkids and get them back into some form of education or training. But not just education for its own sake, rather, we tried to start from where they were at and get into something they were interested in. For Mark this was art. Art was something he loved. He progressed with his art and became a regular attender at the program, and even got to the stage of getting back to school part time. One of his paintings was selected for the Department's NAIDOC Week exhibition which travelled round the State. His art was shown in Japan, and used in the Aboriginal Education Diary. The money he was paid for his copyright he was able to use for clothes and a new bike and bought his mother a washing machine.

The second story is about a Taree schools-community production of the musical, "1788: The Great South Land," which was developed in collaboration with the AECG, and tells the story of Sydney from both sides, not just the First Fleet but Eora people too. The Manning AECG formed the Manning Valley Australians for Reconciliation and we decided to stage the "Great South Land" and invited schools in the district to be involved. We had over 100 students from five schools and community involved as well. We had a successful season in the Manning Entertainment Centre, and all the schools who refused to join in told us they wished they had been involved. We were invited to Sydney to perform for the Aboriginal Studies Association Conference. Patrick Dodson saw the performance and told the Premier about it when they met next morning to talk about reconciliation in New South Wales. The Premier said, "That's best practice! We'll make a video." And "Nothing's going to Stop Our Dream" is in every government school in the state. So that is another success story. But what was really inspiring is the kids who were involved in the show and the effect it had on them. Many of them were close to drop-outs; seen as trouble-makers or a waste of time in school; or encouraged to join the production to get them out of class. The real story is what those kids, both black and white, achieved in self-esteem and empowerment, and what they did for Reconciliation.

The understanding that I hope can be generated from this conference is an important step in the right direction. It all helps.

Thank you.

World Odyssey – Revelations of the Possible

Renilde Montessori

This lovely title was handed to me to build a talk around for the NAMTA conference held in Baltimore last April. The expectation was that, having lived a long life with and among Montessorians, and having travelled quite a bit in the past three years visiting diverse Montessori endeavours in various countries, I would be able to give a cogent and lucid image of **The Past, The Present and The Possible** which was the theme of the conference.

Vain expectation — particularly since I identify quite a bit more with Alice, who was an observer in Wonderland, than with Odysseus who was the heroic protagonist of his voyages. And also because the global Montessori hubbub does not lend itself to either cogency or lucidity. It is in a state of fervour and effervescence and therefore neither clearly discernible nor lucidly explicable. This is in itself a revelation and provides food for thought. Perhaps in some distant future a synthesis of the Montessori Movement in the 20th Century will be made by the wise people with hindsight. For the time being, we have our nose to the windowsill and from that not very elevated vantage point the past, the present and the possible look more or less like this:

Very soon after San Lorenzo, the Montessori Movement came into being. It grew, clearly defined and coherent in spite of ups and downs, shifts of venues and the swinging pendulum of social, cultural and political currents.

The past of Maria and Mario Montessori was adventurous, tragic; their companionship unbreakable, their love for each other and their work unlimited.

The past, as I remember it, was a constant business of people, visitors, fluctuating entourages, of comings and goings and travels with large trunks, of the infernal, exhilarating festivity of train stations, steam-filled and cavernous and gritty.

The Montessori Movement was, indeed, characterised by movement and anchored in the AMI, a safe small harbour on a wild and rugged coast, with a powerful lighthouse to guide those who pursue Montessori philosophy, principles and practice according to Maria Montessori.

After Maria Montessori's death in 1952, the movement gradually subsided and took on another direction, becoming more restricted in scope, its activities channelled under the wise direction of Mario Montessori towards establishing permanent Montessori centres for training teachers and training trainers to continue the work of the centres.

Since the death of Mario Montessori in 1982, the expansion of Montessori endeavours has grown to a frenzy of inchoate proliferation, a global cacophony, deafening as the sound of a huge orchestra tuning its instruments.

Already in 1948 Maria Montessori wrote:

> *"Why are there so many difficulties, so many contradictions, so much uncertainty with regard to what are commonly called 'Montessori Schools' and the 'Montessori Method'? Yet, in spite of this confusion and these difficulties, our schools continue to progress and expand even in the most distant lands. They can be found in the Hawaiian Islands, in Honolulu, in Greenland and in India, among the peoples of Nigeria, and in Ceylon, indeed among all races and in all parts of the world.*
>
> *Can it be that these schools conducted by African and Indian people, in backward rural areas, or for that matter, in the most civilised nations, are all perfect? Experts say that there is not so much as one good school among them; yet all agree that the Montessori Method is more widely spread than any other modern method of education. How to explain its popularity, if many of the schools using our name fall so short of perfection? How to explain the fact that many nations have changed their educational laws in order not to obstruct the application of the Montessori Method? How did it spread so far afield, without any publicity campaign, when there are only a few regular reviews or organised societies working in harmony with an organic superstructure? It lacked all these aids, yet it spread like a transforming leaven, like the seed propagated by the wind!"*

We clamour, we are outraged — and yet this vigorous expansion should be seen as the prodigious activity of multiplying cells after a child is conceived, or perhaps the immense energy in a nebula as a star is born— because then the lovely sentence quoted by Muriel Dwyer in an outstanding lecture acquires reality and meaning:

> "A*nd whether or not it is clear to you, no doubt the universe is unfolding as it should."*

In another outstanding lecture, Professor Winfried Böhm said:

> *"The influence and success of Montessori education far exceeds even the world-wide recognition of the ideas of John Dewey. How can this triumph be explained? And what are the reasons that this crescendo hasn't ended after a century, but rather shows all signs of continuing, banners waving, into the next century?"*

We definitely wish to enter the next century with banners waving. However, we must take utmost care to mend the banners that are tattered and to replace those that are tawdry with rich brocade and velvet embroidered in silk and purest gold.

It has been said that change is of the essence —in our courses, in our schools, in ourselves. Perhaps it is not so much change that is necessary. Perhaps it is a revisiting, with new awareness, of our ancient parameters, rediscovering the vigour, the horme of the Montessori Movement.

In an endeavour to reignite banked fires, the AMI has taken three steps:

1. The reinstatement of the Cattedra Ambulante – **Educateurs sans Frontières**

2. The creation of an **International Study Centre**

3. The organisation of **The Archives**

EDUCATEURS SANS FRONTIÈRES – RAISON D'ÊTRE

Maria Montessori created the Association Montessori Internationale in 1929 to give structure to her work, and to ensure that it would be perpetuated after her death in accordance with her pedagogical, psychological and practical guidelines.

Dr. Montessori was a scientist of a competence akin to genius. It was not her desire that her pedagogy be followed blindly as dogma. Having assiduously and consistently studied children during many years, observing the universal characteristics of their development, she acquired the absolute faith that within the child lies the power which will allow humanity to fulfil a potential as yet unattained. Only a few years before her death she said:

> *"I assure you that were I not absolutely certain that mankind can be bettered, I should not have had the strength to battle for fifty years, having so frequently had to begin again when my work was destroyed by others. I would not have had the strength, at my age, to travel the world, proclaiming this truth."*

She did indeed travel the world, indefatigably — pilgrim of an idea, champion of the child, ambassador extraordinary for generations of children yet unborn. She and those who pursued her teaching created the Montessori Movement. This Movement was eventually left as a legacy to the Association Montessori Internationale.

