New Basics Project
Technical Paper

Education Queensland
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# Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CNN</td>
<td>Cable News Network</td>
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<tr>
<td>CSF</td>
<td>Curriculum Standards Framework</td>
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<td>DEETYA</td>
<td>Department of Employment, Education, Training &amp; Youth Affairs</td>
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<td>EQ</td>
<td>Education Queensland</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<td>GU</td>
<td>Griffith University</td>
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<tr>
<td>HECS</td>
<td>Higher Education Contribution Scheme</td>
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<tr>
<td>IMF</td>
<td>International Monetary fund</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<td>KLA</td>
<td>Key Learning Area</td>
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<td>LISREL</td>
<td>Linear Structural Relations</td>
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<tr>
<td>MCEETYA</td>
<td>Ministerial Council on Employment, Education, Training &amp; Youth Affairs</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>OP</td>
<td>Overall Position</td>
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<tr>
<td>QBSSSS</td>
<td>Queensland Board of Senior Secondary School Studies</td>
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<tr>
<td>QCS</td>
<td>Queensland Core Skills</td>
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<td>QSCC</td>
<td>Queensland School Curriculum Council</td>
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<td>QSE</td>
<td>Queensland State Education</td>
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<tr>
<td>SOSE</td>
<td>Studies of Society and the Environment</td>
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<td>SRLS</td>
<td>School Reform Longitudinal Study</td>
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<td>TM</td>
<td>Trade Mark</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational Scientific and Cultural Organisation</td>
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<td>UQ</td>
<td>University of Queensland</td>
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Executive Overview

Change imperatives for difficult times

These are turbulent times for policy making in public education, which must contend with claims that it is not meeting the extensive and often conflicting expectations of many stakeholders. Some students, particularly in the middle years, appear disaffected with school routine, disengaged from learning and unchallenged by classroom tasks they regard as irrelevant. Managing student behaviour is a major concern. Many teachers are fatigued by waves of reform that they view as failing to address what really matters in schools—support for classroom teaching and learning. New syllabuses include so many mandated outcomes that many teachers are overwhelmed by the apparent scale of what is required.

Media reports criticise schools and teachers for not producing the educational outcomes most valued by parents, employers and the wider community. More external testing of minimum standards in basic skills is usually advocated as the solution. Taken together, these are complex problems for a state educational system—a state system that has begun to act as a social shock absorber for larger social, economic and cultural change and conflict as early as the mid-1970s (Green, Hodgens & Luke, 1994).

In this context, it is tempting to treat education both as the cause of all current social and economic problems and as a panacea for these same problems. It is also easy to overlook many successful interventions and reforms in Queensland and Australian education in the past decade. These have included focuses on socially supportive schools and classrooms, mainstreaming and normalisation policies in special education, expansion of early intervention programs in literacy, successful gender equity programs, fundamental changes in structures of school leadership and management, and, in the early 1990s, excellence in teaching. In these areas, state schooling has led the way.

At the same time, changes in federal funding and policy, and increased public visibility and legitimacy for non-state schools have created a competitive, market-oriented educational environment. Across Australia and Queensland, school-based management of locally differentiated, community-responsive schools have become central policy strategies for state schools as they are encouraged to move away from a 'command economy' approach that treats schools and communities as relatively uniform and standard.

Queensland State Education 2010 sets out a new strategic philosophy that stresses the need to offer students, parents and communities state educational programs that are diverse and flexible, but also relevant and powerful. Improved pedagogy is at the heart of this agenda. The core business of educational systems remains teaching and learning. This requires the orchestration of the "message systems" (Bernstein, 1990) of curriculum, pedagogy and assessment to produce improved educational outcomes—traditional and new, academic and social—for students and communities served by schools.

Any reconsideration of curriculum, pedagogy and assessment in current times should therefore begin from a key systemic policy question:
How does the center “steer from a distance” (Lingard, Knight & Porter, 1995) both the processes of system service provision and local school differentiation, while maintaining requisite financial and pedagogical accountabilities for the equitable production of quality educational outcomes?

Steering an educational system entails both consultation and monitoring at local and district levels, as well as central data analysis based on key performance indicators. The continued systemic commitment to educational equity and social justice also requires an urgent focus on improving outcomes for those students from communities and groups marginalised by changing economic and social conditions.

The New Basics Project will attempt to deal with the imperatives of *Queensland State Education 2010* by:

- assisting schools to harmonise changes in curriculum, pedagogy and assessment;
- focusing on the knowledges, skills and discourses required for new times;
- viewing equity as ensuring equal access to, and continuous improvement of, achievement at important common learnings;
- improving student outcomes through a rigorous empirical analysis and revitalisation of classroom pedagogy;
- making a vigorous commitment to teachers intellectual work and professionalism.

**Premises underlying the proposal**

The New Basics Project is based on five fundamental educational premises:

1. **The Pedagogy Premise.** Improved student outcomes require a systematic, principled and practical coordination of the message systems of curriculum, pedagogy and assessment.

2. **The Futures Premise.** Outcomes should be futures-oriented, based on a philosophy of education committed to the preparation of students for new workplaces, technologies and cultures.

3. **The Equity Premise.** A principled selection and pedagogical provision of important, common learnings should address the economic and cultural aspirations of the most at-risk and culturally diverse communities.

4. **The Research Premise.** Reconstruction of curriculum, pedagogy and assessment needs to be explicitly guided by documented analysis and rigorous discussion of current school practices.

5. **The Professional Learning Community Premise.** Improved, equitable student outcomes and effective reforms in curriculum, pedagogy and assessment require high levels of teacher professionalism, sustained intellectual work and shared ownership of reform within dynamic school communities focused on learning.
Components of the Technical Paper

This technical paper consists of two substantive parts, supported by a list of keywords and a list of references.

Part 1 provides a detailed contextual rationale for the New Basics Project:

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1.1 Queensland State Education 2010: The Futures Premise
Describes the imperatives for futures-oriented education, offering a new vision of the Queensland student.

*Curriculum design and pedagogic intervention should begin from a debate over those knowledges, skills and identities valued and required by society, economies and cultures.*

1.2 Current Pedagogical Context: The Research Premise
Describes the current pedagogical situation, evaluating the capacity of existing approaches to curriculum, pedagogy and assessment to produce new and improved outcomes.

*Pedagogical change must begin from an analysis of current practice.*

1.3 Current and Proposed State Interventions
Describes the limits of current national and international approaches in dealing with problems discussed in earlier sections.

*Queensland reform must consider the approaches and attempts of other educational authorities.*

1.4 Project Parameters: A Way Forward
Sets the parameters of the New Basics Project.

*Pedagogical reform must service overall systems imperatives for the school-based production of accountable educational outcomes.*

Part 2 outlines the technical specifications for the New Basics Project in operation, including the harnessing of relevant theoretical explanations and reviews of the research literature to specific implementation proposals and accountabilities.
2.1 The New Basics
Introduces The New Basics categories with key questions for student inquiry, and examines their links to current pedagogical issues. *Recent literature is used to examine their potential connections to several curriculum operating fields—concepts and topics, traditional disciplines and subject paradigms, and key learning area groupings.*

2.2 The Rich Task
Introduces the concept of the Rich Task, drawn from philosophical and psychological models of Dewey, Vygotsky and Freire. *Selected prototypes of tasks, developed during the 1999 consultative process, are examined and discussed in more detail.*

2.3 Productive Pedagogies
Proposes that the implementation of the Rich Tasks in schools be via an empirical and practical emphasis on Productive Pedagogies. *Prototype in-service from the School Reform Longitudinal Study (Luke, Ladwig, Lingard, Hayes & Mills, 1999) and aspects of the IDEAS Project (Crowther, 1998) are drawn upon.*

2.4 Assessment and Moderation System for Rich Tasks
Proposes a developmental approach to a systemic assessment system for the Rich Tasks with panelling of key features and criteria, school-based discretion over assessment approaches and timing, and moderated teacher judgments of standards of student performance. *Experience with moderated school-based assessment and other high-stakes initiatives such as cross-curriculum testing are drawn upon.*

2.5 Implementation Planning, Systemic Support and Accountability
Focuses on the systemic planning, research and support needed to address key implementation issues; for example, strengthening organisational capacity and institutional accountability, developing levels of staff professionalism, facilitating open dialogue amongst teachers, targeting the use of electronic communication methods and cooperative exchange of educational approaches within dynamic learning communities. *The shared ownership model requires that top-down initiation, pressure and support be integrated with bottom-up desire for improvement in the core business of learning and teaching.*
Part 1: Contextual Rationale

1.1 Queensland State Education: The Futures Premise

Queensland State Education 2010 (hereafter referred to as QSE 2010) begins from a focus on social, economic and cultural contexts of Queensland and Australia (Greco, 1999; Edgar, 1999). Other state curriculum frameworks and initiatives refer to post-industrial conditions as important, but no other strategy or framing statement begins from a futures focus. This section details the educational challenges of the globalised economies, networked societies, digital and multimediated communications technologies, and new community and regional cultures.

The prime educational goal of QSE 2010 is an increase in student achievement levels. It raises questions about the relative competitiveness of Australia in the production of a skilled, post-industrial workforce. Lower achievement levels, according to OECD and EU data, are affiliated with a host of other negative social consequences—with institutional impacts on social services, health, policing and other services (Cullen, Cosier, Greco & Payne, 1999). The aim of QSE 2010, then, is the educational construction of a globally competitive workforce and community for the development of Queensland.

QSE 2010 describes a consensus around the need for schooling to focus not just on employment, but also to enhance social cohesion and senses of community and identity. Within the broader national debate on the deterioration of ‘social capital’ in market driven economic reform (Cox, 1995; Latham, 1997), state schools are essential social infrastructure in support of communities facing unprecedented complexity, uncertainty and diversity. The QSE 2010 philosophy of education is a pragmatic response to a globalised, post-industrial society in two ways, stressing the:

- economic imperative to prepare students to participate gainfully and flexibly, meaningfully and productively in the Queensland economy;
- social imperative to prepare increasingly diverse student cohorts to engage with rapid social and cultural change cohesively and collaboratively, constructively and critically.

Yet neither sophisticated human capital analyses, nor statements about the broad social and cultural goals of Australian schooling specify the blends of knowledges, skills and competencies needed. This requires a futures orientation to current and prospective demands of new economies, new social institutions and increasingly diverse Queensland communities.

What are the new skills and knowledge requirements?

Since the earliest work on post-industrialism in the 1980s, there have been numerous, partial and heavily debated attempts to describe the new workforce. For example, OECD analyses differentiated knowledge-constructing occupations and information-disseminating jobs from information-consumption and end-user service occupations (Webster, 1995). Among the most widely cited description is that of former US Treasury Secretary Robert Reich (1992), who refers to a powerful elite class of symbolic analysts who would dominate new information-technology-driven economies, particularly in such areas as media, financial services and corporate sectors. In a recent analysis of the educational implications of the “new work order”, Gee, Hull and Lankshear (1998) describe the emergence of an elite of critical thinkers engaged in problem resolution and strategic planning, a middle order of information-based and service workers, and an underclass struggling to deal with technological and economic change.

