



Secondary teaching into the future

Prepared by Executive

Introduction

Secondary teachers are surrounded by people and agencies who are seeking to define the future of secondary teaching for us, whether it be the Minister, the Ministry of Education, or the Secondary Futures Project.

PPTA, too, has been talking about these issues for some years. In 2004, there were discussions in branches followed by our *'Charting the future'* conference, which coincided with the launch of the government's Secondary Futures Project. During 2005 and 2006, the union was engaged in discussions in New Zealand and with Australian colleagues about what constituted 'quality teaching', and what conditions needed to be in place to enable it to happen in every classroom in the country. These discussions culminated in the 2006 professional conference *'Quality teaching: leading the way'*. During 2005 also, in the context of the work streams arising out of the 2004 collective agreement, a 'Shared Vision' over a 10-year timeframe was agreed between PPTA, the Ministry of Education and the School Trustees Association. Our 2007 STCA claim, 'Adding value to society', was underpinned by all of these preceding discussions. This year, regions and networks were invited to meet and to provide feedback on a consultation document that led to this paper.

This paper draws on all of these discussions, and seeks to set a stake in the ground by setting out the union's preferred future for secondary education. It describes a set of principles against which the union would judge proposals for change in secondary education, and which would guide the union's responses to the 'wild cards' that the future may throw our way. The future is impossible to predict with certainty, so no vision can be guaranteed to become a reality, but PPTA outlines here its preferred future scenario for secondary teaching. The final section of the paper discusses the implications of all this for the secondary teaching workforce as we move into the future.

The paper does not limit itself to a particular timeframe as constituting 'the future'. The Secondary Futures Project tries to focus on a 20-year timeframe but has found that many of the issues raised in discussions about the future are also issues of the present. PPTA takes the view that we are constantly moving from the present into the future, and at all points in this process, we need principles and a vision to guide our decision-making.

PPTA's next professional conference, *'Secondary teaching on the move'*, to be held in Auckland from 17-19 April, 2008, will provide a further opportunity for members and other interested people to continue discussions of current



and future responses to the changing context and demands on secondary schools.

The Context

An increasingly diverse New Zealand society

Right from the arrival of the tangata whenua from elsewhere in the Pacific, New Zealand has been populated by immigrants. However the range of countries from which immigrants come has broadened enormously and will continue to expand. The cultures of origin of immigrants continue to influence their values and traditions well beyond the generation who migrated here, and influence their expectations about schooling. Increasing exposure through the media to a much wider range of cultures, beliefs, values and lifestyles, and a strong legislative framework on human rights, means that New Zealanders generally accept that diversity is the norm for our future, and this will be reflected in our schools, not only among the student population but also among the teachers and other professionals working there.

Globalisation

The impacts of globalisation on New Zealand must not be underestimated, for example:

- Our economy is increasingly interconnected with a global economy,
- The development of the internet is leading to an increasingly connected world,
- Local stresses around climate change and sustainability are generated by international actions,
- More mobile populations contribute to an increasingly diverse society,
- Changing views of knowledge force us to re-assess our own.

There is a need to prepare students to be citizens of both New Zealand and of this globalised world, with skills, knowledge and experience that is transferable to other countries, and an understanding of how organisations and events outside our shores can and will impact upon our communities. Students need to be confident in their ability to act within this globalised world, and also strong in their sense of identity as New Zealanders.

Pace and nature of technological change

The way in which individuals communicate, acquire information, interact, work, organise, conduct their day-to-day activities and relax is changing at an increasing pace. Technological change, especially in the IT area, is increasing inter-generational differences in experience, expectations, skills and attitudes. Despite this, as long as the focus of teaching and learning remains on building relationships with young people around learning, the fundamentals of education will remain the same.

Changing expectations of schools

These include increasing responsibility for student health and wellbeing, student rights, expectations of family input/control, demands for increased



accountability, requirements to help students negotiate the secondary/tertiary interface, changing school structures, demand for personalising of learning and for providing increasingly diverse learning pathways and multiple opportunities to succeed. These expectations come from both government and the community. According to PPTA-commissioned research on parents' attitudes towards secondary education and secondary teachers, families/whanau want teachers to get to know and value students as individuals, bring out their potential by sparking their interest, support the strugglers, extend the gifted and talented, and motivate all students to succeed. Many also see schools as resources for the whole community, and want them to be a hive of activity day and night, contributing to learning and recreation for people at all ages and life stages. At the same time, there is a perception coming through from schools of families/whanau and students challenging school and teacher judgements and being increasingly litigious.

