Our deepest fear is not that
we are inadequate.

Our deepest fear is that we are
powerful beyond measure.

It is our light, not our darkness,
that most frightens us.

We ask ourselves: Who am I to be
brilliant, gorgeous,
talented and fabulous?

Actually who are you not to be?
You are a child of God.

Your playing small doesn't serve the world.

There is nothing enlightened about
shrinking so that other people
won't feel insecure around you.

We are born to manifest the glory
of God that is within us.
It is not just in some of us; it's in everyone.

And as we let our own light shine,
we unconsciously give other
people permission to do the same.

As we are liberated from our own fear
our presence automatically liberates others.

NELSON MANDELA
President of South Africa*

* Extracts from his 1994 presidential inaugural address.

Chapter Fifteen

How any country can lead the learning revolution: so can you

Now it's your turn. The Learning Revolution is yours to shape.

Almost everything that idealistic dreamers ever imagined is now possible. The knowledge exists to create the world's first truly learned society. That learning revolution will flower fastest when it brings together all these elements:

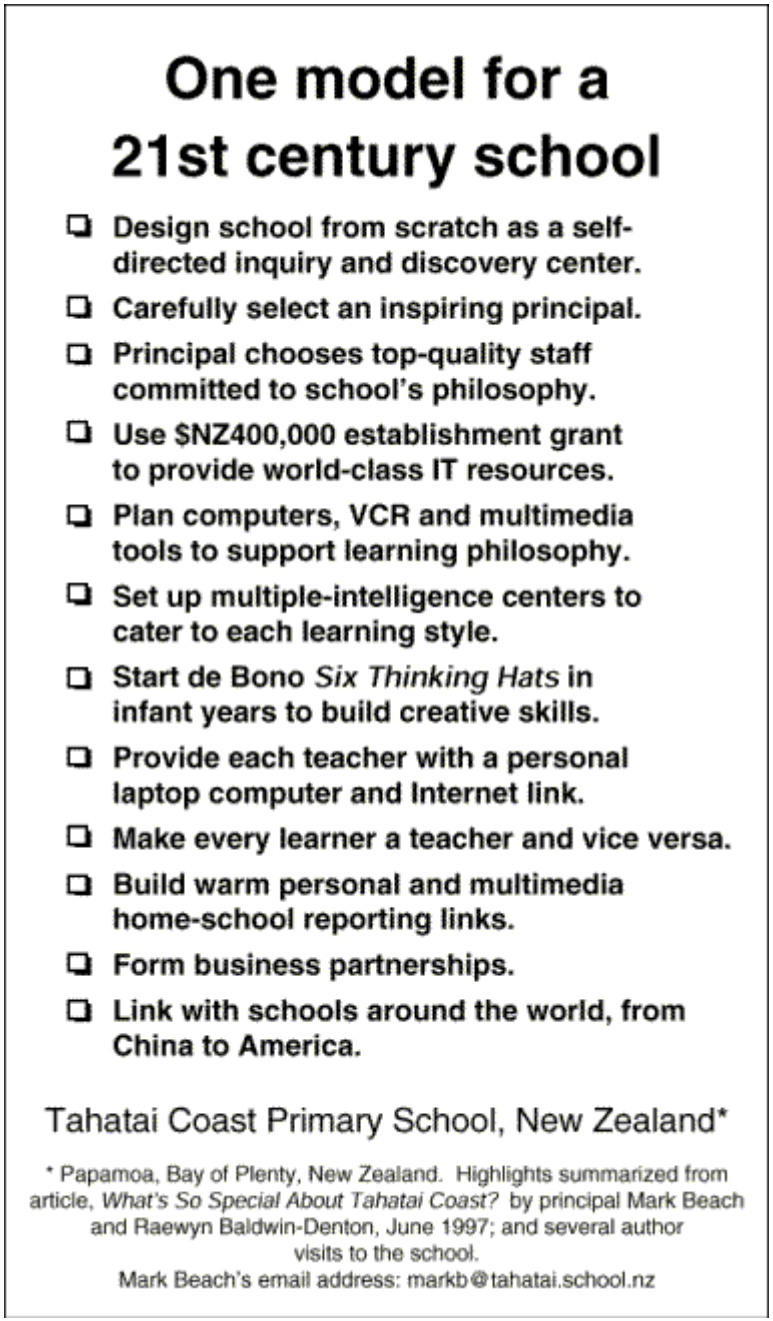
- ❑ Introduce great infant-development and parenting programs.
- ❑ Lead the world in interactive communications technology.
- ❑ Choose from the proven best methods of learning.
- ❑ Mount school-business partnerships and initiatives.
- ❑ Make teacher retraining a top priority.
- ❑ Provide farsighted government leadership.
- ❑ Make lifelong learning a philosophy.
- ❑ Build on the strengths of each nation's own culture.
- ❑ And encourage students to be teachers as well as learners.

Already exciting models are showing that revolution in action.

The Singapore centralized leadership model

On a centralized Government level, the biggest challenge has been thrown down by the Government of Singapore.

Its master plan we've already covered: a $US1.5 billion program to introduce the world's best educational technology to schools and society. It is using that for teaching new skills, with high emphasis on creative thinking and lifelong learning. It's also built in positive steps to ensure



that all students from poorer families can benefit. Singapore's society, of course, is highly centralized: with strong government leadership and a high level of disciplined conformity. Only a handful of its public schools are independently run. And one of them, Raffles Girls School, thinks it has already achieved most of the targets set by the Government for 2002. Sit with bubbling, energetic principal Carmee Lim in her office and you catch the enthusiasm that has made Raffles the top high school in the state.

Switching on her computer, she spends half an hour showing you the Raffles web site: the color photographs of hundreds of students on Outward Bound courses; others on field trips to China and Australia; yet others producing a wide range of computer programs; the entire school on community-service projects; all students surfing the Internet. Like Miriam Kronish at John Eliot School in Massachusetts, Carmee Lim is the epitome of tomorrow's school leader: with the common sense and sparkling drive needed to turn schools into self-directed learning centers.

The decentralized New Zealand model

For a decentralized economy, some of the best models are emerging in New Zealand. All of its 2,700 schools, public and private, are now run by independent parent-elected boards of trustees. And the public policy is competition for excellence.

Go into Tahatai Coast School at Papamoa in the North Island's Bay of Plenty region, and you'll see what can happen when a new primary "school of tomorrow" is designed from scratch. When you drive up to its entrance you think you've arrived at an up-market Californian ranch-style private condominium complex.

Go into any of the classrooms and you'll find students working in Howard Gardner-style multiple-intelligence groupings, with teachers catering to individual learning styles. In every room you'll find de Bono *Six Thinking Hats* material. And every classroom is linked to the entire world: by satellite, cable and interactive electronic networking.