After her death in 1952, the Montessori Movement became more restricted in scope, necessarily focusing on the consolidation of earlier work. Thus the activities of the AMI were almost exclusively directed at establishing permanent Montessori centres for training teachers, developing an efficient structure and organisation and training trainers to continue the work of the centres.

Now the Association Montessori Internationale aims to reinvigorate the Montessori Movement, restoring its original dimensions. As one step to make the Movement operational, AMI has opened a new chapter, under the name **Educateurs sans Frontières.**

DEFINITION

The **Educateurs sans Frontières** are to become a new corps of workers in the Montessori Movement, *cattedra ambulante* of Maria Montessori's educational reform with its vision of a deep ecology which, in evolutionary terms, is suddenly and rapidly permeating human consciousness.

The **Educateurs sans Frontières** will travel the paths Maria Montessori followed as she undertook her unceasing work of sowing seeds of knowledge, awareness and understanding of the natural laws of human development,

wherever, whenever, she was called to go, leaving these seeds to germinate, and then always moving forth. In 1940, in a letter from India to her two granddaughters, she wrote:

> *"We abandon all and travel the world, as did those in former times who would sow seeds and go on their way. This is our destiny: to sow! To sow everywhere, without ceasing, never to harvest."*

When using the term Educateurs sans Frontières, we refer to borders which transcend the obvious ones to do with nation states. The truly important ones are the psychological and spiritual frontiers—the ideological, religious, racial, social and economic, cultural and linguistic boundaries which artificially divide a humanity as yet largely unaware of its intrinsic unity and its interconnectedness with the earth that brought it forth.

Dr. Montessori's work can be applied in a wide variety of ways which can benefit the cause of the child beyond the school and the home. Her own term for the pedagogy she created was 'Education as an Aid to Life', and education as an aid to life is applicable at any time, in any place, within all social strata, through public or private agencies, in settings rural, urban and remote.

When Montessori principles are applied in the wider context of society, their possibilities are vast and all-encompassing. They can be of incalculable help to parents, social workers, child-care workers, family counsellors, in short, to any person involved with the developing human being; they can be, and have been applied with children undergoing lengthy hospitalisation, maladjusted children, physically impaired children, children victims of violence, children abandoned, children at risk.

THE PEOPLE

People who wish to work in such diverse circumstances, with diverse people of diverse ages, must be physically, mentally and spiritually hardy; they must be willing to work in any and all circumstances, in any and all environments; also, they must be well aware that material remuneration may be scant.

Prerequisites for taking part in this programme are:

- an AMI Diploma, either Assistants to Infancy, Primary, or Elementary;
- life experience;
- work experience;
- references; and
- an interview conducted by a panel.

An applicant who has been accepted as a potential **Educateur sans Frontières** will be required to undertake a further six-week period of intensive studies encompassing a deeper understanding and integration of Maria Montessori's work.

The idea of the Educateurs sans Frontières has met with unexpected enthusiasm from many quarters. In fact, the first six-week session will take place in the summer of 1999 during the months of July and August.

THE INTERNATIONAL STUDY CENTRE

Since Maria Montessori inaugurated the first *Casa dei Bambini* in 1907, Montessori schools have been founded all over the world. In the early years these were for children three-to-six years of age. Elementary schools were soon to follow and in the late thirties, Dr. Montessori gave clear and concise guidelines for the education of the adolescent, which, as yet, have not been implemented. Infant communities exist as well for children in their first, second and third years of life.

Since the beginning, people have been trained and continue to be trained to work with children of ages birth-to-three, three-to-six and six-to-twelve, first by Maria Montessori and her son Mario Montessori and later in established training centres, by a growing number of Montessori trainers.

However, nowhere has the full range of her work been represented in its entirety, although Dr. Montessori had the intention of creating an all-encompassing centre — in Spain in the twenties, in Holland in the thirties, and in Italy in the forties.

In 1947 Maria Montessori wrote a letter in preparation for a congress to be held in Italy. This letter contained clear and specific guidelines for the establishment of a University for the Science of the Formation of Man. These guidelines provide the structure for the Centre envisaged by the Association Montessori Internationale, the entity in charge of her intellectual legacy and therefore responsible for perpetuating her work in accordance with her directives.

A proposal will be completed by the end of this summer and presented to various regional

governments and ministries of education in Spain, the country where Maria Montessori originally desired to found such a centre.

THE ARCHIVES

One of the most important mandates of the AMI is to safeguard and organise the vast amount of unpublished material left by Maria Montessori. As a first step, every document available at the AMI has been photocopied. This task has now been completed and the next step, the organisation and storage of the archive, is under discussion. It is particularly with a view to making her work available for study and research that we consider this undertaking of primary importance. Until and unless it is satisfactorily completed, all other efforts will be null, void and meaningless.

All of the above has many people nodding in fervent agreement. However, more than encouraging nods of approval are required —much, much more — and that is the active, cheerful, enthusiastic participation of all those fervent nodders, in whatever field of endeavour each one individually excels.

We have the means, the plan, the practical, intellectual and spiritual wherewithal to assist the children of humanity achieve not only their own potential, but that of humanity itself. We have a treasure not to be hoarded, but to be spent, wisely, lavishly, delightedly on a quest for that which of its essence can never be attained — a perfect species in a perfect world.

In Communications I invited you to join the AMI in celebrating Mario Montessori's 100th birthday. Now I would invite you to join in the grand adventure he and Maria Montessori left as their legacy — the eternal pursuit of their Utopian vision.

Working Together to Honour the Child

Deirdre Berry

An extract of this – paper was presented at the public presentations in Sydney and Melbourne "The Symphony of Montessori: Working Together to Honour the Child".

Ideas are in the air, awaiting discovery and recognition by great minds who then give those ideas the power to be transformed into action. The discoveries made by Dr Montessori about children, the ideas she gathered as she turned the searchlight of her genius towards the child were powerful ideas whose time had come. These ideas, which grew into a philosophy, have reverberated down the century.

Throughout her life and since her death, there have been other people blessed with the necessary insights who have made similar discoveries to Dr Montessori, sometimes without any awareness that she had already thought and written about them. This is the way it is with humans and the universality of ideas. Montessori was generous with her genius and was fascinated by the ideas of others, who influenced her own thinking as she, in turn, influenced the thinking of others. The important point here is that her ideas had power to do good and that she shared them with the world, not seeking fame for herself but a better world for children.

Rachel Remen in her wonderful book, **Kitchen Table Wisdom** (1997), speaks of her anger and feeling of betrayal when a colleague used Rachel's ideas and did not acknowledge their source in a best selling book. As a psychotherapist, Rachel was used to the academic world where ideas are jealously guarded and ownership is important. However, Rachel has humility and is open enough to learn from her patients and was able – painfully – to acknowledge that the world of ideas is everybody's domain. She learned this when her client said, "You know, you can get a lot of good done in this world if you don't care who gets the credit." Struck by the profound truth in this little bit of philosophy, Rachel asked her client what made her think of this. "Oh," she said, "it was on the bumper sticker of the car that just pulled out of my parking spot."

My talk tonight will explore some of Montessori's ideas which have been echoed and validated by educators, philosophers, environmentalists, psychologists, curriculum consultants, childbirth educators and neurologists. When I first began work on this topic, the scope was far more limited. My fellow members of the AMI Alumni Association and I had a far more modest project in mind. We thought that it would be a good idea to identify some practices in Montessori classrooms and talk about how they are used in general education. Then I began to explore – and my journey took me far beyond that narrow pathway. I will touch on some of the highlights of my exciting discoveries but there are many more for you explore independently.