Whatever the eventual mix or blend of work in the Queensland economy by 2010, since the late 1980s there has been a shift towards a service and information-based economy, with fewer...
Queenslanders working in the primary resources and manufacturing sectors (Schmidt, 1999). Recent analyses of the Australian economy have tracked the increased volatility and flexibility of employment conditions, with an ongoing decrease of full-time, secure positions with large corporate and government employers, and an increase in self-employment and small-scale service businesses (Roberts, Clark & Murray, in press). Emergent industrial relations practices, new technologies, planned obsolescence and, perhaps most importantly, rapid global shifts in the flows of capital, goods, services and information have set the conditions for the loss of many jobs in traditional sectors, the emergence of new sectors of employment, and hence, new levels of employment insecurity, job change and career shift.

This context will require of all school leavers:

- entry-level literacy competence with print and electronic media;
- critical thinking and self-analytic skills for coping with complex community changes and uncertainty in jobs markets, economies and workplaces;
- educability for retraining across the lifespan through a range of media.

In sum, service and information-based economies require new blends of skills and competencies, with an increasing segment of workers engaged in information, knowledge and symbol handling and exchange—whether in high-level elite information occupations, or entry level, relatively insecure service sector work. Service sector and information work requires cognitive and social relations work (Harvey, 1989) rather than the skills of manual labour that served post-war generations well.

The new work order involves not only skills in high-tech and print literacy, but also skills in verbal face-to-face social relations and public self-presentation, problem identification and solution, collaborative and group capacity and so forth. These are the New Basics, and they extend considerably beyond traditional versions of the '3Rs'.

In this way, the economy places a premium on communications across different media. The term for the new kinds of literacies is “multiliteracies” (The New London Group, 1996)—different kinds of intelligences and dispositions, knowledges and skills to engage with blends of oral, print, visual and multimediated communications simultaneously. Not surprisingly, these are the very capabilities and skills that many older generations of Australians are struggling to come to grips with.

Traditional definitions of lifelong learning have also changed. It is now about knowing how to learn through a range of media: from traditional face-to-face instruction and workplace mentoring, to print self-instructional materials and on-line resources. This requires not only a diversification in the curriculum content in schools, but also in the actual modes and media of instruction. Lifelong learning increasingly involves a fluency of adaptation to new instructional media, texts and modalities.

Following Vygotsky, learning can be conceptualised as an apprenticeship with new and old technologies (Wertsch, 1985; Cole, 1996) (see Section 2.2). Tools can be adapted for new kinds of work and are not always used for their original design (Bruce, 1997). Further, the emergence of new technologies does not necessarily eradicate old ones. They typically change the way we use other technologies. In this way, computers have not replaced print and oral language but they are modifying, reshaping and blending the ways that we speak, read and write.

At the same time, such tools and technologies change human cultures and communities in fundamental ways. Social relationships, behaviours and knowledges are all changed in quite profound ways by the use of new media of communications (McLuhan, 1962).

In this regard, the curriculum challenge is not just preparing people to learn with and learn through new technologies. It is also about preparing people to deal with the cultural and community changes that flow from their use. New technologies, globalised economies and communications media will require:
• new skills and knowledges for dealing constructively with rapid community change;
• new forms of cultural and social identity;
• the blending and reshaping of cultural traditions;
• exercising new rights and responsibilities of citizenship and civic participation;
• communication across diversity and difference of culture, gender and background.

Communications technologies—from the Internet to jet transportation—enable a “compression of space and time” (Harvey, 1989). The result is almost instantaneous communications across nation states, boundaries and borders, the emergence of a “simultaneous universe” (McLuhan, 1962). Given two facts of new economies: instantaneous communications and globalised production and information flows, intercultural communication has become a requirement for competitive economies. That is, to compete in a globalised marketplace and in culturally diverse domestic markets, workforces use linguistic and cultural diversity productively in the design and manufacture of products, in the marketing and sales of goods and services (Cope & Kalantzis, 1998). In this way, what the most recent UNESCO report (Delors, 1998) calls “learning to live together” means both learning how to live and work within increasingly diverse and cosmopolitan Queensland communities, and learning to live and communicate across regional, national and global communities—virtual and real.

The technological requirements of life in a ‘networked society’ are already upon us, with a generation developing fluency in ‘code shifting’ across media (e.g. television, music, Internet, speech, performance, print) that surpasses the competence of many of the post-war print generation (Lankshear, Snyder & Green, 2000). It is through new technological media that teaching and learning take place on a vast civic scale. In this sense, the networked society is a place where the education of the public goes on outside of the school, the church and government. At the same time, it is through these communications media that students’ and communities’ identities and cultures are formed (Buckingham, 1994).

In this way, the schools’ job is not so much to be the sole didactic teacher of children as it was in the 19th century, but to prepare them to learn critically and creatively from a range of institutions and media. As a result, a key issue facing an educational system through its curriculum involves the “designing of social futures” (The New London Group, 1996); that is, helping students to:

• build secure and productive identities;
• chart and plan life pathways through uncertain and complex times, across new and old institutions and media;
• learn to live together in diverse communities.

In summary, a futures orientation to curriculum, pedagogy and assessment is not an abstraction. The changes described in this) and in Aboriginal and Torres Strait Islander communities (Nakata, 1999). Globalised economies are typified by highly mobile populations seeking employment, lifestyle and community. There are rapid flows of population within and across the state and across national borders. In many Queensland communities traditional jobs are disappearing, new industries and economies are coming on stream, and children are constructing their identities primarily in relation to global consumer and media cultures. Parents and teachers are dealing with students who bring new kinds of skills and knowledges, and are facing serious issues about identity, family structures, poverty and social dislocation. It is in this context that issues like curriculum change and behaviour management need to be understood. Schooling systems that choose to ignore or ‘put a lid’ on such changes will remain reactive shock absorbers, rather than agents for constructive change and the improvement of students’ life chances.
This context places unprecedented stresses on one’s sense of neighborhood, community and identity (Giddens, 1994). According to Castells (1996), identity in all its forms (individual, cultural, religious, national) becomes a rallying point for dealing constructively with change.

Therefore, a major challenge facing curriculum, pedagogy and assessment is the production of educational outcomes suited for a networked society, where the rapid global, regional and local exchange of information, knowledge and symbols is at the heart of the worlds of work, civic and community participation, leisure, and consumption.

These conditions will require blends of old and new knowledges and skills. Key questions are: Is the Queensland education system able to deal with such changes? If so, how? The section that follows is therefore a reappraisal of current contents and practices of students’ and teachers’ work in classrooms.
1.2 Current Pedagogical Context: The Research Premise

The proposals in the New Basics Project are based on both a normative futures orientation and a research-based analysis of current pedagogy in Queensland. This section is an evaluation of the current pedagogical context in Queensland state schools. It draws together findings from four recent Queensland studies to assess current conditions. It concludes with commentary on current organisational capacity to deal with both the Futures Premise and the Equity Premise. The studies are:

- Department of Employment, Education, Training & Youth Affairs/Griffith University: Everyday Literacy Practices in and out of Schools in Low Socioeconomic Urban Communities (Freebody, Ludwig & Gunn, 1996);
- Education Queensland/Griffith University: Reconceptualising Years 10–12 in State Schools (Smith, Matters, Cosier & Watson, 1999);

School Reform Longitudinal Study

Education Queensland began the SRLS in 1998, the largest observational study of classroom pedagogy and student outcomes to date in Australian education. The 3-year design of the study replicates elements of, and uses instruments from, the University of Wisconsin’s Centre on the Organisation of Restructuring of Schools (hereafter CORS) (e.g. Newmann & Wehlage, 1993; Newmann & Associates, 1996). This major US school reform project focused on how changes in school organisational capacity enabled changes in authentic pedagogy and improvements in student outcomes—both conventional and alternative—and particularly for students from at-risk equity groups. The use of the Newmann categories was timely and relevant since Queensland school-based management and the IDEAS projects draw strongly from the CORS study. The focus of the CORS study is illustrated in Figure 1.

The SRLS was designed to investigate the degree to which reform of central office support and school organisational capacity was capable of generating pedagogical change and improved student outcomes. The SRLS is an analysis of the effectiveness of school-based management in making a difference to student achievement, a claim contested in Victorian studies (Caldwell, 1998; Caldwell & Spinks, 1998) and New Zealand studies (Thrupp, 1999).
Figure 1: CORS concentric circle model of levels of school restructuring
The SRLS research design includes large-scale surveys of teachers and principals for systems-wide data on school reform, case study analyses of the impact of management in 24 schools, coded observation of 600 classroom lessons, evaluation of student work from those lessons, and meta-analysis of their achievement using conventional measures. The sample of schools and lessons was not random but intentional: principals and teachers recommended, as innovative exemplars, schools and lessons to be studied. While not fully representative, SRLS provides a broad description of current classroom pedagogic practices in Queensland schools.

The study is completing its second year of data collection. The following observations are taken from annual reports (Luke et al., 1999, SRLS, 1999a, 1999b). Data collection to date has focused on documenting:

- classroom pedagogy in 600 lessons in Years 6, 9 and 11 in four Key Learning Areas (KLAs), viz. English, Mathematics, Studies of Society and Environment (SOSE), Science; and, in 1999, other KLAs and interdisciplinary lessons;
- the kinds of leadership and school-organisational capacity needed to support improved pedagogy;
- an analysis of the first cut of data on student achievement (this occurred late in 1999 and is continuing).

The results presented here are preliminary, pending finalisation of the study in 2000. They are, however, based on a substantial 2-year corpus of data with student work from more than 600 lessons in 16 schools.

The Newmann (1996) study focused on the incidence of the following key elements of classroom teaching and learning:

- higher-order thinking
- depth of knowledge and understanding
- substantive conversation
- connectedness of the lesson to the real world.

Newmann's (1996) findings were that high levels of authentic pedagogy—specifically intellectual engagement and connectedness—enhance student achievement on both conventional measures (e.g. standardised achievement tests, overall achievement levels) and alternative measures (e.g. moderated teacher assessment of student written work). These factors, he argues, have effects on the achievement of both mainstream and equity target groups—in the case of CORS, inner-city African-American students.

The SRLS added an additional 16 coding categories, including other elements of teaching–learning, classroom behaviour and interaction that were not central to the American school reform agenda but that Australian and international researchers claim improve student outcomes for diverse student populations, such as:

- on-task behaviour
- use of background knowledge
- relevance
- critical thinking
- problem-based teaching
- active citizenship

• transdisciplinarity
• metalanguage
• narrative.
(The full coding scheme appears in Section 2.3.)