Innovative principal Mark Beach and his staff have traveled extensively in the United States and Canada to pick up new ideas. He also says Tahatai Coast School has been fortunate with another big "plus": it was designed as a new-era school. And it has been able to select staff to fit the new philosophy. "For the first ten jobs," he says, "we had 200 applicants, so we've been able to select exceptional people." [1]

As a new school, Tahatai Coast received an establishment grant of

A Swedish model for the future

- Build a school for children from age three: "An extraordinary school for ordinary children".
- Make its motto: "A school valuing chickens and computers"—blending nature with the world's best technology.
- Build on the concept of many intelligences so education is tailor-made for each student, respecting unique talent and ability.
- Set up a "Knowledge Port" as an information technology center, with three arms:
  - A multimedia communications and production center.
  - A multimedia publishing company, specializing in learning material.
  - A training center for teachers and others who work with children, with special emphasis on new technology.
- Establish two other projects to promote the concept of lifelong learning:
  - A "school without walls" so students can learn from a variety of experiences.
  - A multimedia center to act as a family and community resource.

*The Welfare Renaissance: The New Swedish Model**

* By Helen H. Wallenberg and Michael S. Bogolea, published by The Carpe Vitam Foundation, Lemshaga, 13461 Ingaro, Sweden, which operates the project.

$216,000. It spent most of this on "big budget high tech items". But for many others it has had to raise the money. And here too it is one of many schools making the most of a joint venture with Telecom, New Zealand's main telephone company. Tahatai is a Telecom site school. That means 5% of the income from specified "family and friends" long-distance calls is donated to the school. But those donations come only from homes and businesses signed up by the school. So the program both helps pay for the school's computers and personally involves its community directly in the funding and learning process.

In 1999 Tahatai became one of 23 model schools selected by New Zealand's Ministry of Education to be the on-site staff-development training centers for information technology. These centers are spread around New Zealand - a country the same area as Oregon - so collectively they can cater to the needs of principals and teachers across the island nation. This is an adaptation of the "Navigator Schools" model used with great success by the Australian state of Victoria.

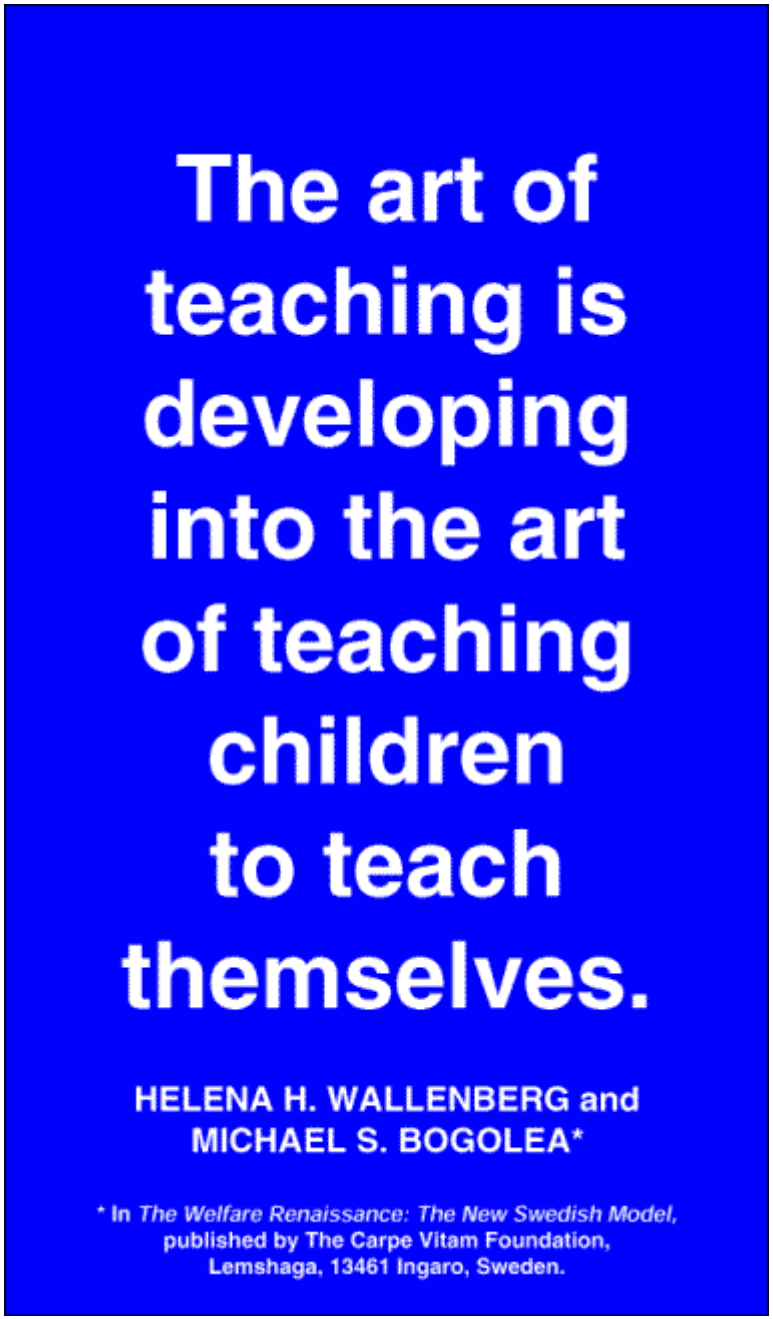
The new Swedish models

Swedish innovators are seeking to blend the skills of entrepreneurs with the best elements of a decentralized welfare state.

Swedish publishers Ingemar and Gunilla Svantesson, for instance, have used *The Learning Revolution* as the "umbrella" to launch other books. Their company has brought several international specialists to Sweden for seminars, following several successful Vos tours.

Helena W. Wallenberg has gone even further, and set out a plan for "a welfare renaissance". This promotes "an alternative which changes the philosophy of welfare from welfare entitlement to welfare responsibility, from educationally dependent to educationally empowered".[2] With colleague Michael S. Bogolea and others, she has established The Carpe Vitam Foundation. It has set up a model school-of-the-future, a multimedia publishing company, a community educational center integrated into the business community, and a teacher-training center.

Their new school is The Lemshaga Bernakademi, designed as "an extraordinary school for ordinary children" - a school "valuing chickens and computers" so that it links nature with the best in technology. It has students from three to 15. From as early as three years, they are exposed to languages, mathematics and science. Many aspects of the school are based around Howard Gardner's concepts of multiple intelligence.



Its next project is a "Knowledge Port: a school without walls, where we try to integrate seventh, eighth and ninth grade with high school, and actually move the children around to workplaces, study halls, language institutes, gyms etc. for a more reality-based education". The foundation is also working "on a community-based media center open to everyone. The idea is that it will be the core that connects all the schools and families in the community." Helena Wallenberg is now pressing for companies to get tax-credits for investing in "enterprise zones" that will be built around lifelong learning centers.