International futures work

Governments around the world are looking at the effects on education of these and other changes, led by the Organisation for Economic Development (OECD). Six alternative scenarios for schooling in the future were published by the OECD in 2001 and have underpinned much of the futures thinking on education throughout the Western world since then. The scenarios were:

- ***Attempting To Maintain The Status Quo***
 - The "Bureaucratic School Systems Continue" Scenario
 - The "Extending the Market Model" Scenario
 - ***The 'Re-schooling' scenarios***
 - The "Schools as Focused Learning Organisations" Scenario
 - The "Schools as Core Social Centres" Scenario
 - ***The 'De-schooling' scenarios***
 - The "Learner Networks and the Network Society" Scenario
 - The "Teacher Exodus and System Meltdown" Scenario
- More detail on these scenarios is attached as Appendix 1.

The Secondary Futures Project is New Zealand's response to this OECD work. In 2006 it published a major report, *Students First*, based on discussions with a wide range of family members, students, teachers, employers and the community. At the time of writing, this was about to be followed by a second major report, *Inspiring Teachers*. These can be found on the Secondary Futures website www.secondaryfutures.co.nz.

Some things stay the same

Part of the development of a futures vision is to be aware of the factors that are unlikely to change as well as those which are shifting. Two key expectations in this regard are firstly that the nature of adolescents will not fundamentally change and they will continue to require guidance, encouragement and sometimes direction, and secondly that the majority of working parents/caregivers will still be required to be away from home during the day, meaning that the demand for young people to be located during the



day in places where they can be supervised and cared for while they learn will remain.

The principles

In a changing context, some fundamental principles about learning and about how education systems should function should guide our decision-making about our responses. These fundamental principles are set out below.

Principles about learning

As we move into the future, the opportunities for students to access a far greater range of learning are clearly increasing. Even now, students access the internet for knowledge and to interact with people in other schools and countries; they can experience work and tertiary education while still at school; they can choose from a much wider range of subjects and qualifications than the students of 20 years ago. However the fundamentals of learning may shift rather less.

- ***Learning principle 1: Education has a profound social purpose.***

Despite recent attempts to portray the purpose of education as largely economic, to produce 'human capital' for the workforce, teachers and families/whanau hold fast to the social purpose of education. Education enhances students' ability to fully participate in a democratic society, while at the same time developing their ability to contribute as adults to the sustainable economic development of the country.

Implication for the future: Education will continue to serve purposes of social cohesiveness and citizenship.

- ***Learning principle 2: Learning occurs in a cultural context.***

Under the Treaty of Waitangi, the State is committed to partnership with tangata whenua, and New Zealand schools, as part of the State, must demonstrate this bi-cultural partnership in their practices. At the same time, New Zealand is also an increasingly multi-cultural society, and schools must respect the aspirations of the many cultural groups represented among their students.

Implication for the future: Schools will reflect Treaty relationships and will recognise cultural diversity in their policies, practices and programmes.

- ***Learning principle 3: Learning is life-long.***

At school, students gain skills, knowledge and qualifications that they can pursue further after they leave school. They also develop the attitudes, values and skills that will enable them to learn independently and in formal learning throughout the rest of their lives. Connectedness between learning and adult life increases with the year level of students.



Implication for the future: School-age learning will continue to establish the foundations for life-long learning.

- ***Learning principle 4: Learning is a social activity.***

Humans need social interaction, and learning flourishes where relationships support the learner. Learning is also enhanced where there is collaboration between student, teacher, family, and the community (including employers and other educational institutions). It is certainly true that ICT will offer hugely increased opportunities for students to access people beyond their classroom both as part of their school learning and from outside the school context. It is also true that secondary schools, teachers and students will maintain close links with local and international communities beyond their own. Nevertheless, learning will still be primarily based in schools because of the social nature of learning.

Implication for the future: Students will be more 'connected' beyond the school, but will still be based in schools.

- ***Learning principle 5: Learning needs are diverse.***

There is increasing awareness of the diversity of the student population, in terms of culture, ethnicity, home language, gender and sexuality, socio-economic background, and special learning needs. Teachers and schools must be adequately resourced to be able to fully understand and meet the diverse learning and social needs of all of these students.