Before I plunge into this talk, I will take a few moments to identify Dr Maria Montessori for those of you who are meeting her ideas for the first time tonight. Maria was born on the 31st August in 1870, the daughter of Alessandro and Renilde Montessori in eastern Italy. She was an only child and very soon proved that she was going to do things *her* way. At first she decided to study engineering but later changed to medicine. Both professions were closed to women, but against great odds, she achieved her goal, graduating at the age of 26 from the University of Rome at the top of her class.

She was given work with adults in a mental asylum and one day, discovered almost by accident, the children's room. The children were considered retarded and were kept in the room with little activity and no expectation that they could learn. It was at this point in her life that she decided to learn all she could about education so that she could help these children. She went to the great educational philosophers of her day, studied and observed the children. Basing her ideas on the work of Seguin, she manufactured materials for the children so that they could learn through their senses and their self chosen activity. She encouraged the children to be free to explore and teach

themselves through the materials. She requested that the adults were not to teach but to guide. These were revolutionary principles in their day and I believe, are still radical today.

She developed her philosophy throughout her long and productive life, shaping and changing it in response to her observations of the child. There are numerous books which are a rich source of information about Dr Montessori's life and work which I would recommend to those of you who are interested in learning more.

MONTESSORI AND OTHER GREAT THINKERS

Throughout this century Dr Montessori's work excited the interest of other great minds. The truth of her discoveries about children was recognised by others with the eyes to see. **Bertrand Russell**, one of the greatest western philosophers who, like Dr Montessori was a polymath or an expert in many fields, and again, like Montessori, was a tireless worker for justice for the oppressed and peace for the world, chose a Montessori school for his child. He saw that the way a child could learn self discipline best was not through external means but by self chosen activity which has its own inherent discipline. He said in 1926 (from **Maria Montessori: a Centenary Anthology** published by the AMI in 1970, p. 37):

> *"I had always understood that Madam Montessori dispensed with discipline and I wondered how she managed a room full of children…On sending my little boy of three to spend his mornings in a Montessori school, I found that he quickly became a more disciplined human being…The fundamental idea is simple: that the right discipline consists not in external compulsion, but in habits of mind, which lead spontaneously to desirable rather than undesirable activities. What is astonishing is the great success in finding technical methods of embodying this idea in education. For this, Madam Montessori deserves the highest praise."*

Jean Piaget was the President of the Montessori Society of Switzerland and noted the similarities between his theory of the stages of development in childhood and Montessori's Planes of Development. **Sigmund Freud** recognised the importance of Montessori's work. He wrote in a letter in 1917:

> *"Like anyone who deals with the study of the psyche of the child I am in deep sympathy with your efforts, which show at the same time a love for – as well as an understanding of – Man."*
>
> **(Centenary Anthology**, p 28)

Freud's daughter **Anna**, became one of the first psychotherapists who worked predominantly with children. The nursery schools which she established in London during the Second World War, followed the Montessori philosophy. She wrote in 1966,

> *"That pleasure in achievement, linked only secondarily with object relations, is present in very young children as a latent capacity, is demonstrated in a practical manner by the successes of the Montessori method."*

Another great thinker, **Alexander Graham Bell**, had a Montessori class in his home during the winter of 1913. He said of the children in the class:

> *"Their development has been so remarkable and the whole experiment so inspiring that people all over the country have become convinced of the values of your teachings and the advantages to American education that will follow a general adoption of the Montessori method."*
>
> **(Centenary Anthology**, p 23)

Montessori's importance was acknowledged by religious leaders, governments around the world and academic institutions. In 1946 she was awarded an Honorary Fellowship by the Educational Institution in Edinburgh. Its President said:

> *"Teaching is a conservative profession, but once in a generation there arises an outstanding figure which comes with a breath of new life inspiring people to new endeavours and new activities. These are the great figures of educational history. Among them no-one in our generation stands higher than Madam Montessori. her name has become a household word, not only in Scotland, not only in Europe, but in every part of the world."*
>
> **(Centenary Anthology**, p 50)

A remarkable Australian woman, **Martha Simpson** an inspector of schools in NSW and Teachers College lecturer, had generated enough enthusiasm for the Montessori method after attending a training course in Rome, that the education system in NSW was primed to become Montessorian in 1914. However, in the midst of a world war, the voices for the child and for world peace, were quickly drowned by the voices for war.

Montessori was seen by the world as a great force for peace. She was nominated three times for the Nobel Peace Prize. In 1950, Torres Bodet, the General Director of UNESCO said,

"In our midst we have someone who has become the symbol for education and world peace: Maria Montessori."

The revered Indian leader **Mahatma Gandhi** wrote in his book **Towards a New Education** (1953):

"Even as you, out of love for children, are endeavouring to teach children through your numerous institutions, the best that can be brought out in them, even so, I hope that it will be possible not only for the children of the wealthy and the well-to-do, but for the children of paupers to receive training of this nature. You have very truly remarked that if we are to reach real peace in this world, and if we are to carry on a real war against war, we shall have to begin with children and if they will grow up in their natural innocence, we won't have to struggle, we won't have to pass fruitless idle resolutions, but we shall go from love to love and peace to peace, until at last all the corners of the world are covered with that peace and love for which, consciously or unconsciously, the whole world is hungering."
(Centenary Anthology, p 39)

Dr Montessori excited great interest wherever she spoke and her ideas and educational practices were enthusiastically adopted by many people on every continent of the world (except Antarctica!). The space of this talk only allows me to touch on a very few. I recommend to anyone interested in gaining a deeper understanding of the dramatic impact of her all encompassing philosophy, to read **Maria Montessori: a centenary anthology**, published by the Association Montessori International in Amsterdam in 1970.

MONTESSORI GAVE THE CHILD A VOICE

Why is it easier for governments to cut back on their financial support for babies and pre-school children than on support for the armed forces or road works or large building projects? One reason is that children do not vote, they do not have a loud voice amongst policy makers and power brokers. There are some adults who see the injustice of this quite clearly and act on it. Dr Montessori acted on it by speaking on behalf of children – all children. In raising this topic, I am not setting myself up as a judge of the way adults or governments respond to children's needs. I believe that all adults do their best by their child. I am raising this issue because it runs as a bright thread through the fabric of Montessori's work and is validated by other people concerned with children. I am hoping that it may encourage you all here tonight to leave aside your adult body for a few minutes and see the world through the eyes of a child.

Dr Montessori spoke on behalf of children. She spoke loudly about much that was wrong with the way children were treated by adults and society. She saw the baby as a young human in the process of growth – vulnerable and powerless. She saw adults with the power of life and death over these young people, who wielded this power unquestioningly and with a strong belief in their God-given right to do so. She saw that the major impacts of these adults were during the time when the baby was most open and trusting and that the memory of these early years would remain in the subconscious mind but exist as the most powerful shaping force in the child's life. The indelible experiences which actually shape the baby's mind happen before he or she has any defenses to withstand these influences.

Montessori wrote in 1938:

"Parents must openly and willingly confront the most burning social issue: the struggle for the recognition of the rights of the child."

There are a few people today who have continued Montessori's role as advocate for children. One such person is the cartoonist and social commentator Michael Leunig. When he published a cartoon in the Sydney Morning Herald in 1995, which I will describe in a moment, he raised an outcry which reverberated amongst families all over Sydney. What is he doing here? He is giving a voice to a baby. By doing this he confronted the comfortable beliefs of parents that child care was not only their right as a modern parent but that it was actually good for their child.