In the city of Lund, in the south of Sweden are 38 relatively new preschool centers and three combined early-childhood and elementary schools operated by a group known as Pysslingen. The project is administered by private enterprise, working with local authorities, aimed at providing high-quality "educare". "The goal," says leader Monica Lundberg, "has been to combine the best from the public sector - fair distribution - with the best from private enterprise: efficiency." [3]

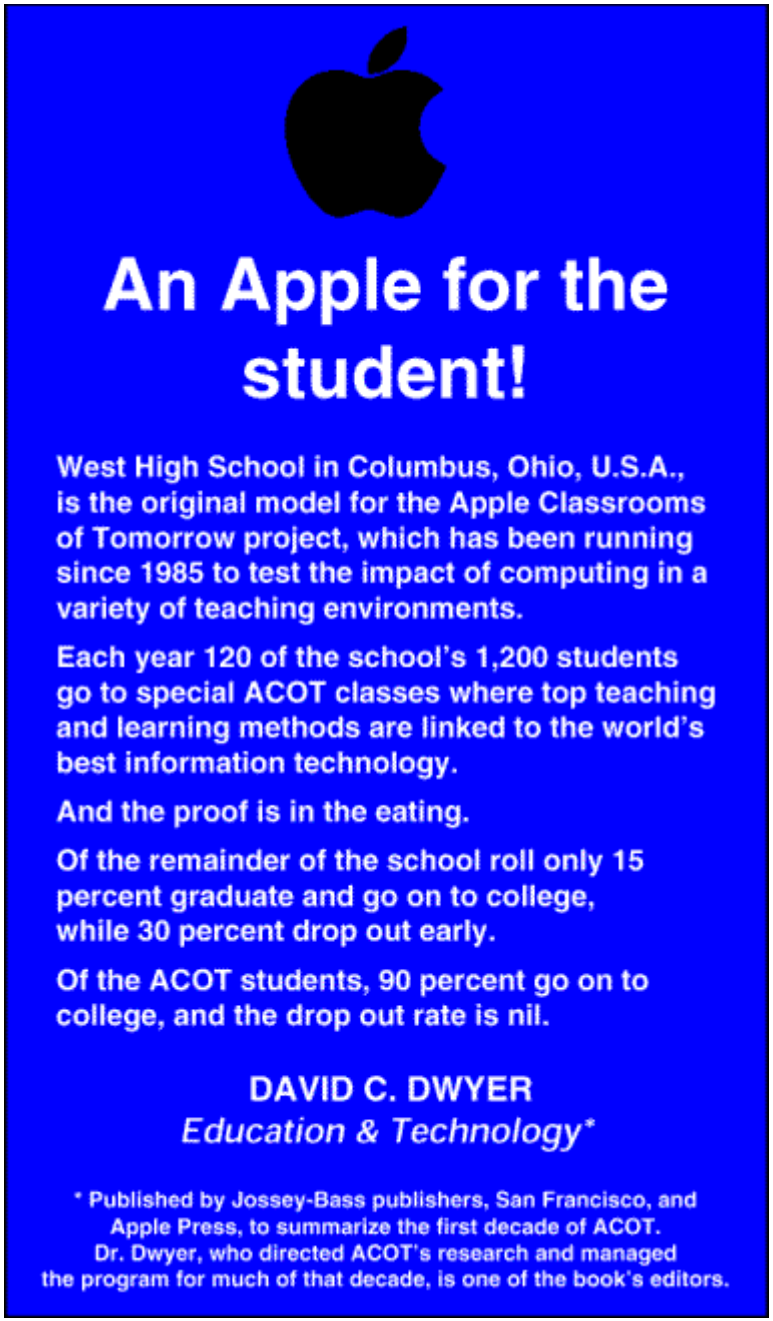
Monica Lundberg says the business-school model has proved so effective that many local governments - which are in charge of Swedish schooling - now turn to Pysslingen to run their government programs. Pysslingen is also setting up an integrated combined early-childhood-elementary school center for disabled children, combining accelerated learning methods with new methods for physical training.

The certification model

Sweden is also showing the way in training teachers in a combination of the best methods outlined in this book, so they can become certified "learning revolution" practitioners.

More than 25,000 Swedish teachers have so far been trained by co-author Vos. Most started off at short workshops, but many have followed-up with one-week courses. From Gullivare schools, in Sweden's Arctic Circle, for example, 45 teachers attended Jeannette Vos's Module One certification program in 1997. Fifteen of them came to Module Two, on group dynamics, and Module Three, on curriculum design.

In 1998 they have taken two final modules on advanced techniques. And those qualifying go on to train other teachers in the same methods. Jeannette's Learning Revolution Academy is now running similar modules each year in San Diego, California, as well as Sweden.



Corporate leadership models

In the corporate world, the models also abound:

- From Andersen Consulting's highly-impressive company university in St. Charles, Illinois, where the world's largest firm of management consultants spends more than $400 million a year on internal staff training - using the latest in multimedia, interactive case-study models.
- From Stan Shih's Acer Group and the $7 million it has contributed to set up The Acer Foundation.
- From the United Kingdom's biggest company, British Telecommunications, which is mounting a five-year, nine-figure millennium project to involve Britain's 60 million population to communicate better.
- And from Apple Computers, which has pioneered one of the longest partnerships between the corporate and school worlds.

Its Apple Classrooms of Tomorrow (ACOT) project has been running in America since 1985. Some of the results have been spectacular.[4]

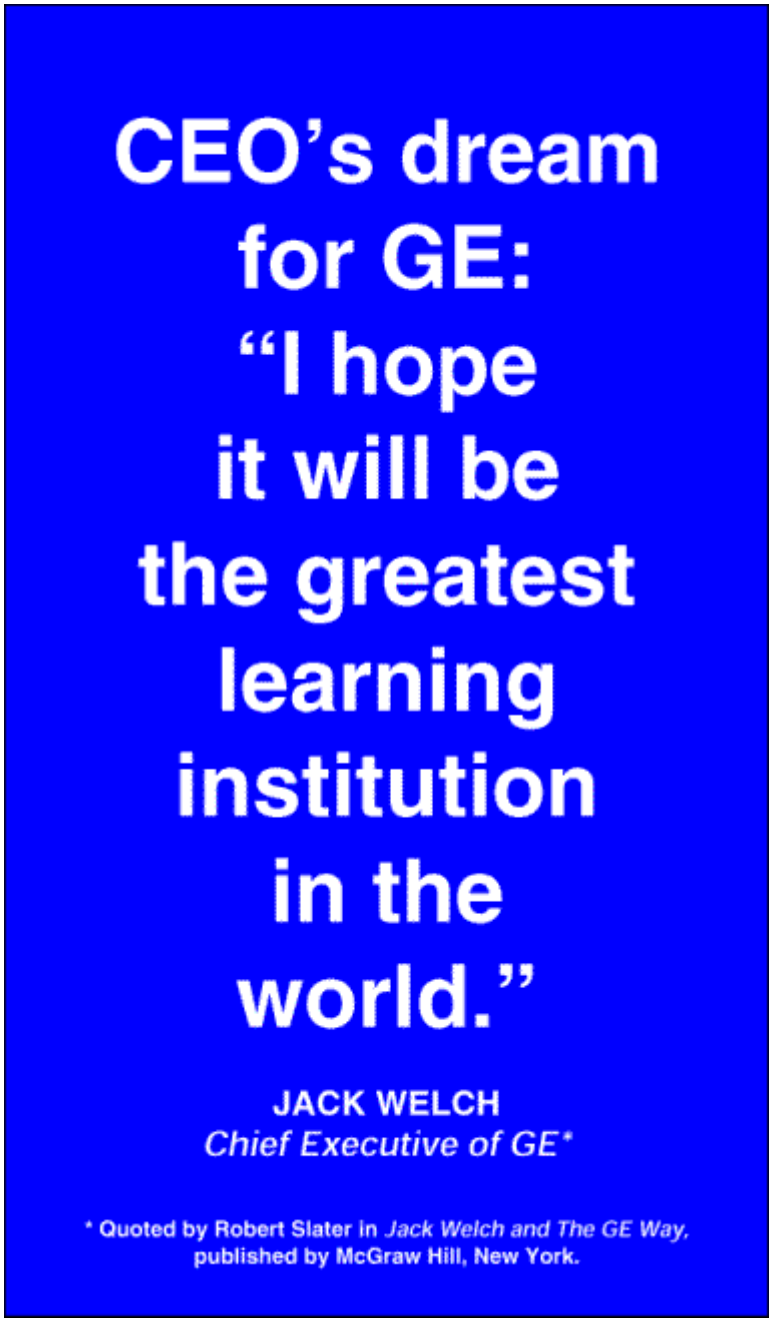
West High School in Columbus, Ohio, is the original ACOT model. It operates as a school within a school. It caters each year to 120 of the school's 1,200 students. Of the total school roll, only 15 percent of students have gone on to college. Of those attending ACOT: 90 percent.