Implication for the future: Schools will offer high quality opportunities for the full range of learners.

- ***Learning principle 6: Learning is underpinned by knowledge.***

There are sometimes suggestions that teaching will become more generalist, however the opposite is true. As knowledge expands, teachers need to be even more expert in the specialist knowledge, skills and pedagogy of their subject areas, in order to be able to help their students access the learning they need. This in-depth subject specialist knowledge is increasingly required for teachers of students from Year 7 and above. This does not deny, however, the importance of knowledge of the linkages between disciplines and areas of knowledge. Further, it does not deny the importance of developing students' metacognitive skills, so that they can become independent learners. The rapid expansion of available information also places an even higher demand on subject specialist teachers to develop students' ability to sift and critically analyse this plethora of information. Many students will also expand, with the support of subject specialist teachers, their capacity to create new knowledge themselves.

Implication for the future: Students will continue to be taught by subject specialist secondary teachers.



- ***Learning principle 7: Students learn best and teachers teach best when they are healthy and safe.***

Schools need to demonstrate commitment to the mental and physical wellbeing of all of their students and teachers, if students are to be able to learn successfully. This includes taking a proactive approach to grappling with bullying and disruptive behaviour. A whole school approach to a healthy and safe environment, including working with families/whanau and the community, ensures that all students and teachers have the skills they need to live and work harmoniously alongside others. New challenges to student and teacher safety and wellbeing lie in increasing access to new technologies, and schools need clear policies and practices concerning these. Teachers and schools need to be supported to ensure that their schools are healthy and safe places.

Implication for the future: Schools will be healthy and safe places for teaching and learning.

Principles about education systems

The learning described in the previous section cannot happen successfully for every student, irrespective of their situation, without the support of a well-resourced public education system. The principles below set out how the system should be supporting learning both now and in the future.

- ***System principle 1: There must be equity of access to quality education.***

Students are not equal in the levels of advantage they bring to their schooling experiences. It is the system's responsibility to ensure that schools are able to redress such inequity, so that all students can benefit from education. It benefits all of society when all students are able to achieve to their full potential. From this fundamental principle, all others will flow.

Implication for the future: The system will be committed to equity of access to quality education, and equity of educational outcomes.

- ***System principle 2: There must be a national system of public schools.***

Equity of access requires the state to balance the freedom of local schools to meet their local community needs and the requirement of the whole society to ensure all students have equity of access to education and develop as citizens of that society. This balance can best be achieved through a national system of public schools. Within that public school system, there will be kura where Maori cultural values and practices are dominant and students do all or most of their learning in Te Reo Maori. All schools must be supported by high quality national curricula and assessment systems.

Implication for the future: The public school network will continue to operate as the guarantor of equity of education.



- ***System principle 3: Public schools must be responsible to that national system.***

While schools and teachers are professionally accountable to their students and their families/whanau, they must also accept a wider responsibility to a national system provided by the state on behalf of all its citizens. Individual schools, principals and teachers should behave collegially to ensure that their actions do not impact negatively on another school or its students.

Implication for the future: The state will promote collaboration rather than competition between schools and between teachers.

- ***System principle 4: The state must be responsible for supporting schools on the basis of need.***

The state generates income from citizens to provide, amongst other services, a public education system. There must be elements of this provision that are needs-based, because school contexts vary. At the same time, a coherent national system is required. Schools must be adequately staffed with trained and qualified teachers, and with sufficient ancillary and support staff to enable teachers to focus on their teaching responsibilities. They must be properly funded to keep up with the pace of technological change.

Implication for the future: Schools will be fully resourced by central government on the basis of need.

- ***System principle 5: Education is a shared responsibility.***

Through collaboration, the ability of students to achieve to their full potential is realised. The responsibility for education needs to be shared between state, school, teachers, students, families/whanau and the wider community. Teachers will be enabled to work collaboratively with other professionals to enhance their own learning and their ability to meet the needs of their students.

Implication for the future: Education will continue to be seen as a shared responsibility.

- ***System principle 6: High quality teaching and school leadership are critical factors in successful learning.***

The primacy of quality teaching and school leadership has become part of fashionable rhetoric, but recognition of it needs to be demonstrated in practice, not just words. This requires that teachers be resourced for ongoing professional development to support enhanced subject knowledge and pedagogy, including quality access to ICT as a tool for their learning, and to enhance their capacity to provide pastoral care to students. It also demands that the work environment of teachers supports their physical and emotional health so that they can do the best possible job for students. Students' needs and rights must be able to be met within sustainable workload demands and practices for teachers.