This very cartoon inspired Sally Loame to write a book called, **Who Cares – Guilt, Hope and the Child Care Debate** (1997). She describes her busy morning organising her two pre-school children for day care before she goes to work:

"Then something catches my eye. A Leunig cartoon. He needs more than the usual split second to digest, but this morning I take it. God, he's drawn a baby, its little head sticking out of a pupae-like swaddling, 'abandoned' by its mother in a child-care centre. 'Thoughts of a Baby Lying in a Child Care Centre,' he's called it. The wretched little mite lying alone and immobile damns his mother for her ignorance, her cruelty and her selfishness for leaving him and going to work. But the Leunig baby has no malice against his mother, just love and bewilderment." (p 2)

Parents were furious with Michael Leunig for the question he posed. They felt that he had no right to pose it. Their rights as parents had been questioned and their reaction throughout the print and electronic media was full of anger and the bitterness of betrayal. They did not want to truly consider child care from their child's point of view. In an interview a week after the cartoon was published, Leunig said:

> *"The mother-baby relationship is a very particular one. It lies at the heart of our culture and I think we're losing this vital relationship. We've become ignorant about the psychological and emotional state of the infant, in the same way we were about Aborigines when we used to take their children away.*
>
> *It's become an expectation that when you have a child you put it in a crèche and go back to work. Noone is questioning that expectation. I'm just trying to open up the question, to be the voice of the infant."*
>
> (Loame, 1997, p 7)

It is often a painful process for adults to shift their perspective and consider our influence on a child. To do so, we need an empathic imagination and the courage to explore our own prejudices. As Montessori said in her book, **The Formation of Man** (1938):

> *"The greatest difficulty in the way of an attempt to give freedom to the child and to bring its powers to light does not lie in finding a form of education which realises these aims. It lies rather in overcoming the prejudices which the adult has formed (about the child). That is why I said we must recognise, investigate and fight against "the prejudices concerning the child" only, without touching other prejudices which the adult may have formed regarding his own life…*
>
> *If the prejudices concerning the child are directly and exclusively aimed at, a reform of the adult will accompany it step by step because an obstacle in the adult will have been removed. This reform of the adult is of enormous importance for society as a whole. It represents the re-awakening of a part of human consciousness which has been covering itself progressively with layer upon layer of impediments…There is in (the adult)…a blind spot, similar to that on the retina of the eye. The child, that unknown being, sometimes considered almost as a matrimonial accident, who opens a road of sacrifices and duties, does not in himself arouse either awe or admiration."*

Montessori, Leunig, Sally Loane and many other people promoting the rights of the child are speaking with one voice when they invite adults to have the courage to consider the world from the child's point of view. When adults can do this, they see how they themselves may have

been an obstacle in their child's best interest. When an adult comes to this understanding, he or she then has the tools to begin a personal transformation which will both help the adult and the child to grow to the fullest potential

THE ROLE OF THE ADULT

Dr Montessori was one of the first voices speaking about the responsibilities of parents to their children. She spoke often of the need for the adult to create a warmly supportive environment and then to step back, allowing the child as much opportunity to develop as possible. In her book, **The Child in the Family** (1989), Montessori says,

"The adult ought never to mould the child after himself, but should leave him alone and work always from the deepest comprehension of the child himself."

And again she notes:

"The small child ... is defined by educators as (soft wax), which can be shaped in the appropriate way. Now the concept inherent in the definition of (soft wax) is correct: the error lies in the fact that the educator believes he *must shape the child. On the contrary, the child must shape himself...."*

Montessori did not mean by this that the tiny child should be left to his or her own devices and abandoned by the adult. Her message is one of deep love and utter respect. She acknowledges the passionate love which exists between child and parents but also asks that this love not be used to dominate the child. She asks that the adult have a selfless maturity, a spaciousness of mind which will mean that the adult will always be there for the child in a loving, consistent and joyful way and that the adult will also be guided by respect for the growing child and an awareness of how easily the small child's attempts at independence may be crushed by unthinking acts of domination.

She says in **The Child in the Family:**

"As educators, we can choose the proper path, using our sensitivity to understand what action is necessary to help in the construction of the child. We must inhibit ourselves in order not to become destructive. The one who creates is the child: we do not. It is no easy matter to make this clear, for in the popular mind it is the adult who creates the new life. What must happen, therefore, is a kind of purification, whereby we liberate ourselves of the unseemly illusion of our omnipotence." (p 20)

Stephen Covey in his best selling book, **The Seven Habits of Highly Effective People** (1989), speaks of his bewilderment when, despite both parents' best efforts at praising and positive reinforcement for their son, the boy seemed to become more and more fearful, more timid and clumsy. Stephen Covey observed his son closely and looked deeply and honestly into his own heart. He finally realised that he was – with the best of intentions – attempting to mould his son into a child he, Covey, could be proud of. With great humility, Covey accepted that it was not his right or responsibility to shape his son. This work belonged to his son alone. Covey accepted in his heart that he was already proud of his son and that he need do nothing to earn his approval except live. He did not need to be an "A" student or a top athlete or a famous piano player. Whatever his son did with his life was his own choice, and Covey would honour that choice while staying in close touch and sharing the highs and lows.

"Through deep thought and the exercise of faith and prayer, we began to see our son in terms of his own uniqueness. We saw within him layers and layers of potential that would be realised at his own pace and speed. We decided to relax and get out of the way and let his own personality emerge. We saw our natural role as being to affirm, enjoy and value him. We also conscientiously worked on our motives and cultivated internal sources of security so that our own feelings of worth were not dependent on our children's 'acceptable' behaviour". (p 20)

Aline Wolf quotes both Carl Jung and JG Bennett in her wonderful book, **Nurturing the Spirit in non-sectarian classrooms** (1996).

"The well known psychoanalyst, Carl Jung, has advised, "If there is anything we wish to change in the child, we should first examine it and see whether it is something that could be better changed in ourselves." JG Bennett echoes this advice: "Whether we have to deal with children as parents or as teachers, our task begins with ourselves; and there is very much more to be derived by children from what those in contact with them do to put their own house in order than what they attempt to do to put the child's house in order." (p 35)

Here is Montessori (1936) again:

"The child's parents are not his makers but his guardians."

Another tireless worker on behalf of children in Australia is Professor Maurice Balson. In both his books, **Becoming Better Parents** and

Understanding Classroom Behaviour, he sends the same message to adults and children. To help a child to reach his or her full potential as a human being, adults need to accept the child as he or she is. Balson believes, like Adler and Dreikus, that encouragement, not praise or competition, is the adults' most powerful tool with which to assist the child. He quotes Soltz (1967):

> *"She (the teacher) must also accept the child as he (the pupil) is now – not as she expects him to be later. 'As you are right now, you are fine. Now let us learn and grow together."*

Let us pause here for a moment to consider the difference between praise and encouragement. The starting point of praise is that, in the eyes of the adult, the child needs to change in some way – to get better at a skill, or to share instead of being selfish, or to form a letter or number better, or to stop bullying, etc. In the adult's view the child is lacking in some respect and this needs to be remedied. So the adult does this by praising the actions which are desirable and criticising (overtly or by ignoring) those that do not measure up. This locks the child into trying to please the adult, trying to measure up to the adult's standard, to hunger for the words of approval, "well done," "best in the class," "so much faster than your brother." It makes the adult feel good.