Using Linear Structural Relations (LISREL) Analysis, the incidence of the 20 classroom pedagogical phenomena were clustered under four headings:

• social support
• intellectual quality
• relevance
• recognition of difference.

A finding based on analysis of data collected in the first year of the study is that social support rates highest on a 1–5 Likert scale. That is, in the Queensland classrooms studied, levels of social support (e.g. positive approaches to control, on-task behaviour, explicit expectations of behaviour) ranked higher than relevance, intellectual quality and recognition of difference. Recognition of difference—strategies for building inclusive classrooms—rated low and is an area that needs greater pre-service attention and greater professional development.

The key finding is that actual levels of the proxy measures for Newmann’s (1996) authentic pedagogy in intellectual quality and relevance are relatively low (in the low 2’s across all ten subcategories) across both schools and subject areas. The high standard deviations indicate that many outstanding lessons were observed. This is, however, clearly an area where it is important to develop strategies for improving teaching and learning.

The 1998 findings suggest that use of productive pedagogies is lower in the middle school than in the senior and primary schools. The research attributes this to the greater incidence of professional learning communities, authentic assessment and integrated curriculum conversations in primary and senior schools studied (SRLS, 1999a). These general findings are corroborated in recent Australian work on middle schooling.

Relating SRLS findings to middle schooling issues
In recent years a number of research and development programs have focused on problems of student achievement and alienation in the middle school. In Queensland, a 1995 report by the Board of Teacher Registration on the educational needs of young adolescents recommended the following:

• stronger emphasis on quality pedagogy
• futures perspectives
• human relationships and personal development
• approaches appropriate to adolescents’ talents, interests and learning styles.

In Australia, the National Middle School Project (Department of Employment, Education, Training & Youth Affairs, 1997) was set up to take account of two perceived areas of need:

• compilation of useful, practical, and adaptable curriculum materials
• development of a set of common and agreed guidelines.

This same study suggests significant problem areas in the middles school that need to be dealt with effectively; in particular, finding new ways of working with these students that are appropriate and productive.

From the existing literature, it appears that many middle-school students face:

- curriculum transition from (a mainly integrated) primary school instruction to a secondary school system that, in most cases, still consists of a disintegrated "collection code" (Bernstein, 1990) of subject 'boxes' with highly variable levels of integration;
- pedagogical shifts from student-centred teaching in primary schools to subject-centred teaching in junior secondary years;
- discontinuities in personal support, as a result of highly variable emphases on self-development, life-planning, physical and psychological health.

According to the SRLS research, the incidence of integrated middle-school approaches to outcomes education, literacy and technology across the curriculum, and KLA-based integration across subjects is extremely variable.

Considerable and constructive developmental work in middle-school curriculum and planning is presently underway in Queensland schools, led by innovative teachers and heads of department. Some have begun to use an integrated (rich task) orientation whereas others have used the Queensland School Curriculum Council (QSCC) syllabus implementation in Health & Physical Education (HPE) and Science to revitalise their work programs and pedagogy. Yet the educational experience of the middle school generally remains subject-specific with inconsistent approaches to outcomes-based education. Students typically move from a junior schooling experience characterised by low-stakes assessment into a high-stakes assessment regime in the senior school, Years 11-12.

The SRLS findings suggest that productive pedagogy has lower levels of occurrence in the four general KLAs (English, Mathematics, Science, and SOSE) than in other areas (HPE, Arts, and other multidisciplinary lessons) sampled in 1999. The preliminary findings from teacher-moderated judgments of student written work in English and SOSE indicate that, where productive pedagogy levels are low, intellectual quality and relevance of student work are also low.

Further data analysis is forthcoming in the final year of the study, with tracking to conventional student achievement data and answering research questions about specific effects on equity groups. The positive news is that there is a great deal of quality teaching occurring. In this sense, the professional development resources and expertise for a systemic focus on pedagogy are in the schools.

Nevertheless, based on an intentional sample of innovative schools and teachers in the first two years of data collection, it remains a finding of the SRLS that levels of intellectual engagement and levels of relevance need improvement. Based on the classroom lessons observed and student work assessed, efforts for improvement in classrooms should focus on such matters as analytic depth; intellectual challenge and rigour; critical thinking; critical literacy and higher-order analysis; and dialogue. Also lessons and student work need to be more connected to student cultural background; knowledge; problem-based learning; and the worlds of work, citizenship and community life.

The data from 1999 and 2000 will test the hypothesis that these low levels of productive pedagogy, as in the Neumann (1996) study, produce lower levels of student outcomes according to both conventional and alternative indicators. Current data trends suggest that a systemic focus on pedagogic practices has the potential to improve student outcomes.

**Everyday Literacy Practices in and out of Schools in Low Socioeconomic Urban Communities**

Whereas the SRLS study is limited to state schools, the Freebody et al. (1996) study of literacy practices of lower socioeconomic primary school students included both state and non-state school children. They studied 300 classroom lessons in early literacy instruction, and augmented these by interviewing teachers and caregivers. In contrast with the SRLS, Freebody et al.'s methodology...
involved ethnomethodological and functional linguistic analysis of classroom pedagogy and a focus on student textual work. The study noted the continued prevalence of deficit explanations of student performance that focused on cultural and social class stereotypes (cf. Hill et al., 1998). At the same time, it noted that there seems to be a lack of focused instruction on those early literacy linguistic and coding orientations that are needed by the most at-risk students.

Freebody et al. (1996) found that many of the contexts set up in the classroom for learning content were not closely related to a focused set of learning objectives. This blurring of objectives makes it difficult for many students to identify what is required of them. In the absence of a strong focus on outcomes, tasks and knowledges for disadvantaged groups, the indications are that the use of an integrated or holistic curriculum per se makes little difference to the accessibility of literacy. When the learning objectives are blurred, those students whose cultural or social background is different from that of the teacher appear to find the teaching confusing or inaccessible.

Freebody et al. (1996) further found that literacy in the classroom is not merely reading and writing. Rather, these factors are tied to the procedure and sequence of the teaching of the lesson. To be seen as a good reader and writer, a student needs to display knowledge of text, procedure, appropriate role, correct timing of responses, and a sophisticated understanding of conventions for sequentially building knowledge and skills in the classroom. Aspects of these pedagogical routines may have little or nothing to do with developing useful and portable language skills and knowledge. Many students may be excluded from learning through this process, not because they could not engage with the content or practices, but because they do not understand the social and linguistic procedures of the lesson routine.

In the classrooms observed, imaginary or fantasy contexts for teaching literacy skills and knowledge were often established. These became the focus of lessons. This reliance on learning that was neither real-life nor life-like, limited the portability and inclusiveness of learning. The main purposes of classroom talk appeared to be the creation of a supportive learning environment through teachers responding positively to all students' attempts at displays of content knowledge, and explicit responses to appropriate behaviour and classroom procedures.

The study concluded that, in the primary classrooms studied, there was a classroom pedagogic focus on student behaviours, establishing and maintaining a supportive classroom order. Another conclusion is that there is apparently a need for:

- more engagement with real-life or life-like community and cultural knowledges, competencies and skills;
- more focused instruction on linguistic aspects of the coding system and intellectual substance, particularly among the most at-risk children.

The Freebody et al. (1996) study thus tends to corroborate the SRLS (1999) findings that there needs to be more work done developing and promoting pedagogic focus, relevance and intellectual engagement. Both studies found evidence of what, in the international literature, is referred to as a "dumbing down" (cf. McGaw, 1996) of the curriculum in some classrooms, but particularly for those at-risk students struggling with basic skills, early literacy and so on. This finding is also corroborated by other Australian and international researchers who argue that a deficit ideology can preclude better achievement among those most at risk (Ladson-Billings, 1995; Hill et al., 1998; Newmann et al., 1996). In a recent commentary on early intervention programs, Gee (in press) attributes what he calls the "slump" in reading achievement occurring in later primary years, despite recent policy foci on early intervention, to earlier unchallenging and irrelevant curricula.

Teaching to the lowest common denominator and stripping out intellectually imaginative and challenging work in a belief that children struggling with basic skills problems are unintelligent can effectively preclude minority, lower socioeconomic and marginalised students from better outcomes.

It is also the contention of Sizer (1994) and Ladson-Billings (1995) that in the context of American urban school reform, behaviour problems and increased drop-out rates can be traced to the degree
to which the most at-risk students consider schooling, classroom teaching and assessable activities to be irrelevant, of no real-world value, and as fundamentally unmotivating.

From these studies of Queensland classrooms and the other literature cited, three working hypotheses about the Equity Premise can be tested in the trial of the New Basics Project:

- That a socially supportive, student-centred classroom is necessary but not sufficient to improve the outcomes of the most at-risk students (SRLS, 1999; Freebody et al., 1996).
- That a basic skills orientation to knowledge of how the coding system works is necessary but not sufficient to improve the outcomes of the most at-risk students (Freebody & Luke, 1990; Freebody, Ludwig & Gunn, 1996).
- That intellectual engagement with higher-order thinking, relevant engagement with high-stakes discourses and knowledges, critical thinking and critical literacy are necessary and sufficient to improve the outcomes of all students, including the gifted and academically excellent (Sizer, 1994; Newmann, Marks & Gamoran, 1995; Luke et al., 1999).

Reconceptualising Years 10-12 in State Schools

How the conditions described by the previous two studies flow through to senior school achievement in Queensland is an important question. In their study of Year 10–12 pathways, Smith et al. (1999) conclude that the patterns of underachievement by social class, location, gender and so forth in senior studies are a major consequence of unprincipled and unfocused learning pathways.

The problem here does not appear to be inflexibility of the Queensland Board of Senior Secondary School Studies (QBSSSS) syllabus development approach or the availability of subjects, but quite the reverse: an unprincipled diversity whereby many students freely mix and match subjects in ways that appear to have little direct connection to clear vocational, occupational or tertiary study pathways. This appears, then, to be a case of disarticulation of pathways from schooling into productive life chances.

At the same time, the study also documents changes in the real demand situation of tertiary education. The actual criteria for university entry have changed substantively since the late 1980s, with what were called non-traditional entries to university study (selection not based on the Overall Position (OP)) comprising almost half of admissions in some institutions. This includes major increases of portfolio admissions, transfer students from other university courses and institutes of Technical and Further Education (TAFE), mature-age students, people from the workforce re­entering study with recognition of prior learning provisions, and a significant number of direct entries without Year 12 completion. In effect, the expansion of university participation—to include nationally an estimated 35,000 more students in the past decade and currently around 45% of all school leavers—has a host of potential flow-on effects to senior schooling and the OP system.