Implication for the future: The system will recognise in practice the primacy of high quality teaching and quality leadership.

- ***System principle 7: Educational policy-making is most successful when it is inclusive of practitioners.***

The history of educational policy-making is littered with examples of policies that had little or no positive impact in classrooms because they were developed without the expertise of practitioners. This can be true at the school level, as well as at the system-wide level. Democratic and inclusive policy-making accesses the expertise of teacher unions, professional and subject associations and other sector representative groups. Teacher unions are valued for their professional leadership. They are seen as part of ensuring that the public education system in New Zealand grows and develops in ways that benefit students and New Zealand society.

Implication for the future: Policy-making will be inclusive of practitioners, including teacher unions.

- ***System principle 8: Educational outcomes are influenced by social and economic factors.***

Recent policy rhetoric suggests that teachers are the primary influence on student outcomes. In fact, when all factors are taken into account, the characteristics of the individual teacher have a rather small influence on the learning outcomes of a student. Most of the factors that influence student success come from outside the school gates. As long as politicians and policy makers continue to ignore this reality, unrealistic expectations and pressures will be placed on schools and teachers to be the silver bullet for social and economic problems.

Implication for the future: Policy-making will recognise that schools must be supported by broader economic and social policies.

PPTA's preferred future scenario

Though it is impossible to reliably predict the future, especially over the medium to long term, e.g. 20 years (the timeframe within which the Secondary Futures Project operates), it is nevertheless valuable to illustrate a preferred future and to use our influence to shape the future in that direction. This section describes PPTA's preferred future scenario for secondary education. It adopts the best aspects of the OECD's two 're-schooling' scenarios (schools as core social centres, and schools as focused learning organisations, see Appendix).



The main features of PPTA's preferred scenario are:

- ***Feature 1: There will be broad political and public agreement on the value to society of high quality public education.***

Education will be viewed as a 'public good', and this will be demonstrated in staffing and funding levels to match this commitment to quality. There will be high levels of trust in teachers as skilled professionals who work with students, families/whanau and communities to deliver quality public education. Education spending will be viewed as an investment in the future of the nation, not as an economic cost to it.

- ***Feature 2: Schools and teachers will be seen as valued community resources.***

Schools will be well-resourced by central government. This resourcing will enable them to operate in high quality buildings with flexible learning spaces and up-to-date equipment. There will be recognition that communities are not equal in their ability to function as self-managing institutions, and that unequal provision is required to deliver equitable outcomes for students.

- ***Feature 3: Schools will be 'connected institutions'.***

They will be strongly connected to, and used by, their own communities. They will be in co-operative relationships with regional and national networks of schools, and will be able to collaborate closely with tertiary institutions/workplaces, enabling students to increasingly move between learning contexts as they move up the school. The capacity of teachers to work effectively across a number of institutions, either virtually or actually, will be strengthened.

- ***Feature 4: Schools will be staffed with sufficient highly trained and qualified teachers and other professionals.***

Schools will be sufficiently staffed to provide personalised learning programmes for all students, including adult learners. This staffing will enable teachers to offer high quality specialist teaching and learning across a wide range of areas, and to build successful learning relationships with diverse students. Teachers will be assisted in their professional work (teaching, pastoral care and administration) by skilled support staff. Secondary teaching will be a highly attractive career option.

- ***Feature 5: Schools and the system will facilitate personalised learning for all teachers.***

In a profession subject to constant change, teachers need to be continuing to learn throughout their careers. Teachers will have ample and equitable opportunities to advance their professional knowledge and skills, both while working as teachers and through opportunities for study awards, sabbaticals, placements in industry, and other learning experiences. As they move through their careers into more specialised roles, professional



learning opportunities will be made available to support the new demands on them.

- ***Feature 6: Schools will function as the home institution for students to meet their core learning and social needs.***

Students will be actively supported to learn and provided with appropriate guidance and mentoring to ensure that their learning experiences are worthwhile. Students will be able to exercise choice within their local school, rather than by attendance at a school outside their community. Schools will be democratic organisations, demonstrating to students the benefits of distributed leadership and participatory decision-making, and providing students with opportunities to learn the skills, attitudes, values and sense of identity that create social cohesion and confident and capable citizens.