Encouragement, on the other hand, begins with acceptance, "As you are now, you are fine." It accepts that the child has an enormous drive towards perfection, to do it better, to be the best I can, to reach for the stars. The adult is there to share this journey, not to dictate it. If you watch a child mastering a skill, emptying the dishwasher, cleaning his teeth, getting the sum right after checking it on the answer chart, you will know the immense satisfaction that child is feeling, you will almost see the self esteem growing by the way his or her shoulders straighten, the head is held proudly, a quiet smile appears. This child will not be the servant of other people's opinions.

Dr Montessori (1988) says:

> *"There is one thing (the teacher) must never do and that is to interfere by praising a child's work, or punish him if it is wrong, or even by correcting his mistakes. This may sound absurd and many people find it a stumbling block.... Most teachers think it is their main business to be always criticizing.... The child's training has, they think, to be guided by two reins: prizes and punishments, ...but if a child has to be rewarded or punished, it means he lacks the capacity to guide himself, so this has to be supplied by the teacher. But supposing he sets himself to work: then the addition of prizes and punishments is superfluous; they only offend the freedom of his spirit. Hence, in schools like ours which are dedicated to the defence of spontaneity and which aim at setting the children free, prizes and punishments obviously have no place. Moreover, the child who freely finds his work shows that to him they are completely unimportant."* (p 223)

Montessori goes on to speak about the dispiriting effect on the child of having his or her work marked with a cross to indicate it is wrong. Pointing out a child's mistakes has "a lowering effect on his energies and interests." (1988 p 224) It does not teach the child anything except that he or she is a failure. This discourages a child even more and makes it even more difficult for him or her to learn.

> *"For if a child is to stop making mistakes, he must become more skillful, and how can he do this if, being already below standard, he is also discouraged?"* (1988, p 224)

Rachel Remen (1996) sees praise and criticism from a physician's point of view.

> *"The life force in us is diminished by judgement far more frequently than by disease. Our own self judgement or the judgement of other people can stifle our life force.... Unfortunately, judgement is commonplace. It is as rare to find someone who loves us as we are as it is to find someone who loves themselves whole.*
>
> *Judgement does not only take the form of criticism. Approval is also a form of judgment. When we approve of people, we sit in judgement of them as surely as when we criticise them. Positive judgement hurts less acutely than criticism, but it is judgement all the same and we are harmed by it in far more subtle ways. To seek approval is to have no resting place, no sanctuary. Like all judgement, approval encourages a constant striving, it makes us uncertain of who we are and of our true value...Approval can't be trusted. It can be withdrawn at any time no matter what our track record has been. It is as nourishing of real growth as cotton candy. Yet many of us spend out whole lives pursuing it."* (p 35)

Jennifer Monaghan, a teacher with over 15 years in education in the Catholic school system as a teacher, student welfare counsellor and principal, echoed Montessori's words in 1995. She spoke at the National Montessori Conference in 1996:

"Encouragement means to put heart into the person. By instilling courage into others, we help them see their strengths and the development of belief in themselves.

Though experts extol the value of using praise to raise the children's self esteem, praise frequently has the opposite effect. When praise is used, usually it is pointing out what we think someone already does well." (p 16)

Montessori's guidelines to teachers in the **Absorbent Mind** (1988) agree with Ms Monaghan's suggestions on how to encourage children:

"Give the child responsibility
Look for their strengths
Have realistic expectations
Avoid comparison with others
Value risk taking
Model having the courage to be imperfect
Emphasise the action, not the actor or the result
Avoid criticism." (p 16)

The wonderful thing about being with the children is that through their optimism and their ability to come to each day fresh and loving, is a great opportunity for the adult who shares their life to grow personally and to become more aware of strengths and weaknesses. Steve Biddulph speaks of this in his inspiring book, **The Making of Love in Today's Society**.

I will conclude this section with another quote from Stephen Covey. This is from his book **First Things First** (1997):

"Life's tests refine you. Genuine friendships sustain you. Being unaffected and genuine, having integrity, and facing problems squarely help as you try to reach out, make a difference, touch a life, be an example, do the right thing. You become motivated as you struggle to become a better person.

The struggles are ongoing. After raising nine kids, I think I'm just beginning to get some perspective. Many times I blew it, lost my temper, misunderstood, judged before understanding, didn't listen, and acted unwisely. But I also tried to learn from my mistakes. I apologised, grew up, shifted my value, recognised growth stages, didn't overreact, rolled with the punches, learned to laugh at myself, had fewer rules, enjoyed life more, and realised that raising kids is hard work – physically and emotionally. It's draining as well as fulfilling. You fall into bed at night totally exhausted, and like Scarlett O'Hara murmur, "Tomorrow is another day." Oh to be half as smart as your child thinks you are and half as dumb as your teenager sees you!" (p 5)

WHAT IS EDUCATION?

Dr Montessori believed that the great purpose of education was to support life. Education should assist every human being to live better lives and to be more sensitively attuned to children so that the future generations would bring greater peace and human harmony to the world. Normally education is viewed in a more narrow way. It is often seen as a means of correcting faults in children or society generally. For example, the literacy and numeracy standards are believed to be dropping, so a new program is initiated in schools. Education is asked to react to problems. However, Montessori saw the potential for education to be far broader, more proactive in its positive influence by supporting the best in life rather than trying to correct its faults.

Montessori says (1988):

"This is education, understood as a help to life; an education from birth, which feeds a peaceful revolution and unites all in a common aim, attracting them to a single centre."

Education, therefore, is not a curriculum or timetable. Rachel Remen (1997) defines education in a very similar way to Montessori. She says that educate comes from the root word educare, "…the root word means to lead forth the innate wholeness in a person."

She goes on to speak about the theory of karma. She says:

"(It) suggests that life itself is in its essential nature both educational and healing, that the innate wholeness underlying the personality of each of us is being evolved, clarified and strengthened through the challenges and experiences of our lifetime." (Remen, 1997, p 325)

Montessori saw education as a force for the liberation of the personality. She said (1946)

"Education should no longer be mostly imparting of knowledge, but must take a new path, seeking the release of human potentialities."

Montessori education is therefore not tied to a static curriculum or a passing on of information. Margaret Stephenson, a well known Montessorian, quotes Dr Montessori in **Dr Montessori – A Contemporary Educator?** (1996)

"During 1948, in a lecture in Poona, India, Dr Montessori said,

'Today education ... is still largely the passing on of information. It is static and stagnant. It fails its purpose if it remains on the same old level, if it does not move with the needs of the time. Mere information imparted is nothing. It is the cultivation of the values that are hidden in the human personality that is of importance and urgently needed today.'"

Erich Fromm in his beautiful book, **The Art of Loving (1957, p 117),** validates this view. He says that the teaching of knowledge is useless:

"While we teach knowledge, we are losing that teaching which is the most important one for human development: The teaching which can only be given by the simple presence of the mature, loving person."

The globlisation of information and the pace of change, makes it vital that education is used in its broadest sense. The information in use today will be out of date in 20 years. As Mr Mario Montessori said in **Education for Human Development**, "It doesn't matter what we teach children so long as we teach them how to think."

Teaching children to think and question is suggested by the proponents of the study of philosophy for primary and secondary students and well known radical thinkers such as Edward de Bono (1990). Teachers who share philosophy and divergent thinking with children help them to see things from another perspective and to liberate their minds from their normal patterns of thought. They are helping children to develop habits of mind which are flexible and open to new ideas.