It is dangerous to predicate either maintenance of the status quo or changes to senior schooling solely on the demand context of university entry, given funding and policy debates on the Higher Education Contribution Scheme (HECS), university growth and expansion. If, however, we apply both the Equity Premise and the Futures Premise to the current system, Smith et al. (1999) offer some disturbing findings:

- Patterns of inequitable achievement on the basis of location and social class are significant, with low OP performance in the most at-risk communities, low overall certification rates in Vocational Education and Training (VET), and high participation rates in basic literacy and numeracy programs.
- The directing of students into particular pathways needs to be reconceptualised and improved so that students make appropriate critical choice in relation to new and future economies.
- OP-eligibility does not necessarily equate to the study of what traditionally has been regarded as the 'competitive academic curriculum'. This is, of itself, not a negative finding. The public
perception, however, is that students are ‘straight-jacketed’ into academic streams by the OP. The reality is that there is a relatively low number of students (5.5%) who study the physical sciences strand while others take combinations like English, Maths A, Film & Television or Health & Physical Education, Multistrand Science, and Hospitality Studies. In state schools there is a residualised science focus with a strong applied focus.

To augment the foregoing commentary on the middle-school situation, Smith et al. (1999) argue for a comprehensive reconceptualisation of Year 10 as a crucial transition year that could become a more flexible, multi-purpose year to address the pathway disarticulation problem and the apparent alienation of many young people from school before Year 11.

Taken together, these major research studies suggest that there are fundamental unresolved issues in pedagogy and curriculum that present significant impediments to the attainment of improved and equitable student outcomes.

While it is difficult to make a direct connection between the pedagogical problems described by the SRLS (1999) and Freebody et al. (1996) and the longitudinal outcomes described by Smith et al. (1999), the picture is nonetheless disturbing. The SRLS and Freebody findings suggest that there are more powerful pedagogic strategies for closing the achievement gap that could be more broadly generalised and implemented across the system. A working policy hypothesis is that the pedagogic situation described in those studies contributes to the stratification of Year 12 results, however indirectly.

The picture is one of a system where there is innovation in pedagogy and curriculum occurring in schools and classrooms. There is evidence of strong and diverse teaching but that innovation appears to be local, idiosyncratic and not systemic. If it is the case, as claimed during consultations for QSE 2010, that teachers view Education Queensland as a culture that discourages innovation and risk taking, then a refocused encouragement of pedagogical innovation should be the highest systemic priority.

Links with statewide testing results for targeted equity groups
A systemic focus on pedagogical innovation is necessary to close the achievement gaps demonstrated by Smith et al. (1999) and evidenced in the QSCC report (1999) on performance of students of targeted equity groups in aspects of literacy and numeracy in Years 3 and 5 in 1998. Despite limitations of the instrumentation, the test results tell a significant story about underachievement in both literacy and numeracy by such students.

For students of Aboriginal and Torres Strait Islander backgrounds, this is the case on all subscales (three each for literacy and numeracy) and at both year levels (3 and 5). The QSCC flags these differences as “demanding attention”. The performance of students from non-English-speaking backgrounds, while below that of the cohort in many cases, is not dramatically so. In fact, in one case it is above it (Year 3 spelling) and in some cases being equivalent to it (Year 5 spelling and Year 5 number). There is also an urban–rural achievement gap favouring urban students on several subscales (e.g. Years 3 and 5 data, including measurement).

The gender differences at exit from senior studies (girls outperforming boys on average) have already received much media attention. The emphasis, however, on comparing averages can be misleading because it ignores the achievement of subgroups of girls and boys. For example, in state schools, boys taking the most popular combinations of subjects are ahead of the girls. Particular subgroups of girls continue to evidence patterns of under-participation and under-performance. Additionally, there remain unresolved questions about the translation of improved academic achievement into improved occupational, educational, and life pathways (Cox, 1999). Further analyses of these differences (Matters, Allen, Gray & Pitman, 1999; Teese, 1995; Teese, Davies, Charlton & Polesel, 1995) reveal that there are many factors (e.g. subject choice and class) that interact with gender. The absence of an agreed indicator of socioeconomic status that can be applied to individual students precludes any sophisticated analysis of the relationship between class and achievement. Unfortunately, performance data on the primary literacy and numeracy program have not, to date, been disaggregated according to socioeconomic status.
Regarding the Equity Premise, contemporary educational systems remain committed to maximising the achievement of children of diverse abilities and backgrounds. There remains a sustained trend towards uneven outcomes across the system distributed on the basis of socioeconomic level, location and cultural background (Hill et al., 1998). While Education Queensland as a system is not unique nationally or internationally in this regard, the trend is troubling when situated in the context of residualisation by social class.

The danger, as QSE 2010 points out, is not just of a residualised state system for working class and underclass students and communities (cf. Thrupp, 1999). It is imperative to focus on systemic improvements in students’ achievements and life pathways in all schools and communities. The Equity Premise should direct our attention particularly to those students coming from communities and regions hit hardest by the economic and social scenarios described in Section 1.1.

Regarding the Futures Premise, the previous section also raised major issues about the relevance to new workplaces and cultures of the knowledges and skills in the current curriculum. The SRLS and Freebody studies raise issues about the relevance of much school-based instruction to current and future workplace, civic and community contexts. The contestable assumption in much school-level planning is that preparation for futures will be dealt with through systematic approaches to technology education.

Digital Rhetorics, Literacies and Technologies in Education, and related studies

The assumption described at the end of the previous section was one of the propositions about information technology explored in a major study by Bigum et al., 1997.

The researchers studied 20 classrooms in eleven schools in NSW, Queensland and Victoria and found that there was considerable variation in the extent to which technological tools were used and, where they were used, in the ways they were used. One class, in the technology component of a subject, actually used no new technologies, only pen and paper, blackboard and an overhead projector. At the other extreme were classrooms employing Internet access (including E-mail the World Wide Web) and an array of other multimedia applications (e.g. CD-Roms, presentation software, quick-take cameras, sound and animation software) on a daily basis. This research highlights the wide inequities in technology education access and experience in schools.

According to Meredith, Russell, Blackwood, Thomas and Wise (1999), in a report commissioned by DEETYA and conducted by the Australian Key Centre for Cultural and Media Policy at Griffith University, teachers need knowledge and skills in mastering the tools of new technologies and integrating them into curriculum and instruction. A recent South Australia Department of Education and Community Services study of current Information Technology (IT) uses and practices (Comber & Green, 1998) concluded that IT is being adapted by teachers into extremely conventional, print-oriented lesson formats and activities.

The discrepancy in what is happening from classroom to classroom also has important implications for effective learning, which calls for continuity from year to year, subject to subject, and classroom to classroom. Bigum et al. (1997) maintain that continuity must be pursued strategically, especially within a school and among other local schools—including to secondary schools from their ‘feeder’ primary schools. Research into information communications technology also shows how little things have changed at the ‘chalkface’ since the 1970s and 1980s, despite the rhetoric (Chalmers, 2000). The unevenness of access and use of technology appears to have exacerbated, rather than addressed, the Equity Premise.

Bigum et al.’s (1997) findings indicate that the use and adaptation of IT by schools has reached a conceptual and practical impasse. Many schools have had the necessary hardware in place since the 1980s, and there have been exemplars of innovative teachers and students using new technology for authentic, practical, and intellectually engaging tasks. Schools experienced major problems supporting the infrastructure and reported a need for systematic training and investment in the ‘warmware’ of professional and technical expertise.

The relatively low degree of IT engagement by many schools is not merely a function of a need for professional development. Bigum et al. (1997) report that many teachers are justifiably cynical...
about the promise of IT and its capacity to resolve the difficult teaching-learning problems they encounter.

It would appear that much of the IT use reported by Bigum et al. (1997) is for extremely inauthentic and uncritical pedagogy (e.g. word processing, replication by rote, lower-order thinking, and other largely irrelevant activities in IT-based instruction). In more recent studies of schools in the Rockhampton area, Lankshear, Bigum and colleagues indicate that too many students engage in simple information reproduction activities and too few students use IT to produce new and locally relevant knowledge.

The consensus from these recent studies corroborates the constructivist philosophy taken by Apple Classrooms of Tomorrow (ACOT) in Springfield (Dwyer, 1994): That technology in and of itself will not solve the problem, but that its use must be accompanied by a pedagogical revolution. Until IT is more commonly used for educational practices that are constructivist and problem-based, locally relevant and critical, it has little hope of fundamentally changing patterns of student outcomes and achievement. Without a major reframing of the technology push within a larger reorientation to pedagogy and curriculum, the danger is that schools will simply import and adapt the pedagogical problems identified by the SRLS (1999) and Freebody et al. (1996) into IT environments.

IT is neither the problem nor the solution. It can, however, play a key role in a futures-oriented reform of pedagogy. It can do so both as an instructional mode and as a medium for building and sustaining professional development learning communities.

This section has examined the Research Premise, painting a picture of the current situation in Queensland schools and offering an assessment of current organisational capacity to respond to the challenges of the Futures Premise and the Equity Premise. It has portrayed a system with four key challenges, to:

- increase intellectual engagement and relevance across Years 1–10;
- improve curricular integration and focus in the middle-school years;
- conceptualise and develop clear pathways from secondary school into changing workforces and tertiary studies;
- engage with relevant futures scenarios and technologies.

The test for Education Queensland as a system is the degree of maturity with which it responds to this situation. It is also a serious challenge for professional associations, unions, universities, parent organisations and others. It is tempting to lay blame on structural, institutional or human factors: to shunt responsibility around among teacher training institutions, in-service support (or lack of it), work intensification and class size, administrative inefficiency and industrial recalcitrance. But none of these strategies in and of itself has any hope of addressing the challenges.

One of the interesting aspects of Sizer’s (1994) work with the Coalition of Effective Schools is his documentation of the initial blame and guilt phases of reform. This observation is restated in the meta-analyses of the school reform literature, especially Fullan (1992, 1993), Elmore (1995) and Hargreaves (1994), outlined in Section 2.5. It is equally tempting to assume that because these problems are quite likely generalisable across the non-state sector and across other systems in other States, that we should leave things as they are, or assume that the current systemic strategies discussed in Section 1.3 are capable of generating sufficient innovation and reform.

The New Basics Project proposes that the only way to an effective and comprehensive response to questions raised and problems identified by the three premises—Research, Futures and Equity—is a trial strategy based on the remaining premises:

- The Pedagogy Premise. Improved student outcomes require a systematic, principled and practical coordination of the message systems of curriculum, pedagogy and assessment.
- *The Professional Learning Community Premise.* Improved, equitable student outcomes and effective reforms in curriculum, pedagogy and assessment require high levels of teacher professionalism, sustained intellectual work and shared ownership of reform within dynamic school communities focused on learning.

This will require a coalition of educational interests committed to an honest appraisal of the situation and a shared set of strategic solutions.
1.3 Current and Proposed State Interventions

THIS SECTION HAS BEEN TEMPORARILY REMOVED DUE TO RECENT DEVELOPMENTS IN OTHER STATES' PROGRAMS FOR CURRICULUM, PEDAGOGY AND ASSESSMENT
A Queensland response to these approaches

In Queensland the QSCC (P-10), the QBSSSS (11-12) and Education Queensland (EQ) have been operating on different agendas for curriculum renewal and assessment instrument development. Three distinctive patterns of systematic organisation and planning have been used by QBSSSS, QSCC and EQ.