Implications for secondary teachers

Change in secondary education inevitably means change for secondary teachers. Change is something that secondary teachers are very familiar with; in fact, it is a constant in their professional lives. The list below, however, is not so much about change. It actually encapsulates PPTA's longstanding aspiration for the professional role of secondary teachers: trained and qualified teachers who have equitable access to high quality ongoing learning.

In the future, secondary teachers will need to be:

- ***Highly qualified on entry to the profession.***

They will need to be graduates of high quality initial teacher education programmes that prepare them for the new challenges of 21st century teaching, and that enable them to continue to be inspirational teachers.

- ***Willing and able to continue learning.***

Teachers will need to be continuing their professional learning throughout their careers. Learning will be needed across a range of areas, e.g. subject, pedagogy, student guidance, use of ICT, and new demands that we are not even aware of yet.

- ***Knowledgeable specialists in their curriculum area(s) but able to make links across disciplines.***

The 'knowledge society' does not mean that secondary teachers' specialist knowledge of subject content and pedagogy will be less important, quite the reverse. At the same time, part of this specialist role will increasingly be to make links across the curriculum in order to provide coherence to student learning.



- ***Highly versatile in their teaching practice.***

Teachers will need the flexibility to adapt to the changing cultural contexts of schools. They will need to be able to cater to increasingly diverse learning needs, both in the mainstream and in specialised programmes. This will require support systems for students so that even students with the most complex learning needs and the most challenging behaviours can have opportunities for success. Teachers will also need to be enabled, through high quality and accessible professional learning, to move into an increasing diversity of specialist roles as teachers. Roles which are already evident or emerging include working with other teachers as adult learners, e.g. in pedagogy, curriculum change and use of ICT as a learning tool, working with students with special learning needs, and working across schools using new technologies.

- ***Able to make connections for students.***

Teachers will need to be able to facilitate learning opportunities for students with the wider community, other learning institutions and other agencies. They will also be able to make connections between the sectors, to ensure smooth transitions for students between primary and secondary education, and between secondary education and tertiary education or employment.

Conclusions

Recommendation 2 proposes that the principles, preferred future scenario and implications for secondary teachers outlined here form PPTA's policy on the future of secondary education. This would mean that in all discussions and negotiations involving PPTA that are about the current system or about change, this paper would serve as a foundation for PPTA's response. Examples could include collective agreement negotiations and working party discussions, discussions with the Ministry of Education about teacher qualifications, professional learning or teacher education, responses to papers from the Secondary Futures Project, responses to new curriculum documents, or advocacy to the public about perceived attacks on the quality of secondary education.

Adoption of this paper by Annual Conference would provide PPTA with an excellent foundation document as we move into the future.

Recommendations

1. That the report be received.
2. That the principles, preferred future scenario and implications for secondary teachers outlined in this paper guide PPTA's policy on future developments in secondary education.

Appendix A

The OECD Schooling Scenarios

The scenarios describe in 'pure form' how schooling might be overall in a society, not individual schools or local developments. In reality, one would expect complex mixes to emerge between these different possible futures, rather than one or the other. By sharpening the alternatives, their value is as a tool to think about what we want and do not want, and how probable the more or less desired choices are in terms of on-going trends and policies.

1. ATTEMPTING TO MAINTAIN THE STATUS QUO:

With the 'status quo' scenarios, the basic features of existing systems are maintained well into the future, whether from public choice or from the inability to implement fundamental change.

1.1 The "Bureaucratic School Systems Continue" Scenario

This scenario is built on the continuation of powerfully bureaucratic systems, strong pressures towards uniformity, and resistance to radical change. Schools are highly distinct institutions, knitted together within complex administrative arrangements. Political and media commentaries are frequently critical in tone; despite the criticisms, radical change is resisted. Many fear that alternatives would not address fundamental tasks such as guardianship and socialisation, alongside the goals relating to cognitive knowledge and diplomas, nor deliver equality of opportunity.