Dr Montessori (1989, p4), said that the best experience for a child in school was to have the spark of his or her imagination ignited, the seeds sown which would enthuse the child to want to find out for him or herself. The best curriculum for a child exists,

"not in a syllabus to be imposed on him, or with exactitude of detail, but in the broadcasting of the maximum number of seeds of interest. These will be held lightly in the mind, but will be capable of later germination, as the will becomes more directive, and thus he may later become an individual suited to these expansive times."

The seeds sown lead to germination of ideas and true understanding. The child begins to understand the reason underlying the knowledge instead of learning the rules by rote.

As Jane Healey points out in **Endangered Minds, Why Our Children Don't Think** (1990), children are losing the ability to reason out a problem, to apply their knowledge in new ways, to sustain interest over a period of time longer than the program space between advertisements on television. They need opportunities to think, to reason, to debate, to have conversations, to discuss ideas, to collaborate, to independently persist with a problem until it is solved. They do not need facts and rote learning. Jane Healey speaks with regret of the loss of the oral narrative tradition where the myths and fables of the culture were passed on to children. While listening to these stories and to the stories of their own families, the child will be developing imagination and the language and cognitive skills required for intellectual thought.

Jerome Bruner developed the narrative curriculum in which children's interest is sparked by "the building in the suspense of how things came to be." ("Schools of Thought: Pathways to Educational Reform", **NAMTA Journal**, 1991 Special Edition, Vol 16, No. 2, p6.)

Children do not need the answers, they need help in framing the questions and support in following up their sparks of interest.

Montessori education uses story telling for both pre-school and primary children. A four year old in a Montessori school will be told true stories: for example, the teacher's own life stories, the story of a lake, the story of the life cycle of a snail. In the primary school, the child is told the Great Stories: the origins of the universe, the story of how people began to use writing, the story of famous people in history, etc. These stories are not given to the child as the one true interpretation. They are given as what *might* have happened to spark interest and encourage further research. The children are encouraged to make up their own versions of the story using all the research tools and people at their disposal.

Rachel Remen, in her work as a therapist with people who are very ill, came to the realisation that mystery in life is more important than answers. As a medical doctor, she had worked for 30 years with the belief that patients came to her for answers, cures and that she had failed them if she could not supply the answers. I think that her words (1997, p 293) apply equally well to teachers, parents and people in the healing profession:

"Mystery seems to have the power to comfort, to offer hope and to lend meaning in times of loss and pain. In surprising ways it is the mysteriousness that strengthens us at such times. I used to try to offer people certainty in times that were not at all certain and could not be made certain. I now just offer my companionship and share my sense of mystery of the possible, of wonder. After twenty years of working with people with cancer, I find it possible to neither doubt nor accept the unprovable but simply to remain open and wait.

I accept that I may never know where truth lies in such matters. The most important questions don't seem to have ready answers. But the questions themselves have a healing power when they are shared. An answer is an invitation to stop thinking about something, to stop wondering. Life has no such stopping places, life is a process whose every event is connected to the moment that just went by. An unanswered question is a fine traveling companion. It sharpens your eye for the road."

When education is seen in Montessori's context of a broad preparation for life which begins at birth and may end at death, it can be understood that it goes far beyond the boundaries of the school room. Teachers share only part of the child's education and can be of the greatest support when they are sharing the essence of themselves, their experiences of life, their open-hearted values and of the least help when they are teaching memorised facts. When education is seen as liberating the personality, freeing the spirit of the child and uncovering the life force, it helps prepare the child for whatever he or she will encounter in life.

MONTESSORI AND THE NEW BORN

In **The Secret of Childhood** and **The Child in the Family**, Montessori speaks about the acute needs of the new born baby. She says that the baby and the mother need a period of quiet to adjust to the tremendous thing which has happened to them. The child should be welcomed by shaded lights, soft sounds and gentle touching because the baby is acutely sensitive to light, sound touch. As in the animal kingdom, the new born baby and mother should be protected by the family, left in peace to discover each other.

These beliefs have been echoed this century by many sensitive gynaecologists, midwives and childbirth educators. Le Boyer became famous in the 1960's by his proposal of a birth without violence. Dr Spock encouraged parents to be responsive to the baby's needs. Sheila Kitzinger advocated a gentle birth where the mother was in control of the birth process and active in the labour. Rather than the baby "being delivered" by the doctor, the mother was to give birth.

Recently, Dr Sarah Buckley wrote in **The Age** newspaper (29/11/96), recommending that women become more aware of the process of birth on themselves and their babies instead of allowing the "experts" to rule them:

"As a doctor and a mother, I ask myself why women are tolerating this situation. Why are educated, articulate women, who are prepared to battle for their rights in their personal and professional lives, so accepting of the high intervention rates that are characteristic of this group in particular? I ask why we are not at least advocating for our babies, at a time when science is discovering what mothers have known for years, that a new born baby is a highly sentient being, exquisitely sensitive to its emotional and physical environment…."

Montessori's advice for the care of the mother and the baby still reverberates amongst some people but needs to be far more widely accepted and supported by the whole of society.

BRAIN DEVELOPMENT

Recent research into the development of the brain has validated many of Montessori's views. Montessori divided the child's growth into planes of development lasting 6 years. She maintained that the first 3 years of a child's life (the first subplane of the First Plane of Development) witnesses the most phenomenal growth in the brain. A conference called, "Rethinking the Brain: New Insights into Early Development", was held in 1997 in the United States. In the Executive Summary, it states, "It is during the first three years of life that the vast majority of synapses is produced. The number of synapses increases with astonishing rapidity until about age three and then holds steady throughout the first decade of life."

Dr Montessori believed that the baby's brain had potentialities for growth in different areas, e.g., language, movement, manipulation, and acquisition of culture. She believed it was the child's interaction with the environment which caused these potentialities to become actual, experienced sensitive periods of growth during which time the brain was extremely adaptable to certain skills. If not utilised during this period, these skills would never develop to their fullest. This particular quality she called the "Absorbent Mind", which meant that the sensory exper-

iences of the baby actually shaped (she used the word "incarnated") the brain.

All of these assertions have been validated by recent brain research.

1) **Time Magazine** (February 1997, p 50) reported on the latest brain research. Carla Shatz, a neurobiologist at the University of California, reports the fact that at birth the baby's brain has 100 billion neurons, "roughly as many nerve cells as there are stars in the Milky Way....

> *But while the brain contains virtually all the nerve cells it will ever have, the pattern of wiring between them has yet to stabilize. Up to this point ... what the brain has done is lay out circuits that are its best guess about what is required for vision, for language, for whatever .... And now it is up to neural activity, no longer spontaneous but driven by a flood of sensory experiences, to take this rough blueprint and progressively refine it."*

2) Findings published both in the proceedings of the Conference, "Rethinking the Brain" and in Jane Healy's book, **Endangered Minds** (1990), state that current research reveals that the child's brain has special times when it is most receptive to new skills or aspects of the environment. It is variously called prime time, critical periods, windows of learning and sensitive periods.