The two statutory bodies (QSCC and QBSSSS) have established stakeholder consultation processes. Hence, neither would purport to have a distinctive agenda of its own. The structuring, timing and procedural constraints on these consultation processes, and affiliated research and development practices, evidence both particular technical orientations and particular philosophies to curriculum and assessment. Thus statutory bodies are not neutral educational entities—philosophically or technically—nor by definition can they be. Their distinctive approaches have the effect of tilting the educational orientation of the system in particular directions in particular temporal cycles.

The QBSSSS follows the logic of curriculum renewal in 6-year phased cycles of syllabus redevelopment, critique and renewal in existing Board subjects. These cycles are influenced by the field of stakeholders (universities, schools, systems) and professional educators (subject experts, teachers, curriculum specialists) who may choose to argue for changes in syllabus topics or approaches at any time. The operations of the QBSSSS are premised on the imperative to define and maintain standards in the development process and renewal cycles because of its credentialling role. There are a number of key questions about the capacity of this approach to respond to dynamic changes in fields of knowledge, and changing flows of students to particular institutions, occupations and life pathways. These include:

- Can the critique and renewal of subjects and disciplinary traditions be put into teachers' practices more rapidly?
- Should QBSSSS take a more pro-active role acting upon issues of equity of achievement?

The QSCC works from developmental cycles of 5–6 years for each KLA and 15 years for total renewal of all KLAs. As a new authority, it has also been reliant on initiatives conducted elsewhere. To illustrate: the current English syllabus was developed in the mid to late 1980s by EQ in close collaboration with other systems, implemented in the early 1990s, and accepted by the QSCC as an official Queensland syllabus on an interim basis. It has since been augmented by the addition of assessment instrumentation (e.g. Year 2 Net, now overseen by the QSCC) and early intervention approaches (e.g. Reading Recovery, operated by EQ). It is to be replaced by a new QSCC syllabus, presently in developmental stages, for trialling in 2001. In the meantime, the written genres featured in the curriculum, the developmental sequences used in the diagnostic instrumentation, approaches to the teaching of reading, and interfaces with technological media of communication have changed radically and substantially in the intervening period. Among the questions:

- Are 15-year cycles of total curriculum review and renewal adequate to deal with changes to the state of knowledge?
- Are levels and kinds of intellectual, philosophic and pedagogical compatibility between junior and senior syllabuses maintained?
- Do the approaches to assessment developed and implemented by QSCC undergo periodic review and renewal?

EQ has attempted to adjust or intervene in the curricular process at roughly two- or three-year intervals since the early 1990s especially since the publication of *Shaping the Future* (Wiltshire, McMeniman & Tolhurst, 1994). Each effort has been an attempt to refocus, shift and/or recoordinate an aspect of the system. In instances the main focus was assessment (early intervention via the Year 2 Diagnostic Net, Student Performance Standards, National Benchmark testing); in others, it involved early withdrawal intervention (Reading Recovery); in a few cases a DRAFT New Basics Technical Paper, Version: 3 April 2000
focus on pedagogy (Excellence in Teaching); in others, a focus on new syllabus goals and outcomes (current QSCC implementation roll-out). Among the key questions:

- What are the relationships between these various attempts to reform curriculum, pedagogy and assessment?
- Is there an overall, coordinated and public plan?
- How have these interventions been coordinated and timed with representations and directions taken by QBSSSS and, more recently, QSCC?

There is no current medium or long-term agenda for new interventions over the period 2000 to 2010—other than to roll out the QSCC syllabuses as required by legislation, and this proposal of the New Basics and New Basics Project in QSE 2010.

The internal clock of curriculum change in Queensland has been attuned to political cycles, constrained by the economies of time and scale of a much slower, pre-electronic educational setup and based on traditional linear approaches to curriculum development. The key question is:

- Even under optimal conditions for the coordination of curriculum, pedagogy and assessment renewal cycles in Queensland, can current systems cope with the Futures Premise?

Section 1.1 argued that the advent of a networked society based on rapid flows of information and capital had led to an exponential expansion of knowledge and a compression of space and time.

If, as sociologists of knowledge have suggested, human knowledge is doubling each decade under the impact of IT and globalisation, then 15-year curriculum development cycles, or 3–5 year trial schedules to develop, renew and propagate among teachers print-based syllabuses may not be adequate. Curriculum materials like the Queensland Readers and the Dick and Dora Readers were used for over three decades. Sets of encyclopaedias could sit on school library shelves for 10–20 years and remain relatively usable (Luke & Kapitzke, in press). Several major encyclopaedia publishers have now ceased the production of hard copies and, instead, market renewable websites. What this means is that knowledge in, for example, the fields of biological sciences, information science, or even literature study and indigenous studies, undergo major paradigm shifts within 5–10 year time periods.

Tylerian approaches to curriculum\(^2\), variations of which are used in most States, was developed by Ralph Tyler at the University of Chicago and refined by influential students like Hilda Taba. These models serviced postwar educational systems (and, indeed, economies), systems that required far slower patterns of curriculum reform than needed today. A 10-year cycle of curriculum reform might have suited, for example, the rate of knowledge change in 1950—prior to the advent of digital technologies, multinational information, capital and population flows, and mass mediated cultures. Such models are predicated on a stability of a knowledge canon and a much shorter 'half-life' for cultural traditions. They are also useful for state educational systems because they focus on a needs analysis process that allows stakeholders to weigh in with what they consider to be valuable knowledge. This is readily translated into manageable consensus-building systems for curriculum reform.

In contrast with the Tylerian Model, the Reconceptualist Model developed by William Pinar (1975) and colleagues proposes that curriculum not be built from specific behavioural objectives, knowledge or process outcomes. It is based on a phenomenological approach to curriculum and education. Reconceptualist and critical models of curriculum argue that the multiple objective and outcome approach tends to fragment, molecularise and disintegrate knowledge and practice, and to deskill teachers (Apple, 1982).

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\(^2\) Tyler's model, elaborated in *Principles of Curriculum* (1949), is a linear process-based model involving consultative 'needs assessment', specification of behavioural and cognitive outcomes, subject-based curriculum design and development, trial, and implementation cycles.
The Reconceptualist Model argues that curriculum can be built by envisioning the kinds of life worlds and human subjects that the education system wants to contribute to and build. In this way, a reconceptualist approach to curriculum is better suited to addressing a futures orientation than the Tylerian approach, which by definition tends to reproduce existing categories, knowledges and skills rather than build new ones. Reconceptualist and critical models have been used in the development of new futures-oriented categories for curriculum in places such as Sweden, Toronto, and Chattanoga.

The model for syllabus development for senior studies in Queensland is predicated on the assumption that effective curriculum development requires generating and negotiating changes in teacher practices. This negotiation requires a dialogic interaction between teachers and the central authority—processes similar to those described in Section 2.5. Such negotiation in syllabus development, however, is time-consuming and may stretch the curriculum development and implementation cycle even further.

Some current Australian models are based on the contrary assumption that curriculum development is largely a matter of developing and finding relevant materials and broadcasting them from the central authority to teachers and schools. Such models are predicated on particular economies of scale for publishing, distribution and implementation of texts using print media. The possibilities for using on-line, interactive technology for local, regional and global curriculum development and renewal have put these assumptions and cycles of production and transformation of knowledge and skill up for grabs. They may enable a shift from the production of large runs of curriculum materials to the rapid prototyping, development and revision (on-line and in the field) of more specialised and niched materials (e.g. A Short Course in the Australian Constitution, c.1998); that is, they may mark a shift from curriculum “economies of scale” to “economies of scope” (Harvey, 1989). They also potentially enable other forms of dialogic, interaction and curriculum construction involving and refiguring the power relationships between teachers, curriculum developers and central agencies.

It is now possible to reconceptualise knowledge not in terms of a stable print canon, but rather in terms of a renewable and criticisable resource that is dynamic, changing in relation to new contexts, renewed and sustained by teachers and curriculum developers. Teachers’ work in new conditions, then, is less about reproducing the canon, and more about reconstructing and shaping it in relation to contemporary problems and issues.

In Queensland, a whole-scale redirection of the entire system in response to new learning or knowledge imperatives would require the coordination of major employing groups such as Education Queensland (responsible for implementation in state schools) with two statutory bodies (QBSSSS and QSCC). The major employing groups and other relevant stakeholders are, of course, represented on the statutory bodies. Through no fault of their own, the three aforementioned organisations often work from divergent philosophic approaches to curriculum, radically different research and development timelines, different knowledge bases, and, crucially, advocate fundamentally different technologies of assessment. This also makes a coordinated educational response to a particular ‘breaking’ issue difficult, and requiring delicate political coordination and stakeholder consensus (e.g. the introduction of VET; the current debate over gender, social class and achievement; ongoing issues about indigenous student achievement).

In most states, curriculum, pedagogy and assessment are defined by historical agreements and achievements, previous paradigms operational at the time. Many existing systems and school-based practices have survived successive 1980s and 1990s reforms. State systems across Australia are ridden through with the artefacts of bricolage: of discontinuities between senior and junior schooling; anomalies between assessment instrumentation and curriculum goals; older curriculum documents with no outcomes orientations whatsoever; and, indeed, assessment instruments and procedures with little connection to technologically-oriented or futures-oriented competences.

Given the pedagogical situation described in Section 1.2, point-in-time micro or incremental adjustments to curriculum, pedagogy and/or assessment practices do not have the capacity to provide a responsive and developmentally coherent, educationally coordinated and principled approach to the construction of educational outcomes. Further, there is limited evidence that any of
the above three policy moves alone are capable of steering the system in an educationally coherent
direction, much less producing high quality or equitably distributed educational outcomes.
In fact, the evidence is to the contrary. Those places that have taken standardised basic skills
testing as the principal value-driver (e.g. Colorado, Texas) and those that have taken examinations
as the principal value-driver (e.g. Singapore) have effectively narrowed the curriculum, limiting the
kinds and types of educational outcomes produced (International Reading Association Board of
Directors, 1999), with questionable effects on the achievement of the students from lower
socioeconomic or cultural minority communities (McGill-Franzen & Allington, 1993; Hoffman,
Paris, Patterson, Pennington & Assaf, in press).

In response to the effects of an overreliance on standardised testing, Toronto and California have
moved towards task-based assessment. The Californian Advancement Via Individual
Determination (AVID) (1999) project is a particularly innovative model worth further elaboration.
Coordinators and site teams select students for this program, especially from the following groups:

- low-income and linguistic minority students with average to high achievement test scores and
  C-level grades;
- students who would be the first in their family to attend college;
- students with special circumstances that could impede their progress to college.