- **Learning and organisation:** Curriculum and qualifications are central areas of policy, and student assessments are key elements of accountability, though questions persist over how far these develop capacities to learn. Individual classroom and teacher models remain dominant.
- **Management and governance:** Priority is given to administration and capacity to handle accountability pressures, with strong emphasis on efficiency. The nation remains central, but facing tensions due, for example, to decentralisation, corporate interests in learning markets, and globalisation.
- **Resources and infrastructure:** No major increase in overall funding, while continual extension of schools' remits with new social responsibilities further stretches resources. The use of ICT continues to grow without changing schools' main organisational structures.
- **Teachers:** A distinct teacher corps, sometimes with civil service status; strong unions/associations but problematic professional status and rewards.

1.2 The "Extending the Market Model" Scenario

Existing market features in education are significantly extended as governments encourage diversification in a broader environment of market-led change. This is fuelled by dissatisfaction by 'strategic consumers' in cultures where schooling is commonly viewed as a private as well as a public good. Many new providers are stimulated to come into the learning market, encouraged by thoroughgoing reforms of funding structures, incentives and regulation. Flourishing indicators, measures, and accreditation arrangements start to displace direct public monitoring and curriculum regulation. Innovation abounds, as do painful transitions and inequalities.

- **Learning and organisation:** The most valued learning is importantly determined by choices and demands, whether of those buying educational services or of those, such as employers, giving market value to different forms of learning routes. A strong focus on non-cognitive outcomes and values might be expected to emerge. Wide organisational diversity.
- **Management and governance:** There is a substantially reduced role for public education authorities – overseeing market regulation but less involvement through organising provision or ‘steering’ and ‘monitoring’ – and entrepreneurial management modes are more prominent. Important roles for information and guidance services and for indicators and competence assessments that provide market ‘currency’.
- **Resources and infrastructure:** Funding arrangements and incentives are critical in shaping learning markets and determining absolute levels of resources. A wide range of market-driven changes introduced into the ownership and running of the learning infrastructure, some highly innovative and with the extensive use of ICT. Problems might be the diseconomies of scale and the inequalities associated with market failure.
- **Teachers:** New learning professionals – public, private; full-time, part-time – are created in the learning markets, and new training and accreditation opportunities would emerge for them. Market forces might see these professionals in much readier supply in areas of residential desirability and/or learning market opportunity than elsewhere.

2. THE RE-SCHOOLING SCENARIOS:

The “re-schooling” scenarios would see major investments and widespread recognition for schools and their achievements, including towards the professionals, with a high priority accorded to both quality and equity. In the “Schools as Focused Learning Organisations” scenario there is a strong knowledge orientation, whereas in the “Schools as Core Social Centres” scenario, the focus is on socialisation goals and schools in communities.

2.1 The “Schools as Focused Learning Organisations” Scenario

Schools are revitalised around a strong knowledge rather than social agenda, in a culture of high quality, experimentation, diversity, and innovation. New forms of evaluation and competence assessment flourish. ICT is used extensively alongside other learning media, traditional and new. Knowledge management is to the fore, and the very large majority of schools justify the label “learning organisations” (hence equality of opportunity is the norm), with extensive links to tertiary education and diverse other organisations.

- **Learning and organisation:** Demanding expectations for all for teaching and learning combines with widespread development of disciplines and diversity of organisational forms. Flourishing research on pedagogy and the science of learning is systematically applied.
- **Management and governance:** “Learning organisation” schools characterised by flat hierarchy structures, using teams, networks and diverse sources of expertise. Quality norms typically replace regulatory and punitive accountability approaches. Decision-making rooted strongly within schools and the profession, with the close involvement of parents, organisations, and tertiary education and with well-developed guiding frameworks and support systems.
- **Resources and infrastructure:** Substantial investments in all aspects of schooling, especially in disadvantaged communities, to develop flexible, state-of-

the-art facilities. Extensive use made of ICT. The partnerships with organisations and tertiary education enhance the diversity of educational plant and facilities.

- **Teachers:** Highly motivated, enjoying favourable conditions, with strong emphasis on R&D, continuous professional development, group activities, networking (including internationally). Contractual arrangements might well be diverse, with mobility in and out of teaching.

2.2 The “Schools as Core Social Centres” Scenario

The school here enjoys widespread recognition as the most effective bulwark against social, family and community fragmentation. It is now heavily defined by collective and community tasks. This leads to extensive shared responsibilities between schools and other community bodies, sources of expertise, and institutions of further and continuing education, shaping not conflicting with high teacher professionalism. Generous levels of financial support are needed to meet demanding requirements for quality learning environments in all communities and to ensure elevated esteem for teachers and schools.