Students at Bell High School in south-western Los Angeles County - a high poverty area - have won more than 100 awards for producing their own videos as key components of their multimedia ACOT program.

Lincoln High School in San Jose, California, has worked in closely with a local television station and the police department to pioneer digital photography. Its students have even collaborated with NASA scientists to produce an interactive educational CD-ROM about the effects of space on the heart.

But despite these great examples, America - the richest nation on earth - continues to provide the greatest possible contrasts: corporate leaders in informational software and hardware yet with a public school system that veers from brilliant to appalling. By contrast, companies such as Microsoft, Oracle, Hewlett-Packard and Netscape are revolutionizing the entire field of instant communications. And several of them are revolutionizing their businesses into learning organizations.

GE Chief Executive Jack Welsh is caught up in building what he calls a learning culture in a highly diversified corporation that was founded more than 100 years ago by Thomas Edison. And as Robert Slater quotes



the company's leader in *Jack Welch and the GE Way:* "What sets GE apart is a culture that uses this wide diversity as a limitless source of learning opportunities, a storehouse of ideas whose breadth and richness is unmatched in world business. At the heart of this culture is the understanding that an organization's ability to learn, and translate that learning into action rapidly, is the ultimate competitive business advantage."

Welch is consistently voted by his peers as America's most-admired corporate manager. Before he took over the company, fully 80 percent of General Electric's earnings came from its traditional electrical and electronic manufacturing businesses. Now more than 80 percent comes from selling services, training and finance. Asked by Slater whether GE would look like it does today in 20 to 30 years time, Welch replied: " I doubt it. I hope it will be the greatest learning institution in the world."

The give-it-away model

We believe the Netscape concept of free software through the Internet will also be one of the main breakthroughs to revolutionize the delivery of learning programs: give it away - and sell the add-ons.

The whole culture of the Internet has been built around an open environment, where people around the world freely share knowledge. University researchers have been using it for years to swap information, so the pattern of the future is already set.

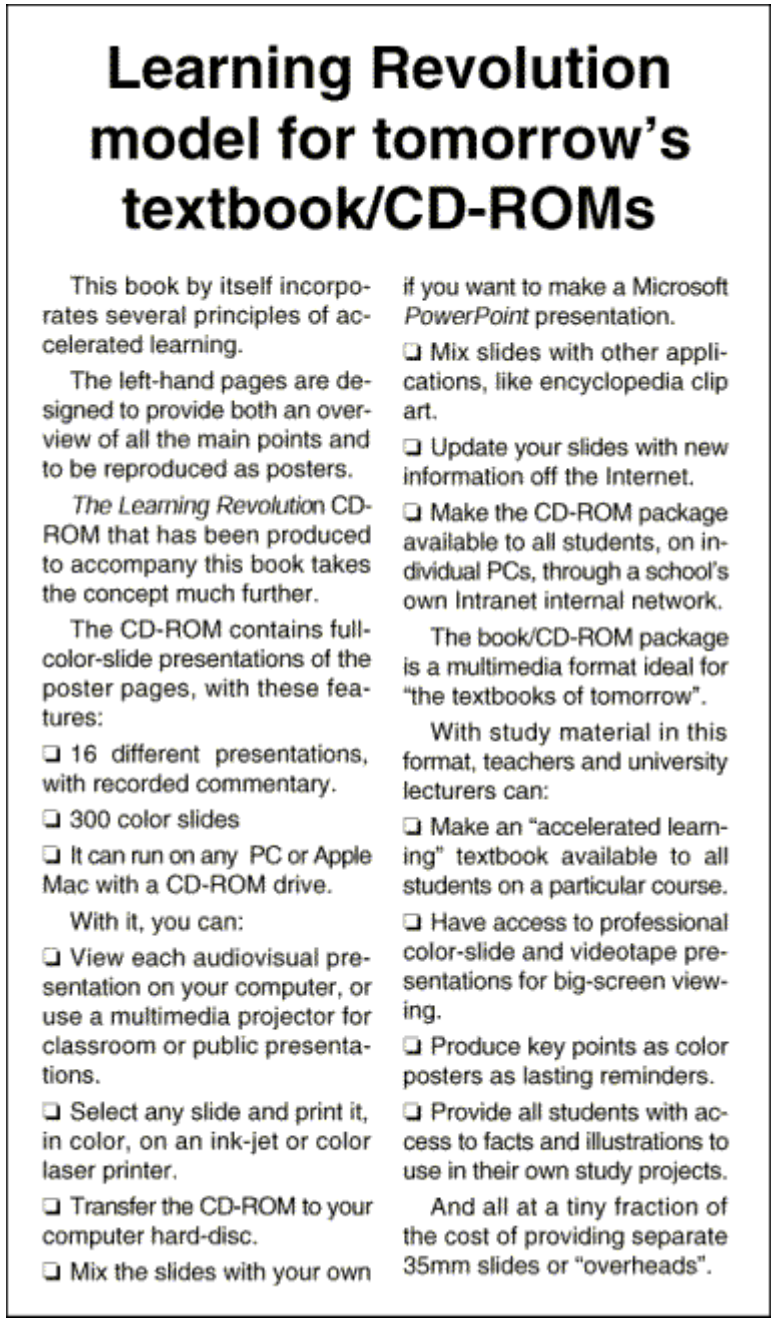
We're convinced that sometime soon most complex computer programs will be stored at central Internet web sites, and you'll be able to access them instantly through a "network computer" - call it what you like - connected to your television set, or as a combined TV-PC.