From "Fertile Minds" in **Time Magazine** (1997, p 55), for example, it is explained that baby's have a repertoire of all the sounds in the human language. But by the age of 6 months, they are refining their perceptions to include only those from their own culture:

> *"The University of Washington's Patricia Kuhl and her colleagues have conditioned dozens of new born to turn their heads when they detect the ee sound emitted by American parents vs. the eu favoured by doting Swedes. Very young babies ... invariably perceive slight variations in pronunciation as totally different sounds. But by the age of six months, American babies no longer react when they hear variants of 'ee'...'It's as though their brains have formed little magnets.' says Kuhl, 'and all the sounds in the vicinity are swept in.'"*

Another sensitive period focuses on the language skill of phonemic awareness. Healy (1990, p 287) speaks about the importance of the skill of hearing the individual sounds in words (phonemic awareness) in the later ability to read:

> *"...yet children do not necessarily pick up these skills without certain types of listening experiences. Children who have missed out during the sensitive period for auditory discrimination, especially need concentrated training in these skills. Although lack of early experience may still result in gaps, a good training program can probably make up at least some of the lost ground."*

3) There is much recent evidence to support Montessori's view that the baby and young child's brain is formed by interaction with the environment and is indelibly marked by experiences. Research has found that the electrical activity of the brain, when it is in contact with an experience, changes the physical structure of the brain. If a child is deprived of a stimulating environment, the child's brain develops less than those children who have been played with, touched and talked to. Jane Healy (1990, p 48) says:

> *"We now have clear evidence that the environment can play a role in shaping brain structure and, in turn, learning behaviour. It is the area of the brain which is stimulated which grows."*

Unpleasant or frightening experiences impact on the child's brain in the same way and leave an indelible mark. The 1997 article from **Time** reports:

> *"Children who are physically abused early in life ... develop brains that are exquisitely tuned to danger. At the slightest threat, their hearts race, their stress hormones surge and their brains anxiously track the nonverbal clues that might signal the next attack. Because the brain develops in sequence, with more primitive structures stabilizing their connections first, early abuse is particularly damaging.... Experience is the chief architect of the brain. And because these early experiences of stress form a kind of template around which later brain development is organised, the changes they create are all the more pervasive."*

It is sobering to note here that often parents believe that a family breakdown will affect an older child more than a younger baby. However, the evidence now seems to suggest that the effect of family trauma on a baby is far more pervasive and is indelible.

STRUCTURE OF SCHOOLS

The structure of schools today reflects Montessori's theory of the planes of development. The primary school encompasses the years of the second plane (6-12) and

secondary school covers the third plane (12-18). There is an understanding on the part of educators that there is a difference in intellectual, social and emotional needs between the children of the second and third planes even if they are unaware of Montessori's theories.

Montessori believed it was extremely important to mix the ages of the children in their school groups. She advocated 3, 4 and 5 year olds together; 6, 7, and 8 years olds together; and, 9, 10 and 11 year olds together. Educators today are discovering the benefits of **multi-aged** classrooms, also called "composites". In America the concept is called "looping" and in Great Britain, "family clusters." The teachers recognise the benefits of having children for at least two years.
Although not all schools gather children in multi-aged groups, there is a recognition that a child's learning cannot be judged by his or her age. Montessori believed that the child proceeded according to his or her own pace and that this should be respected. The curriculum should be shaped for the child's interest and stage of development, not to his or her chronological age. The Curriculum Standards Frameworks is an initiative of the Victorian government. It is a broad description of a curriculum in primary and secondary schools. Children are not placed in 12 grade levels but in broader bands of development. A child is in a particular level for at least 2 years. This recognises that the curriculum should be more expansive and horizontal rather than vertical, allowing for individual exploration.

Montessori schools follow the structure of a **3-hour work cycle**. Montessori observed the children's pattern of activity and noted that they needed a full 3 hours to move from short, easy tasks to the longer, more concentrated work which she called their "great work period". If this freedom is offered the child, he or she will have the opportunity of coming to know his or her own work cycle.

The most recent literacy initiatives of the education department in Victoria call for a restructuring of the timetable so that children can have a **block of 2 hours** to concentrate on literacy skills. The program is called, "Keys to Life". There is a greater emphasis on individual work by the child with more time for 1-1 work with the teacher. In the Catholic education system, a similar program is called, "Literacy Advance". This program also recommends the benefits of a two-hour block each morning for the development of literacy. An enthusiastic teacher in NSW, Ann Morrice, was encouraged by her Principal to establish a new method of teaching children to write and read. She used the 2-hour block as the foundation for her program, which shows early signs of success with 5 year olds. These programs recognise that the child learns best when allowed to move at his or her own pace and to have the opportunity to repeat tasks.

Some Principals would like to offer a longer work period but find this impossible within the timetable constraints where the '8 Key Learning Areas' have to be given time.

THE CURRENT CURRICULUM DEBATE

There is wide acceptance of Montessori's view that the early years of a child's life are the most important for laying the foundations, but only a few voices are raised on behalf of the importance of the pre-school years. Governments show their interest in the curriculum only when formal schooling begins. The brain research cited earlier, however, shows that if governments are truly concerned with the prosperity of the future, they would turn their attention to day care centres and kindergartens when children have the highest potential for learning.

The Montessori curriculum for the 3-6 and 6-12 year old child does not separate subject areas either by timetable or by limiting the child's choice of work. This means that the child integrates the curriculum naturally. When a seed of interest is sown by a story or by watching an older child work, the child is free to follow that interest. For example, if the child's interest has been sparked by the Story of the Coming of Life on the Planet, he or she may move into researching astronomy, physics, mathematics, chemistry, and geology.

The Curriculum Standards Frameworks which was mentioned earlier recommends that teachers integrate the curriculum as much as possible. The writers recommend that children learn better when the subjects relate to and build on each other. They suggest that teachers select a theme which is general, so that many 'Key Learning Areas' can be woven into the subject matter.

A famous American educator, Jerome Bruner, recommended what he called a spiral curriculum and gave teachers an example of one such curriculum when he developed, "Man a Course

of Study" (MACOS). A spiral curriculum is integrated so that each step of learning rests on the one which went before.

Montessori called the classroom experiences of a child aged from 6–12 in Montessori schools, "cosmic education with a fusion curriculum". It has no artificial barriers between subjects. David Kahn (1991, p 10) calls the Montessori curriculum "incomplete" and likened it to Bruner's "Man a Course of Study", which has been called "the unfinished curriculum." Kahn says "The Montessori framework is incomplete by design, and therefore the curriculum is deliberately left to the child and teacher to complete its formation through activity, discovery, experience, structure and thoughtfulness."

The child who is fortunate enough to fully experience the 'cosmic education' as envisioned by Montessori, emerges at age 12 with a deep understanding of the delicate balance of all things living and non-living on the planet. This child has a sophisticated understanding of the inter-relationships of all things. Current curriculum writers have recognised the importance of developing this understanding in primary and secondary students and have written curriculum documents covering them in the 'Key Learning Areas' of Studies of Society and the Environment (SOSE) and Technology.

People who are concerned with the environment and ecology today advocate that deep thought should be given to any projects which have an impact on the physical environment, Seddon (1997). They believe that it is not possible to introduce, for example, a new farming method, a bacteria which kills rabbits or a new species to an area – such as sparrows into Australia – without altering the delicate balance of ecology. This sensitivity is exactly what children are receiving when they are told the 'Great Stories' in Montessori primary schools, and it is what the curriculum writers of the CSF for SOSE and Technology are aiming at in the late 1990's.