- **Learning and organisation:** The focus of learning broadens with more explicit attention given to non-cognitive outcomes, values and citizenship. A wide range of organisational forms and settings emerge, with strong emphasis on non-formal learning.
- **Management and governance:** Management is complex as the school is in dynamic interplay with diverse community interests and of formal and non-formal programmes. Leadership is widely distributed and often collective. Strong local dimension of decision-making, while drawing on well-developed national/international support frameworks, particularly where social infrastructure weakest.
- **Resources and infrastructure:** Significant investments made to update the quality of premises and equipment in general, to open school facilities to the community, and to ensure that the divides of affluence and social capital do not widen. ICT used extensively, especially its communication capabilities.
- **Teachers:** A core of high-status teaching professionals, with varied contractual arrangements and conditions, though with good rewards for all. Around this core are many other professionals, community players, parents, etc, and a blurring of roles.

3. THE DE-SCHOOLING SCENARIOS:

Rather than high status and generous resourcing for schools, the dissatisfaction of a range of key players leads to the dismantling of school systems to a greater or lesser degree. In the “Learning Networks and the Network Society” scenario, new forms of co-operative networks come to predominate. The most negative scenario of all is the “Teacher Exodus – The Meltdown Scenario”.

3.1 The “Learning Networks and the Network Society” Scenario

Dissatisfaction with institutionalised provision, and expression given to diversified demand, leads to the abandonment of schools in favour of a multitude of learning networks, quickened by the extensive possibilities of powerful, inexpensive ICT. The de-institutionalisation, even dismantling, of school systems as part of the emerging ‘network society’. Various cultural, religious and community voices to the fore in the socialisation and learning arrangements for children, some very local in character, others using distance and cross-border networking.

- **Learning and organisation:** Greater expression given to learning for different cultures and values through networks of community interests. Small group, home schooling, and individualised arrangements become widespread.
- **Management and governance:** With school assured through inter-locking networks, authority becomes widely diffused. There is a substantial reduction of existing patterns of governance and accountability, though public policy responsibilities might still include addressing the 'digital divide', some regulation and framework-setting, and overseeing remaining schools.
- **Resources and infrastructure:** There is a substantial reduction in public facilities and institutionalised premises. Whether there is an overall reduction in learning resources is hard to predict, though major investments in ICT could be expected. Diseconomies of small scale, with schooling organised by groups and individuals, might limit new investments.
- **Teachers:** There is no longer reliance on particular professionals called 'teachers': the demarcations between teacher and student, parent and teacher, education and community, blur and sometimes break down. New learning professionals emerge, whether employed locally to teach or as consultants.

3.2 The "Teacher Exodus and System Meltdown" Scenario

There is a major crisis of teacher shortages, highly resistant to conventional policy responses. It is triggered by a rapidly aging profession, exacerbated by low teacher morale and buoyant opportunities in more attractive graduate jobs. The large size of the teaching force makes improvements in relative attractiveness costly, with long lead times for measures to show tangible results on overall numbers. Wide disparities in the depth of the crisis by socio-geographic, as well as subject, area. Very different outcomes could follow: at one extreme, a vicious circle of retrenchment and conflict; at the other, emergency strategies spur radical innovation and collective change.

- **Learning and organisation:** Where teacher shortages are acute they have detrimental effects on student learning. Widely different organisational responses to shortages – some traditional, some highly innovative – and possibly greater use of ICT.
- **Management and governance:** Crisis management predominates. Even in areas saved the worst difficulties, a fortress mentality prevails. National authorities are initially strengthened, acquiring extended powers in the face of crisis, but weakened the longer crises remain unresolved. A competitive international teaching market develops apace.
- **Resources and infrastructure:** As the crisis takes hold, funds flow increasingly into salaries to attract more teachers, with possible detrimental consequences for investments in areas such as ICT and physical infrastructure. Whether these imbalances are rectified depends on strategies adopted to escape 'meltdown'.
- **Teachers:** The crisis, in part caused by teaching's unattractiveness, worsens, with growing shortages, especially in the most affected areas. General teacher rewards could well increase, as might the distinctiveness of the teacher corps in reflection of their relative scarcity, though established arrangements may eventually erode with 'meltdown'.

Adapted from *Schooling for Tomorrow: Scenario Indicators and Analysis*, www.oecd.org, downloaded 19/09/03.