We're also convinced that one path to the future involves combining the abilities of the world's best teachers and making them available to all the world through interactive multimedia sources. Any school system not developing that concept will be left behind and surpassed by individual and corporate initiatives.

The Internet selling model

But the Internet is not only great for exchanging information; it's emerging as a potent new way to sell learning products.

By May 1997 Dell Computers were achieving $1 million in sales a day



Learning Revolution model for tomorrow's textbook/CD-ROMs

This book by itself incorporates several principles of accelerated learning.

The left-hand pages are designed to provide both an overview of all the main points and to be reproduced as posters.

The Learning Revolution CD-ROM that has been produced to accompany this book takes the concept much further.

The CD-ROM contains full-color-slide presentations of the poster pages, with these features:

❑ 16 different presentations, with recorded commentary.

❑ 300 color slides

❑ It can run on any PC or Apple Mac with a CD-ROM drive.

With it, you can:

❑ View each audiovisual presentation on your computer, or use a multimedia projector for classroom or public presentations.

❑ Select any slide and print it, in color, on an ink-jet or color laser printer.

❑ Transfer the CD-ROM to your computer hard-disc.

❑ Mix the slides with your own if you want to make a Microsoft *PowerPoint* presentation.

❑ Mix slides with other applications, like encyclopedia clip art.

❑ Update your slides with new information off the Internet.

❑ Make the CD-ROM package available to all students, on individual PCs, through a school's own Intranet internal network.

The book/CD-ROM package is a multimedia format ideal for "the textbooks of tomorrow".

With study material in this format, teachers and university lecturers can:

❑ Make an "accelerated learning" textbook available to all students on a particular course.

❑ Have access to professional color-slide and videotape presentations for big-screen viewing.

❑ Produce key points as color posters as lasting reminders.

❑ Provide all students with access to facts and illustrations to use in their own study projects.

And all at a tiny fraction of the cost of providing separate 35mm slides or "overheads".

from the Internet, and by early 1999 that was up to $18 million a day.

"Virtual book companies" such as Amazon, in the United States, and the Internet Book Shop and Blackwells, in England, now offer millions of titles for ordering on line. We predict this model will be one of the most successful commercial applications of the learning revolution.

The business-teacher-multimedia model

The barriers between business and education are rapidly coming down, and that, too, is an essential part of the breakthrough.

Again several initiatives in innovative New Zealand show the models:

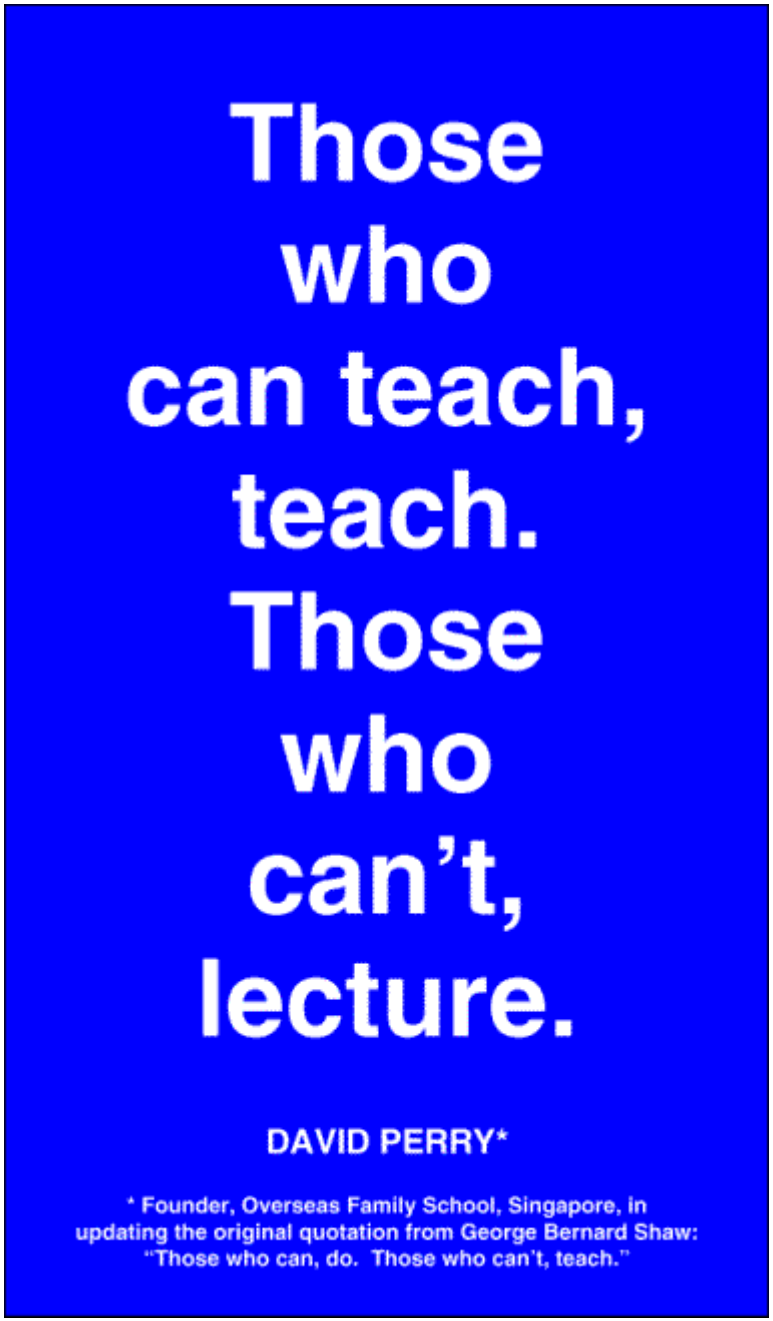
❑ Publisher Wendy Pye has become one of New Zealand's wealthiest business women. Dismissed by New Zealand News Ltd. when it was taken over by an investment company, she formed Sunshine books. Its philosophy: teaching children to read. Its theoretical base: New Zealand's whole-language reading research. Its authors: some of the world's best, starting with Joy Cowley and June Melser. Its big breakthrough, apart from Wendy Pye's entrepreneurial brilliance: setting up a television production partnership between her, Brian Cutting - a reading expert and former teachers' training college lecturer - and television network pioneer Tom Parkinson.

That led to the production of *The Magic Box* television series which now screens Monday to Friday on the United States Learning Channel to an audience of 15 million, promoting sales of the books it features. Sales to date of Sunshine books: 85 million units.[5] Sunshine is also a leader in learning on the Internet. The company has seven-year-olds in countries and states as diverse as South Africa, Alaska, New Zealand, Singapore, Poland, Canada and America designing their own books on line.

❑ Also from Auckland, Jerome and Sophie Hartigan are turning their *Jumping Beans* physical brain-development programs for infants into a franchised network, and developing *Beanie* as a book and television cartoon character to cover the main principles of learning.

❑ Barbara Prashnig's Creative Learning Company, with its physical base in Auckland, New Zealand, is typical of the coming links between good educational research, an innovative interactive multimedia product, and the Internet. Her new Working Styles Analysis[6] is readily available on the Web. To check your own style, you can download a questionnaire, fill it in and order an inexpensive computerized printout.