The AVID curriculum at both the middle and high school level is composed of a series of libraries
organised around writing as a tool of learning, inquiry, and collaboration. The curriculum is
typically taught two or three days per week and AVID students complete formal writing domains
based on anticipated college-level writing experiences. The previously underachieving students
who are placed into college preparation classes are not left to sink or swim, however. AVID has
arranged a system of supports to assist students in making the transition from low-track to high-
track high school classes. These include:

- a special academic elective class for the duration of the student's middle or high school
  experience, supported by 7:1 tutorial groups;
- two school days are designated tutorial days, when students work in subject-specific groups
to probe material deeply through a variety of inquiry methods with the assistance of a
  specially-trained tutor;
- one motivational day each week, devoted to guest speakers, field trips, or to goal setting or
  organisational activities;
- contracts signed by parents to formalise their child’s participation in AVID in high school.

In contrast, other systems have gone down the route of overspecification of curriculum outcomes.
For example, Janks (1999) reports that the new South African curriculum had identified over 170
skill and subskill outcomes for citizenship education. One of the principal critiques of the British
national curriculum is that it tends to over-enumerate outcomes, creating an unmanageable
educational situation. As Sizer’s (1994) work with the Coalition of Effective Schools has pointed
out, the crowding of the curriculum with more content and more breadth of coverage may have the
opposite effect in practice, of narrowing pedagogy and curriculum to packing in what is required.
According to Sizer, the very breadth that is sought actually winds up selling short serious
disciplinary inquiry and intellectual work.

The further effect is a deskilling of teachers—where teaching becomes a kind of hoop jumping
through outcomes. In this context of an overcrowded curriculum, the attractive option to many
teachers becomes the use of prepackaged, commercially produced materials.

Without a philosophical vision and practical plan linking parts of the message system, a range of
unintended effects occurs. Reforms in curriculum may be countermanded by shifts in assessment
(e.g. higher-order thinking may be neglected because of an emphasis on basic skills testing;
literature-based approaches may be countered by an assessment emphasis on functional literacy).
Equally, reforms in pedagogy may be negated by particular changes in curriculum (e.g. a
constructivist or critical orientation may be countered by a canonical approach to history or science). Further, there is evidence that, despite a crowded curriculum, teachers will adjust their work to deal with high-stakes assessment if evaluation of their schools, students or teaching is on the line (Heubert & Hauser, 1999). In such cases, quality syllabus goals, curriculum content or pedagogical processes may be sacrificed because they are not part of high-stakes reporting.

Unless the triad of the educational message system is pulling in a coordinated fashion towards clear systems goals, the achievement of those goals can be deterred by the system. Further, in light of the challenges of QSE 2010, to develop educational plans that are middle-term tactical in nature (2- or 3-year timelines) can lead to a reactive 'twiddling the dials' as curriculum and assessment become obsolete, and as pedagogy fails to adapt to new kinds of students, new learning styles and new knowledges. Strategic policy planning for the message system needs to be both medium and longer term, forward-looking and flexible. Any systems set in place need to be quickly renewable and readily sustainable. That is, the system needs to have a futures-oriented strategic vision for curriculum, pedagogy and assessment, but one that has a great deal of medium-term and short-term tactical flexibility.

Second, there is a policy vacuum on the third part of the message system—pedagogy. Adjustments in curriculum and assessment in and of themselves cannot generate changed outcomes without a focus on classroom interaction, where students and teachers select, shape and renegotiate contents, skills and knowledges, and their assessment, in idiosyncratic ways (Luke, deCastell & Luke, 1989).

Queensland is undertaking the largest scale research and development orientation to pedagogy in Australia, beginning with school-based management and the IDEAS Project (Crowther, 1998), and including the current SRLS (Luke et al., 1999). In the tradition of the school reform and improvement literature, this work suggests that locally managed schools cannot make a difference for students without strong teacher professional learning communities focused on intellectual quality and depth, with a concentration on, and flexibility of, pedagogy.

According to Fullan's (1993) widely cited Canadian studies of educational change, unless reform is owned by teachers and is generated interactively between centralised authorities and local schools, it cannot make a substantive difference in generating changed pedagogical practices. Teacher professional learning communities are the crucial practical nexus of inside-out and outside-in, top-down and bottom-up pedagogic reform (Luke et al., 1999).

To summarise, current policy approaches to improving student outcomes fall short of the mark. Merely adding many standardised tests as key performance measures will not solve the complex problems described thus far. Merely moving from a content approach to an outcomes approach to curriculum also will not solve them. Each move, in and of itself, has some possible educational value. Yet such moves may generate short-term redirection of the system and narrowly defined improvements. Some of the unfocused pedagogy described by Freebody et al. (1996) may become more focused, and teachers will, no doubt, teach to the tests. Yet there is international evidence that large-scale testing may succeed in narrowing the curriculum, driving pedagogy away from the kinds of higher-order skills, critical thinking and intellectual depth required for improved and longer-term student outcomes.

Despite the high quality of many of the QSCC syllabus documents, there is also limited evidence that the elaboration of numerous outcomes can effectively solve or redirect the pedagogy described by SRLS. In fact, the US school reform literature argues strongly that the over-elaboration of curriculum content, outcomes and goals does not, in fact, expand curricular breadth but has the effect of limiting depth, relevance and intellectual engagement (Sizer, 1992; 1994).

Current attempts at reform cannot begin to address the complexity of the problems. They do not focus on the Futures Premise. They are silent about pedagogy. There is also US evidence, cited here, that large-scale standardised testing in and of itself will not begin to address the Equity Premise.
1.4 Project Parameters: A Way Forward

The central curriculum question since Spencer and Durkheim has been: "What knowledge is of most worth?" Educators have always been faced with the challenge of building "selective traditions" (Luke, 1988). This means that the task of curriculum building requires hard decisions about including and excluding knowledges, skills and practices from a potentially infinite range of possible selections (cf. Oakes, Gamoran & Page, 1992). Section 1.2 showed some of the difficulties that Queensland and other States are having with these challenges in relation to the Futures Premise, the Equity Premise and the Pedagogy Premise. In the New Basics Project, these premises form the broad criteria for this reconceptualisation of curriculum.

Many countries and educational authorities are struggling with the curriculum question in new economic, cultural and social conditions. Many are attempting to develop futures-oriented categories. Sweden has undertaken a basic values project stressing democratic values. The Canadian province of Ontario has developed new curriculum categories, including multiliteracies. Singapore has undertaken a radical simplification of its curriculum stressing critical thinking. Chattanoga has developed a futures orientation using categories of time and space. Many developing countries have applied variations on the UNESCO categories (Delors, 1998).

Aristotle’s answer was to provide a broad range of distinctive disciplinary fields, each with its own vocabulary and knowledges (e.g. rhetoric, poetics, biology). The KLA answer is to reassemble traditional disciplines into broadly unified and administratively coherent fields of study. But the problem has become acute: the unprecedented volume, rapidity of change, and diversity of knowledge far exceeds that of any previous period of human history. Selecting what is of most worth has become a confusing and controversial task. Curriculum has always been controversial, but this time the controversies are not about ideology—they are about the sheer breadth and scope of changes in human knowledge and technology. Responses range from lists of great books to E.D. Hirsch’s popular 1980s cultural literacy lists of key facts, works and knowledges.

As noted in Section 1.2, Australian States have moved to list and enumerate skill, process and knowledge outcomes across the KLAs. This is a taxonomic approach. Given the explosion of knowledge, disciplines, fields, and conflicting paradigms—it is not surprising that there has been an overproliferation of outcome statements of varying kinds and levels of specificity. While this fits a Tylerian approach, it leads to a further packing out of the curriculum. Despite their integral and critical attempts to deal with the Futures Premise and the dynamism of disciplinary knowledge, there is a sheer volume and complexity to most current Australian and New Zealand curriculum documents. Many teachers find their multiple framings, categories and subcategories daunting. Others selectively read, include and ignore aspects of these documents.

Yet the New Basics Project is not a project in curriculum reform per se. As Part 1 has argued, the challenges facing Queensland schools require a coordination of all elements of the message system, and a concentration of all aspects of school operations on productive pedagogies and improved student outcomes.

The New Basics Project is therefore a project in school renewal and improvement with a focus on pedagogy.

Thus, the framework is the logical extension of two key recent moves of EQ: It is a reiteration of the original aims of school-based management and it is a specific policy response to the empirical findings of the SRLS study. It is also a logical extension of two current policy moves: It is a necessary variation in the options for school renewal and differentiation, and it is an attempt to develop accountability mechanisms that have positive educational effects.

To return to the CORS project and the implementation of school-based management in Queensland (Figure 1), the New Basics Project aims to set generative conditions for schools to focus their organisational capacity on improved pedagogy and student outcomes. In this way, it is similar in aims to Newmann’s CORS Wisconsin project, which worked with schools that were given exceptional control over curriculum. The effects of authentic pedagogy described by Newmann (1996) were cases of "what is possible under exceptional circumstances" (Sizer, 1992). The New Basics Project is therefore a project in school renewal and improvement with a focus on pedagogy.
Basics Project aims to set up enabling circumstances for the realignment of the message systems in 20 trial school clusters.

Therefore, the models for the implementation of the New Basics Project need to be drawn from the extensive literature on school reform and on school-level change (see Section 2.5), rather than from the previous models of curricular reform and implementation undertaken between 1990 and 2000. Such reforms have tended to operate as top-down and inside-out processes. That is, materials for implementation were blueprinted a priori, trialled, and then rolled out via centralised support. If we were to follow the principle of the "backward mapping" (Elmore & Associates, 1990; Elmore, 1995, 1996) of pedagogic change from its level of subsidiarity, then the logical approach to systems-wide reform would involve:

- setting up enabling and generative conditions, and providing intellectual and material resources for a focus on pedagogy and for renewal of curriculum and development of authentic assessment instruments at the school level;
- enabling teacher development, ownership and problem-solving around issues of pedagogy, curriculum and assessment;
- tracking and studying which teacher and school-based solutions change student outcomes;
- consolidating, codifying and institutionalising those resources for broader systemic dissemination and generalisation.

In this section we have here reviewed extensively the international literature from two outstanding projects; Sizer’s Harvard-based Coalition of Effective Schools and Newmann’s CORS study. Section 2.5 draws from the work of Andy Hargreaves and Michael Fullan in Canada—both of whom describe the processes of teacher change and empowerment, and school change. We also draw upon the exemplars of the IDEAS Project and the National Schools Network, which have successfully renewed several Queensland schools.