Organisations supporting such occasions as the annual Arbour Week, recognise primary school students' particular sensitivity towards the environment and their responsibility to it. Their printed material and practical help to schools is an important contribution to an understanding of world ecology.

It is clear that there is much rethinking going on in curriculum development. Every few years state and Catholic school teachers must adopt a new method and content of teaching. This is tiring and dispiriting for teachers, sometimes making them cynical or wanting to leave the profession. The curriculum writers in Victoria would do well to study the Montessori program as it contains all the important areas of study in the 'Key Learning Areas'.

This tendency to reinvent the wheel also occurs in America. As Howard Gardner (**NAMTA Journal** 1991), author of the theory of multiple intelligences, said in an interview:

> *"I think there is general agreement that mass education is in trouble. The attempts to try to improve education across the board are entirely praiseworthy. However, I am personally disappointed by the fact that these new reforms have paid so little attention to interesting experiments which have worked already … around the margins, to progressive education ideas and to ideas which are associated with particular schools of thought such as piagetian education or Montessori education. Why go back to the drawing boards and mandate instruments from on high when you can already learn a great deal from projects which have succeeded over a period of ten to fifty years?"*

THE MONTESSORI LANGUAGE PROGRAM

The Montessori language program, when followed carefully, is the only one in existence today which takes a 3 year old child from playing with words and having fun with sounds, through to the breaking up of these words into units of sound and to identifying these units with a letter of the alphabet. The child is then free to write! He or she is not limited by the physical skills of writing with a pencil but is set free to form thoughts into physical symbols by the use of an ingenious wooden alphabet which the child is free to manipulate. Reading, which occurs later at about the age of four or five, is based on this firm foundation of awareness of the sounds of our language and its relation to a symbol.

The Montessori language program follows the principles of:

- basing writing and reading on a firm oral language foundation;
- moving from speaking to writing using sandpaper letters and a movable alphabet which is manipulated by the child and incorporates movement;
- moving to a whole word approach so that the child has the 2 major word attack

skills of phonics and sight words – again incorporating movement to assist learning;
- introducing the study of the structure of the language, i.e., grammar to enhance writing skills; and
- moving to the twin goals of total reading and total writing.

The current research into how children become literate fully supports the Montessori approach to language. The research is implemented by various programs such as the West Australian First Steps program, the Keys to Life in Victoria, Reading Recovery which is Australia-wide and Ann Morrice's interesting experiment in NSW referred to above. All are firmly founded on the importance of phonemic awareness, the use of phonics, the importance of oral discussion, the use of meaningful print, the importance of good literature and the development of the child's personal word bank.

These are all Montessori principles and have been in use for over 80 years in Montessori classrooms. A clear description of the Montessori approach to language can be found in Pat Hilson's excellent thesis which was written for her Master of Education degree from the Canberra CAE in 1987.

MONTESSORI EDUCATION – A MULTI SENSORY APPROACH

It is now well established that children have different modes of learning. Some children are more visual, some are aural and some are more kinaesthetic. Howard Gardner (1983) identified linguistic, musical, logical-mathematical, spatial and bodily-kinesthetic intelligence. Whether these different modes of intelligence exist or not, it is important that a child is able to explore the world using many different parts of his or her brain. The Montessori method of education activates all areas of the brain and encourages a child to learn by many different modes.

Theodor Hellbrugge, a German paediatrician, established a highly successful program called, "Action Sunshine" in Munich in the late 70's. His theory was that handicapped children could be taught alongside normally able children using the materials of Montessori education. He chose this method because it called on the full range of learning styles. As recorded in Montessori (1997, p169) Hellbrugge said in 1989:

> *"The therapeutic potential of Montessori's theory lies primarily in its physiological approach to the senses. Learning by seeing, hearing, smelling, feeling as well as through movement (kinaesthetic learning), is strongly encouraged in the Montessori approach by the material. The child assimilates auditory, visual, gustatory, tactile and olfactory impressions.... Working with the sensory material helps the child to understand what he sees, hears and touches. In sensori-motor learning, the child combines different impressions, and develops concepts. Only when these subprocesses are sufficiently developed is abstract thought possible."*

Mr Hellbrugge found remarkable success in these methods. The children's progress was monitored over several years as they progressed through primary and secondary school after 4 years at the pre-school level. They have been able to pass entrance examinations into conventional schools, and some have completed secondary school.

Mr Hellbrugge again (p 175):

> *"In the program of developmental rehabilitation, as it was founded 15 years ago in the Munich Paediatric Centre with the aim of utilizing the unique opportunities of early childhood development to rehabilitate children with congenital or early disorders or damage, Montessori education ... has a decisive role to play in the integration of those children ... into the family, into ordinary nursery school, and into ordinary school. This new approach is meanwhile starting to be accepted and practised not only in the Federal republic of Germany but also internationally."*

The Montessori materials which support the educational philosophy are successful with children of all abilities because they stimulate the full range of learning styles.

THIRD PLANE OF DEVELOPMENT

Montessori saw that young people aged between 12 and 18 needed a very different environment to that provided by a primary school. She said in **Basic Ideas of Montessori's Educational Theory** (1939, p 151)

> *"During the difficult period of adolescence it is desirable to have the child live outside his habitual surroundings, outside the family, in the country, in a peaceful place...Life in the open air, in the sun, a diet rich in vitamins furnished by the nearby fields are the auxiliaries so precious to the body of the adolescent; while the calm environment, the silence, the marvels of nature*

satisfy the mind and are conducive to its functions of reflection and meditation."

Dr Montessori (p 153) envisioned the young people learning to live in a mini-society, preparing for the life in the greater society by practicing its functions in a more secure environment away from their parents and family.

"A modern farm requiring a number of scientific and manual labours presents the chance to produce, then to exchange, and also to enter into direct contact with society through the store or sales stand. By providing a hotel annex, "The Rural Children's Hotel", the school affords itself the opportunity of initiating the children into all that such an enterprise entails.

Such a house, receiving both boys and girls, should be directed by a married couple who, in addition to the material functions, exercise a moral and protective influence on the youths. It would be a family house."

This need for a different lifestyle, away from family and the city, has been acknowledged by other educators. Several private schools in Australia offer the opportunity for students in Year 9 to live away from home in the country. One such school is Geelong Grammar. The Principal, Sir James Darling, saw it as a time for students to develop confidence, self-reliance and independence:

"The theory of Timbertop was this: that adolescent boys could better develop by themselves, out of the usual school machine. Placed in a different and less clement environment, they should undertake responsibility for themselves and be given the challenges of something like a man's life under conditions which they had to conquer. But the first principle was essentially one of self reliance and the challenge to live up to this responsibility."

(Geelong Grammar Prospectus)

CONCLUSION

I have been able to touch on only some of the areas of the Montessori philosophy which have been validated by other thinkers. In the space of this paper it has not been possible to explore this theme fully. Dr Montessori's brilliant work demystifying the teaching of mathematics, her work on the spiritual nature of the child and the importance of silence, conflict resolution and peace in schools, the development of the conscience as part of moral development, are all deserving of full attention, and I would recommend their exploration to anyone who is interested in human development.

I would like to conclude with an image which I believe encapsulates the essence of Dr Montessori's hope for children. I am indebted to Gordon Preece of Ridley College for this image. He spoke of nurturing and assisting children with an open hand. This open hand supports but does not crush, it guides but does not force. It supports the child lightly, giving strength where needed but always with an implied belief that the child has the inner strength, the skills and the independence to do it alone.

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