❑ Another New Zealand entrepreneur, David Perry, has taken his



talents abroad in a different way. Called in to Singapore to rescue one international school from bankruptcy, he went back later to set up a much larger one. In the buildings of the former Singapore Teachers Training College, his Overseas Family School now has 1700 students, and a management split that could be a model for the world.

Teachers applying for jobs are sent a copy of The Learning Revolution to indicate the school's overall philosophy. But David Perry stresses: "We don't try and tell good teachers how to teach. Instead, we make a very distinct split between the teaching and management functions. We spend a great deal of time selecting able teachers from around the world. Management then provides all the resources needed for those excellent teachers to do an excellent job."[7] And that means that every teacher can concentrate 100 percent on developing each child's natural ability. With students from around the world, the school looks like a mini United Nations. And it is.

The Overseas Family School has students from early childhood through to high school, and a developing college-level campus operated in conjunction with California State University, the world's biggest teacher-training college.

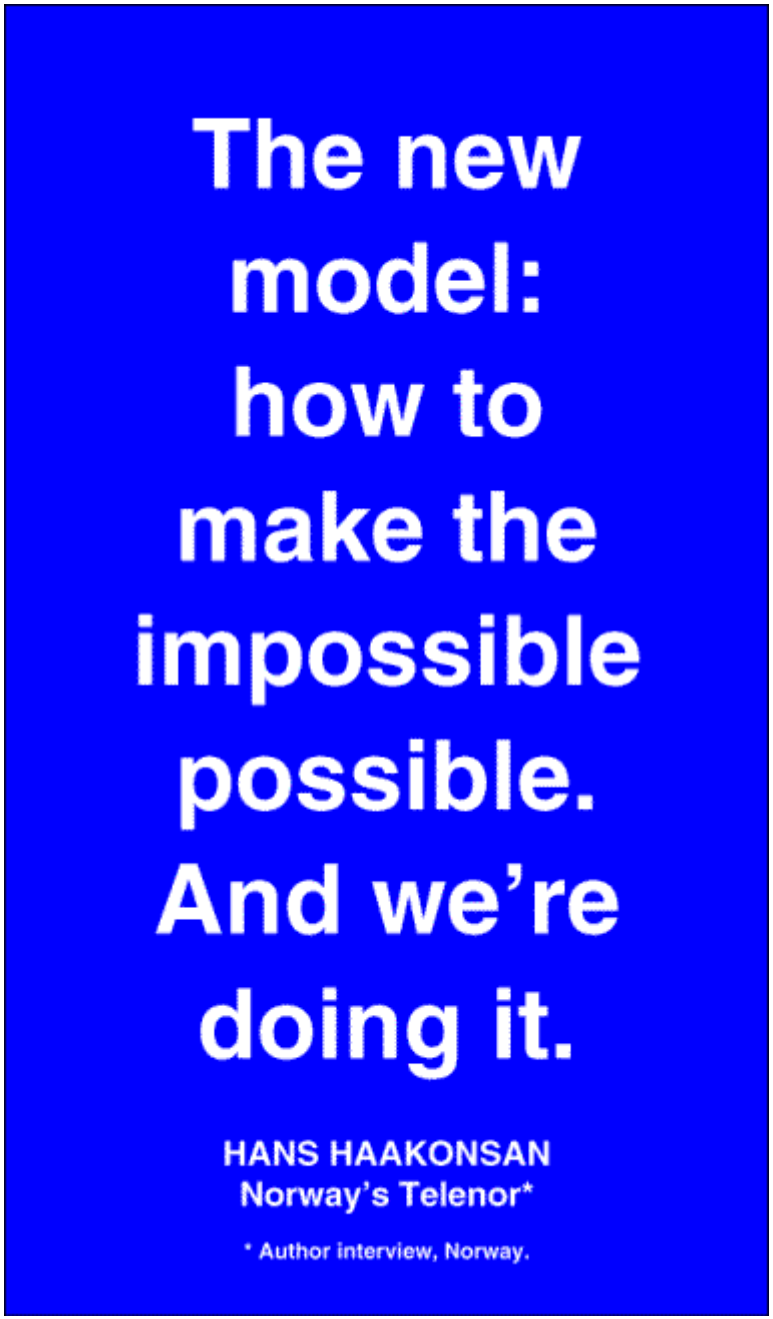
The Foundation model

Variations of the "Foundation model" are also showing the way - often set up with grants from business following the patterns originally set by the Ford and Carnegie Foundations in the United States.

❑ In Britain, the Royal Society for the encouragement of Arts, Manufactures and Commerce has launched a four-year nationwide Campaign for Learning. Sir Christopher Ball is chairman. Its aim: "To change the culture and gradually transform the U.K. into a 'learning society'." To that Ball adds a personal vision: "For every individual to have a Personal Learning Action Plan (PLAN), every organization to become a learning organization, and for everybody to be in reach of an accessible provider of learning opportunities - whether in a school, college, university or in employment or in the home." [8]

❑ In America the Johnson Foundation - financed by Johnson Wax - has recruited John Abbott from Britain's Education 2000 Foundation to promote the search for new learning methods.

❑ From New Zealand again comes an unusual hybrid from the rapid changes in finance, banking and internationalization. For over 100 years



New Zealand communities have owned "trustee" savings banks, with their profits distributed to the communities they serve. But when the Government opened up New Zealand banking to international competition in the 1980s, the trustees of the Auckland Savings Bank made a bold decision: they sold 75 percent of their bank to the Commonwealth Bank of Australia. They put the $NZ350 million proceeds into the ASB Charitable Trust, and invested them around the world. It is now by far New Zealand's biggest trust, disbursing millions of dollars a year for major educational, cultural and charitable projects.*

The international conference model

International conferences on new methods of learning and education provide another gateway to the future.

Singapore was one of 44 countries that sent delegates to Arthur Andersen's 1997 *Learning for the 21st Century* conference in Chicago. Significantly Singapore's delegates were chosen by the Ministry of Education and the National Computer Board.