One way to cut across the problem of knowledge selection for the curriculum is to take a pragmatic philosophical approach. According to Dewey (1958), problems arise where there is an organism/environment “disequilbrium”. This requires the selection and coordination of knowledges and skills from a range of fields to solve the problem and thereby readjust an organism/environment equilibrium. For example, the decision to build a road is based on a transportation or infrastructure community problem. To build a road requires the principled selection and coordination of knowledges from engineering and physics. It also requires environmental analysis, social and cultural impact studies, accounting, meteorological expertise, and so forth. In this way, everyday problems require transdisciplinary combinations of knowledge. By focusing on real-world and real-life problems, curriculum can provide principled, focused and practical grounds for teachers to select from the vast array of traditional disciplines, KLAS, and new transdisciplinary fields available.

The New Basics are not a discarding of disciplines. They provide a way of focusing and coordinating the teaching of traditional and new fields of knowledge in relation to new demands and contexts. They provide schools committed to various curriculum models or disciplinary structures with ways of coordinating, focusing and integrating their teaching programs. They also provide teachers and schools with ways of renewing their knowledge of fields in light of the dynamic changes and blendings of disciplinary knowledge that have occurred since their initial training.

The framework therefore answers the knowledge question with a reconceptualist strategy. Instead of trying to describe everything that students need to know, it begins from three key knowledge questions:

- What are the characteristics of students who are ideally prepared for future economies, cultures and society?
• What are the everyday life worlds that they will have to live in, interact with and transform?
• What are the valuable practices that they will have to 'do' in the worlds of work, civic participation, leisure, and mass media?

The broad principles underlying the framework reform are as follows:

• a focus on 'mindful schools', where intellectual engagement and relevance are constant foci;
• an introduction of new knowledge categories (The New Basics™) that have an explicit orientation towards researching, understanding and coming to grips with new economic, cultural and social conditions;
• curriculum planning and student assessment based on demonstration (The Rich Tasks™) that are intellectually demanding, relevant and credible to the community, and futures oriented;
• a focus on, and support of, Productive Pedagogies and student work as the core orientation of teachers;
• a focus on teachers' professional judgment regarding the accomplishment of meaningful, visible and credible educational outcomes;
• the development and implementation of an agenda of moderated teacher assessment based on principles of authentic assessment.

The framework has three conceptual pivots. Each is essential to generate changed pedagogy and improved outcomes:

![Diagram showing conceptual pivots: New Basics, Rich Tasks, Productive Pedagogies]

**Figure 2:** Conceptual pivots for the New Basics Project

**The New Basics**

The New Basics refers to four clusters and families of practices that are essential for survival in the worlds that students will live and work in. They describe the interactive requirements of new life worlds and futures orientations thus:

• **Life pathways and social futures:** Who am I and where am I going?
• **Multiliteracies and communications media:** How do I make sense of, and communicate with, the world?
• **Active citizenship**: What are my rights and responsibilities in communities, cultures, and economies?

• **Environments and technologies**: How do I describe, analyse and shape the world around me?

As curriculum organisers, the New Basics are meant to assist teachers, curriculum planners and schools to move beyond a defence of status quo knowledges to a critical engagement with new social, technological and economic conditions.

**Rich Tasks**

Rich Tasks are specific activities that students ‘do’ that have real-world value and use. They are designed by expert panels of teachers and educators using the New Basics as beginning categories.

Each Rich Task will draw on:

• **Repertoires of practices**: the cognitive and cultural, linguistic and social skills that need to be acquired developmentally in order to complete the Rich Task;

• **Operational fields**: the New Basics, and other disciplinary, KLA, and/or transdisciplinary fields of knowledge that will have to be brought into play in order to complete the task.

The Rich Tasks will thus be accompanied by a curriculum design template to enable teachers to:

• identify repertoires of practice needed for developmental sequencing in order to complete the task;

• make principled selections from the various approaches to defining operational fields that they and their school have in place.

In this way, the Rich Tasks cut through problems associated with crowded curriculum and overproliferation of outcomes. The Rich Tasks are designed and built from the New Basics categories. They also provide teachers and schools with principled means for the selection of useful and valued knowledges and skills from KLAs, traditional subject areas, and interdisciplinary fields.

Successful completion of the Rich Tasks will verify that students have demonstrated mastery of the New Basics at the requisite level to contend with new cultures and economies.

Together, the Rich Tasks and the New Basics form the core curriculum for trial schools.

**Productive Pedagogies**

The term, Productive Pedagogies, refers to the array of classroom strategies that teachers can select from and use to focus instruction and improve student outcomes.

The SRLS does not argue that there is a single, universal teaching strategy that is relevant or effective in all contexts. Rather, teachers have various strategies that they can draw upon that work in different combinations with different groups of students. Likewise, some strategies are better suited for teaching some skills and fields than others. The use of Productive Pedagogies requires that teachers:

• 'read' the students’ backgrounds, capabilities and contexts;

• 'read' and assess the target repertoires and operational fields to be taught;

• assess and apply appropriate strategies from own teaching repertoires.
The SRLS describes the following 20 strategies:

- Students' direction
- Knowledge integration
- Problematic knowledge
- Cultural knowledges
- Higher-order thinking
- Depth of knowledge
- Depth of students' understanding
- Substantive conversation
- Social support
- Academic engagement
- Inclusivity
- Background knowledge
- Connectedness to the world beyond the classroom
- Explicit criteria for quality performance
- Student self-regulation
- Problem-based curriculum
- Narrative
- Group identities in learning communities
- Active citizenship
- Metalanguage

Teachers' arrays of strategies are produced through their pre- and in-service training, through professional exchanges and mentoring. In trial schools, teachers will experience in-service on Productive Pedagogies both to:

- expand and exchange their array of strategies with mentors and peers;
- make selections regarding strategies which are appropriate for preparing students for the Rich Tasks.

The Professional Learning Community Premise argues that the problems facing schools can only be addressed through the engagement with high levels of teacher professionalism and ownership of reform. This guides the detail of the implementation planning set out in Section 2.5. There are two major propositions at the centre of QSE 2010:

- That there are major contextual, economic and philosophic imperatives for educational change.
- That the current system is not presently providing the pedagogic conditions for the reconstruction of educational outcomes in line with the above imperatives.

There is demonstrable receptivity among teachers to a systems emphasis on pedagogy. A coordinated, whole-scale approach is needed. The broad implementation principles for such an approach are as follows:

- An attempt to establish exceptional circumstances for a focus on pedagogy; to identify the variables and constraints on those circumstances and then to generalise those circumstances.
- An engagement of teachers in professional learning communities through a shared dialogue about philosophy, aims, communities, and school differentiation.
- The coaching of productive leadership through the establishment of a New Basics Project forum for principals.
- A realistic timeline that allows trialling, development and ownership by teachers in the field of Rich Tasks, curriculum materials and moderation processes.
- Establishment of online learning communities for the exchange of curriculum and pedagogic resources.
• Formative and summative research projects that focus on changed pedagogy and changed student outcomes.

The New Basics Project addresses three of its premises—Pedagogy, Futures and Professional Learning Communities—by creating three key dialogues within and between trial schools. These professional dialogues will occur through on-line discussion groups, curriculum exchange websites, and regular cluster and state conferences and meetings. In keeping with its own philosophy of learning, the New Basics Project sets up a virtual and real learning zone (Cognition and Technology Group at Vanderbilt, 1993), an enabling professional, intellectual and industrial situation for developing new approaches to curriculum, pedagogy and assessment.

The three key professional dialogues are:

• **On curriculum:** through the design of 3-year, transdisciplinary curriculum plans around the Rich Tasks.

• **On pedagogy:** through a concentrated in-service focus on Productive Pedagogies.

• **On assessment:** through the implementation of authentic assessment and moderated teacher judgment at Years 3, 6 and 9.
PART 2: Technical Specifications

The New Basics

This section provides a conceptual overview of the New Basics, which were defined in passing in Section 1.4.

Conceptual Overview

The New Basics are clusters of real world and futures-oriented practices, and their affiliated skills and knowledges. Each of the four clusters, or “families of practices” (McHoul, 1991), describes a range of key student activities for new and future conditions. Such conditions have intellectual, cultural, linguistic and social dimensions. The practices connected with the New Basics may draw selectively upon both traditional and modern knowledge categories (e.g. disciplines, subjects, KLAs, themes, topics, issues).

It is important to note that the Rich Tasks are designed and built from the New Basics categories, not from existing subjects or KLAs. Inversely, successful completion of the Rich Tasks provides evidence that the student has mastered the New Basics to a requisite level for participation in new economies, cultures and communities.

Each of these practices—called Rich Tasks in the New Basics Project—is directly connected to the out-of-school life worlds of work, further study, civic affairs, family life, mass media, and so on. Some of the practices are connected with traditional ways of doing things, others are responses to new times. Some of them require existing practices and skills, some blendings of old and new. Others require that students and teachers construct and explore new problems, new learning strategies and new solutions.

Many schools have come to view the phenomena of rapid social change as impediments to proper teaching and learning. The signs and symptoms of new times and futures—shifting identities, innovative use of mass media technologies, different community configurations and problems, changing workplaces, unforeseen ecological and health problems—are sometimes viewed as barriers to education. The New Basics approach takes these as objects of study and critical analysis.

Changing social and cultural conditions are not regarded as impediments to learning but as dynamic flows of changing knowledges and practices. This suggests that new media not be resisted or ignored, but dealt with openly and critically. The New Basics may thereby provide a challenge to some. Tired debates between old and new knowledges, between discipline-based school subjects and KLAs, for example, should be resolved around their capacity to address the pressing, important problems facing Queensland students and communities.

The New Basics categories provide organisers for a future-directed curriculum to be built around the key questions facing Queenslanders, as described in QSE 2010. The New Basics argument is that the core challenges that students face every day are fundamentally about:

- their identities, mental and physical health, and planning of life pathways;
- contending with mastery of traditional and new communications media, and their complex codes;
- exercising their rights and responsibilities in relation to communities, economies and institutions;
- the need for a highly developed toolkit of scientific and technical knowledges to interact with their physical and social environments.

In summary, the New Basics are groups of core, essential sets of practices that young Queenslanders need to survive and flourish in new economic, social and cultural conditions. As a
set, they are not meant to be exhaustive, nor could they be. They are limited selections from an infinite set of possibilities. Teachers and schools will include other knowledges—local, traditional, multicultural, and alternative. In time, exposure to the New Basics learnings should be guaranteed to all Queensland students, their families and communities.

Life Pathways and Social Futures
Who am I and where am I going?

The single outstanding feature of new economic and community conditions is that youth must contend with environments that contain new kinds of risks and dangers, problems and challenges. The most pressing concerns facing Queensland families and parents today are about their children’s physical and mental health, and about how their educational development will translate into constructive futures (Education Queensland, 1999).

Queensland students need vision, plans and tools to navigate and negotiate their relations within families; and with peers, community members and others. They need the understandings and skills to survive and care for themselves, mentally and physically. They need to be able to take some control over their lives, planning how and where they will live and work meaningfully and constructively. In the Harvard Educational Review, the New London Group (1996) refers to the need for schools to help students “design social futures”.