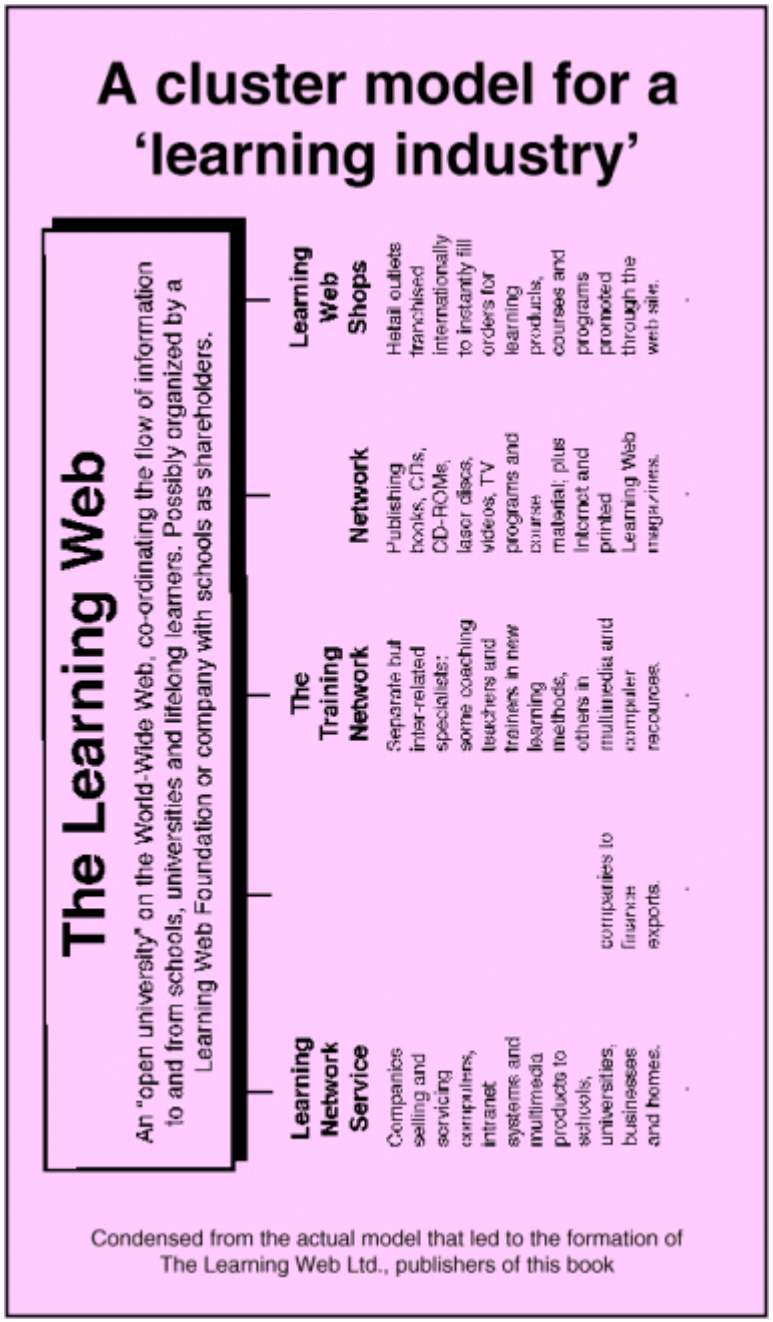
The Singapore Government in mid-1997 also paid for every school principal and deputy principal in the country to attend a one-week International Conference on Thinking. The keynote presenters read like a *Who's Who* from the pioneers in creative thinking: Howard Gardner from Harvard; Robert Sternberg from Yale; Edward de Bono from England; Israel's Reuven Feuerstein; Venezuela's former Minister for the Development of Human Intelligence, Luis Machado; David Perkins from Harvard; and such thinking-skills pioneers as Paul MacCready, Robert Sylwester and Richard Paul - all brought to Singapore to stimulate the drive for creative thinking.

The "learning organization" model

Hundreds of companies are also taking advantage of new methods of learning to build their corporations into learning organizations.

❑ Norway's Telenor telecommunications company is using accelerated learning techniques to develop its 18,000 staff. It's using the Norwegian translation of *The Learning Revolution* and Peter Senge's *The*

** A donation of $NZ2-million from the ASB Charitable Trust in 1990 enabled co-author Dryden and Lesley Max to form the Pacific Foundation. It paid for most of the "Where To Now?" television series and a range of New Zealand parent-education programs, including a pilot project for combining parenting education with a preschool and health center.*



translation of *The Learning Revolution* and Peter Senge's *The Fifth Discipline* as models. Telenor sent two senior executive officers, Hans Haakonsan and Earnst Risan, to one of co-author Vos's ten-day workshops in San Diego for training. It also bought a copy of *The Learning Revolution* for every staff member involved in a pre-test of its total program. And a year later it sent more trainers to Vos workshops.

Haakonsan says Telenor is now "focusing on values, instead of rules".[9] The *base values* are "responsibility, respect, creativity and integrity". And the *key values* are "customer satisfaction, good bottom line, good teamwork and focus on long-term development".

One of the big challenges, he says, is in building appropriate mental models. An example? "How to make the impossible possible - and we're doing it."

Accelerated-learning methods are being adopted, too, in more and more American businesses. The Center for Accelerated Learning in Lake Geneva, Wisconsin, for instance, reports results like these:

- Judy Authier of Cooperators Insurance says: "Our investment in accelerated learning has paid us back ten-fold." [10]
- Kimberly-Clark's Randy Atkins says: "Accelerated learning is the best training investment our organization has ever made." [11]
- On one course at Intel, participants on an AL course achieved a 507 percent knowledge gain, compared with 23 percent by "normal" training methods.[12]
- Of Travelers Insurance representatives studying a computer system, 67 percent learning by AL methods end up in the highest quartile of grades, compared to only 14 percent by traditional methods.[13]

The "cluster" model

One of the best model of all, for any small country or state to profit most from the learning revolution, is the "cluster" model.

This is the concept promoted extensively by the Harvard Business School and especially Professor Michael Porter who argues that industries develop best around "clusters of excellence".[14]

The outstanding example of this is California's Silicon Valley. It has radiated out from the brilliant leadership of Stanford University and especially Professor Fred Terman, Bill Hewlett, David Packard, Bob Noyce and the other engineers who originally formed Fairchild

Semiconductor. Spin-offs from their examples have spawned just about every company in Silicon Valley, and many more around America.

Singapore provides another example. Its government has used its multi-billion-dollar national superannuation fund to finance many high-tech industries, and has provided generous tax-breaks to attract 3,000 international companies to the city state.

The Chinese back-to-your-roots model

One of the most exciting models of all is to rediscover the great strengths of a society's own culture. That's why China is one of the most exciting countries in the world to visit today. Probably no society has a stronger "learning ethic" than China.. No large developing country is racing harder to join the world of space-age communications; by early the year 2000 or 2001, China will rank next to the United States in the number of Internet connections. Yet China is striving, too, to marry the era of "networked intelligence" to its own traditions and roots.

In doing so it is rediscovering that many of today's most effective learning methods were those first taught 2,500 years ago by Confucius and his close followers. Many critics credit Confucius with a Chinese preoccupation with examinations, forgetting that he urged these in particular to select , on merit, the main advisers the country's rulers. But many of his other concepts are even more valid now than they were when he became China's most famous early teacher:

- ❑ Confucius urged the blending new ideas with old proven concepts.
- ❑ He was a democrat - and wanted to bring about social reforms through education.
- ❑ He believed strongly in "learning by doing".
- ❑ Confucius used the whole world as his classroom. He did not teach in the confines of a school.
- ❑ He used music and poetry extensively in both learning and teaching.
- ❑ He believed that learning how to learn was as important as learning information.
- ❑ He believed that everyone had different learning abilities, and able teachers should cater to these individual abilities.
- ❑ And he believed strongly in the importance of values and courteous behavior, still two key characteristics of Chinese schooling.[15]

A final message from the authors

This book draws on practical examples drawn from research and the authors' own experience.

Some of the examples (like the abacus, dominoes and playing cards, opposite) go back centuries.

But we live in a world of supersonic change.

And many of the school examples, in particular, often depend on the drive and brilliance of a principal or specific teacher, or the dynamism of a board or government. Often those policies change with a change in people. Where that has happened since the earlier versions of this book, we've chosen to leave the success-models intact—because that is what the book is about: successful principles that work, whether or not someone has since chosen to amend them.

Chinese journalists, in particular, have also asked: how can we be sure that foreign-language learning methods suitable for an alphabet culture can work just as easily with a "picture word" language. Can we point to Chinese schools getting the same results?

The simple answer is: we can't. That's not the task we set ourselves. Again, we have reported the best specific success stories we have researched or seen in action, wherever they may have been applied. It is up to all readers to select and use those they like best. And we're always looking for examples that work even more effectively. Please email them to:

Gordon Dryden: gordon@learningweb.co.nz
or Jeanette Vos: vos@learning-revolution.com

In many ways he introduced the original Learning Revolution, and we have rediscovered it. Link many of those traditional truths with the latest brain research, and the latest in instant communications, and you have the potential for China to once again lead the world.

And perhaps that is not surprising. For more than 2,000 years the Chinese learned mathematics with the world's earliest accelerated-learning "tool", the abacus or *suanpan.* With columns of moveable beads, it can be used to add, subtract, multiply and divide, from single units up to trillions. Two of the other great "learning tools" for teaching mathematics - playing cards and dominoes - were also invented in China centuries ago. So, too, were paper and printing.

Invent your own model

But why wait for anyone else to lead when you can create your own model?

❑ In Singapore, Indian-born former senior shipping executive Dilip Mukerjea has become so fascinated by new learning methods that he now guarantees to teach anyone to become a competent freehand artist in five days, using methods developed by Betty Edwards and illustrated in *Drawing on The Right Side of the Brain*. He's taking up the Government's challenge for private-sector participation in its "learning revolution" by teaching students, parents and teachers the key principles of Mind Mapping, super memory, effective reading and creativity.

❑ In Australia, one of the world's most effective facilitators, Perth's Glenn Capelli, has taken much of the learning-revolution research and turned it into songs, television scripts and interactive corporate and school training programs. His keynote topics illustrate his unique approach: On humor and health: *what we learn from apple juice;* Dealing with change: *what we learn from raindrops;* Continuous improvement: *what we learn from frogs;* Entheos - the power of enthusiasm: *what we learn from optimism;* If we're so smart, how come we're so dumb? *what we learn from whales;* The art and science of relationships: *what we learn from cereal boxes.*[16]

❑ In Auckland, New Zealand, school teacher Kristine A. McLaren has developed a complete *Integrated Reading Program* for young children, and is marketing it internationally with her accountant husband.

❑ In Dunedin, New Zealand, several key staff members at the University of Otago, have been collecting some of their country's best examples of learning through computers and the Internet. They are now

publishing them as series of books through Otago University Press. The latest: *NetWorking: Teaching, Learning & Professional Development with the Internet*, edited by Hong Kong-born Dr. Kwok-Wing Lai, Senior Lecturer at the university's School of Education.

❑ From Canada, Lane Clark is building an international reputation as an expert skilled in training teachers to blend the world's best learning methods with the world's best interactive, digital technology. Her staff-development model is based very much on theme-based inquiry learning, but showing how students can use digital technology to retrieve information. In a typical month, you're likely to find her running staff development courses for schools in Canada and the United States, Tahatai Coast School in New Zealand and in Western Australia running extended courses for the Center for Excellence in Education.

❑ From the New Zealand city of Christchurch come other examples of the enormous strides that can be made when students are encouraged to learn in their own way, with their own style, at their own pace.

When co-author Dryden in 1991 produced six one-hour television documentaries on new world learning breakthroughs, one of the most spectacular individual examples came from Christchurch. Michael Tan, son of Malaysian-Chinese parents, was that year studying senior high school mathematics - at the age of seven. By the end of the year he'd passed New Zealand's top secondary school examinations - while spending his spare time playing table tennis, basketball, the classical piano and working on the family's home computer. Father Choon Tan, a modest engineer, insisted that "it all comes down to love, really".[17]

When Jeannette Vos went back to Christchurch in 1994 as the guest keynote presenter and workshop facilitator for the Canterbury College of Education - the city's teacher training university - she dined with one of her workshop attendees, Chrystal Witte, the mother of 11-year-old Daniel Witte. Many teachers regarded Daniel as a discipline problem. But over dinner, a different story emerged. At age four, Daniel had built an electronic circuit board. At aged nine, he had hacked into his father's office computer. But at primary school he'd continued to get into trouble until his parents found outlets for his scientific bent. In Jeannette's view, he was gifted, but bored. Chrystal and husband Stephen obviously agreed. And their big breakthrough came when Papanui High School agreed to enrol Daniel, aged 12, at a *fourth-year* secondary school level.

By the end of 1995, he'd passed six bursary exams and won the

school's physics prize. By the start of 1996, Christchurch's main newspaper, *The Press*, could report: "Most 13-year-olds will start secondary school next week. Daniel Witte will start university. Too young to have a cheque book, hold a driver's licence, or vote, Daniel has enrolled at the University of Canterbury to study electrical engineering. He sat bursary at 12, scoring an A."[18]

And by mid-1999, Christal Witte could report: "Daniel is firing on all cylinders, and continues his Electronic and Electrical Engineering degree in his fourth year. What is truly wonderful is to see and feel his enthusiasm, passion and motivation for the work he has chosen to do."[19]

Like Choon Tan, whose elder son David had earlier become New Zealand's youngest-ever Ph. D., the Wittes say their son is "not a genius, just passionate". They believe many children would do better at school if allowed to progress at their own pace. "If he had gone on in the system as he was," says Stephen Witte, "he'd probably have been diagnosed as having attention-deficit disorder syndrome or something like that."

Both Michael Tan and Daniel Witte were given their first chance to study at high-school level by Christchurch's Hagley Community College.

An excellent book, *Learning To Learn*, by Christine Ward and Jan Daley, has been based on their introduction of accelerated learning methods to Christchurch's Cashmere High School.

And the first edition of *The Learning Revolution* was launched at a South Pacific university marketing educators' conference at nearby Lincoln University.

So the catalyst can be anyone, anywhere: in business, at school, in a community or a family. It needs to be, for the evidence is overwhelming:

- ❑ The world is racing into an interactive era that is changing every aspect of the way we communicate, learn, live, work and play.
- ❑ These changes demand a complete rethink on how we learn; how we can rekindle the learning enthusiasm we embraced as small children; how we can go on learning and relearning throughout life; how we can provide the same stimulation to those coming after us; and how we can positively reshape the world.
- ❑ The tools are here. The time is now. The script is yours to write - or dance, or sing, or play, or act, or draw, or orchestrate.

Anyone can lead the world into the 21st century. Why not you?