There have been various attempts in the past two decades to respond to new and risky conditions faced by students. These include innovations in counselling, human relationships education, life skills and, most recently, a comprehensive reorientation of HPE via the QSCC syllabus.

Despite this developmental work and the best efforts of many teachers in trialling and implementing such initiatives, the 'care and maintenance of the self' has yet to receive a systematic, whole-school focus in many school communities. Life Pathways and Social Futures refer to that cluster of practices students need to master in order to survive and flourish in a changing world. It involves both understanding the self and relationships with others, mental and physical health, and designing a place for the self in the changing contexts of work and community.
Key issues

• Living in and preparing for diverse family relationships

One of the characteristics of new conditions is the emergence of many new family configurations (Edgar, 1999). Understanding the diversity of family situations is an important part of establishing identity, maintaining self-esteem and also understanding others. It can also provide important experiential grounds for planning personal life pathways.

• Collaborating with peers and others

Social relations become the stock and trade of service and information-based economies. Interpersonal communications skills are essential aspects of successful practices in work and life contexts. Conflict resolution, problem solving, showing tolerance and leadership, developing and maintaining personal friendships, and coping with peer pressure can all be seen as basic educational outcomes. These knowledges and skills need not be viewed as being components of only some school subjects but as essential elements of an overall process of developing a set of personal life pathways (Jones, Valdez, Nowakowski & Rasmussen, 1994; Berliner, 1995).

• Maintaining health and care of the self

An essential issue for all students to resolve is an understanding of, and participation in, a personal plan for physical and mental health. As exemplified in the new QSCC HPE syllabus, this involves understanding the social and physical dimensions of health, and the various forms of at-risk behaviours that particularly face young people (Kirk & MacDonald, 1999).

• Learning about and preparing for new worlds of work

In volatile economic times work is not guaranteed for all. Preparing for work does not just involve the development of academic and job-related skills. It also involves understanding the changing worlds of work, the different kinds of social relations in workplaces, as well as issues associated with and possibilities for retraining and lifelong learning. Survival in times of unemployment; creative and productive use of leisure time; and selected training and further education options are also relevant in this context. Schools can assist through providing career and work education, as well as experience and work observation learnings. Many secondary students are involved in part-time work (e.g. in local service industries). Schools should also consider this in their curriculum planning.

• Developing initiative and enterprise

In earlier economic times, schools provided skills and credentials that were readily translatable into options of employment or further study. Students currently confront complex, risky pathways to such desired outcomes. Agency and action, initiative and enterprise are often demanded from a young person to participate successfully in these social futures. Knowing how to find or create meaningful and gainful work, and how to identify opportunities for self-development have also become important skills for young people in the new economic and institutional conditions.

Multiliteracies and Communications Media

How do I make sense of and communicate with the world?

This category of the New Basics refers to technologies of communication that use various codes for the exchange of messages, texts and information. Historically, communications media have included spoken language, writing, print and some visual media like photographs and film. Since World War II, the various electronic media such as television and other digital information technologies have provided much more complex audio-visual layers to this pattern.

Yet the old technologies of pen writing, book reading, spoken communications, mental arithmetic and so on are not made redundant by these changes. They remain central to the New Basics. But if
we view new communications technologies as merely add-ons then we are in danger of further crowding an already overcrowded curriculum. New communications change the way we use old media, enhancing and augmenting them.

All of these communications media are systems of representation. People use them to represent themselves, to exchange beliefs and ideas, images and visions, often in the most powerful ways. The Arts in particular use various media for diverse purposes. Students learn to create and design, to shape and perform in ways that often transcend the functional and the everyday. In doing so, students can develop critical thinking skills to assess and make creative judgments about many important ideas and about a variety of products.

Communications media require mastery of symbolic codes ranging from number systems to sign language, from linguistic grammars to computer codes. Engagement in the production and reception of messages requires mastery of these codes. Networked societies require the use and blending of various kinds of literacy simultaneously, the mastery of many different codes, and the capacity to switch between and blend “multiliteracies” (The New London Group, 1996).

For instance, to read or construct a Web page requires many different kinds of literacies and numeracies:

- traditional print literacies (to record information and ideas);
- visual literacies (for overall design and to manipulate images);
- aural and musical literacies (to build a soundscape around the page);
- numeracies (to keep track of usage and interest).

The emergence of new media involves both new forms and channels of communication. These channels allow movement beyond the physical walls of the school and open up possibilities of new ways of learning. But since society is becoming awash in electronic sounds, images, icons and texts (Tyner, 1998), multiliteracies and numeracies related to communication and information—notably involving aural, visual, multi-media, information networks and other technologies—are increasingly needed for a person to cope.

To participate effectively in 'global villages', as well as in many increasingly cosmopolitan Australian cultures, requires skills of communicating across different cultural and language groups. This will require an understanding of, and basic means for communication with, people from other communities and cultures—local and global, face-to-face communication in selected languages, with sensitivity to the needs and practices of people in other cultures.

**Key issues**

- **Blending traditional and new communications media**

Mastering the interaction between new and old technologies is fundamental to the New Basics. It is also increasingly a common part of the work of symbolic analysts in new corporate and institutional workplaces. It is important that students learn to integrate and blend different media and different codes in ways that are effective in solving real-world problems in schools, communities and workplaces. This might involve, for example, creating blended texts that combine visual arts, sound and traditional print script.

- **Making creative judgments and engaging in performance**

The Arts have historically been marginalised as soft options within many school programs. This is unsustainable for the future. The presentation of the self, cultural representation across a range of media, and the mixing and matching of communicative messages are central elements in service and information economies. The design and performance of multi-media texts—blending both
traditional and new, informational and aesthetic work—is central to preparing people for balanced, innovative engagement with a diversity of people, cultures and economies.

- Communicating using languages and intercultural understandings

Multilingualism is an essential tool in intercultural communication and for productive diversity. This typically involves learning languages other than English, understanding cultural differences and variations in patterns of communication, and being able to use code-switching techniques as required.

- Mastering literacy and numeracy

These historically involved learning the codes of language and number systems, and their critical uses in everyday contexts (Freebody and Luke, 1990). Now, mastery of traditional skills and techniques, genres and texts, and their applications through new media and new technologies are required. Literacy and numeracy are not stand-alone activities or skills: they are always integrated with each another and with new repertoires of practice.

**Active Citizenship**

*What are my rights and responsibilities in communities, cultures and economies?*

Historically, schooling has been founded on the development of students as worthwhile and contributing citizens. Schooling for citizenship has also continued to be a specific goal of schooling—whether as compliant members of an assumed social order; as participants within given social structures; or as active agents of social change.

Since 1993 Education Queensland has advocated an approach to active and informed citizenship, which involves students in the reinvigoration of valued social practices and civic institutions by exercising their democratic rights and responsibilities. Since that time, a diverse constituency has advocated the importance of preparing students to play a more active role in our society.

Gilbert (1997), however, argues that citizenship is a problematic and inequitable concept, morally bound to the dominant ideologies prevalent in any age. It is only in more recent times that such a perspective on citizenship has become an acceptable focus of the school curriculum. In a school community context, some debate has centred around the nature and limitations of the student-as-citizen.

Active Citizenship as a New Basics category is grounded in the idea of a curriculum for life rather than merely a curriculum for knowing. For example, Kenny (1996) argues that, in a rapidly changing world, we need to be more concerned with mapping the shifts in new social forms than simply describing, and becoming disenchanted with, the world as a given.

This view of citizenship suggests that schools engage students in active participation in social, political and economic issues in communities, as well as in their school life and studies. Communities take on a different perspective when we view them not just as physical spaces with clearly defined boundaries but as a series of interacting, intersecting social relationships and groupings. Important social changes and issues may have local impacts, but also reflect global dynamics. The power of communications technology in redefining what were once reasonably static and defined boundaries has to be acknowledged in this context.

Taylor, Rizvi, Lingard and Henry (1997) suggest that, in a “post-industrial and technologically sophisticated global economy”, the mass production skills required of the industrial age have been replaced by “flexible specialisation techniques” which require process skills. For example, the online economy is changing patterns of consumption, production and delivery of goods and services. It has created new industries based on products and services specially designed to exploit these opportunities.

Throughout the world people are beginning to acknowledge the increased value of knowledge-based goods and services—particularly with the emergence of multimedia markets. Schools are
also becoming engaged in this new economy. Lundvall (1998) proposes that communication and negotiation skills, organisation and planning skills, and the capacity to access, absorb and process information become the characteristics of a common curriculum required to respond to this changing economic order. In this context, examining the role of the student-as-consumer is important (Idczak & Meyer, 1995).

Key issues

- Interacting within local and global communities

Changing patterns of global communications have resulted in a blurring between virtual and actual communities. Building and maintaining communities has moved from being a local, site-specific issue towards a new concept of communities—of interest and leisure, of business, or perhaps of protest. Community activity and participation entails participation in globalised cultures, economies and communities (Parker, Ninomiya & Cogan, 1999). These communities already exist, and are rapidly being extended, across a wide range of both physical and virtual contexts. Active Citizenship involves cosmopolitan participation in, and critique of, a range of communities, groups, organisations and institutions well beyond the boundaries of the school fence.

- Operating within shifting cultural identities

While communities are changing, so too are their building blocks—cultural identities. Shifting versions of what counts as cultural participation means that we can no longer rely solely on a prescribed set of valued cultural knowledges. Instead, globalisation has reconfigured cultural identity in terms of capacities of intercultural communication. This involves developing skills and knowledges of how people in other cultures undertake their social and economic business. Students and teachers are also challenged to understand and critique discriminatory practices, not only as personal or local cultural identity issues but also as having national and international dimensions. Students are thereby able to explicate the nature of inclusion and exclusion, as well as rights and responsibilities embedded in the concept of citizenship.

- Understanding local and global economic forces

The current global economic environment is characterised by accelerated change driven by applications of new technologies, intense domestic and international competition, and increasing interdependence of nation state economies. Many people have viewed this new environment as centring on a 'knowledge economy'. Given this shift, the need to develop student economic understandings is now a crucial factor underpinning the economic growth of our own society (Idczak & Meyer, 1995). Citizenship has an economic dimension in addition to its legal and political roots and its social and cultural extensions. It is essential that each student is given early and significant opportunities to understand how their lives and that of their family and community are embedded in local and global economies.

- Understanding the historical foundation of social movements and civic institutions

All civic institutions and social movements have sprung from the active participation of citizens, from people exercising their rights and accepting their responsibilities in the society (Gilbert, 1997). Examples of civic institutions include governments, courts, political parties, trade unions, churches and schools. Social movements are usually centred around a cause based on perceived injustices often perpetuated by such civic institutions. Citizenship is predicated on a long and complex set of historical progressions involving significant social movements. Tracking such historical development is an integral part of any citizenship program in schools.

Environments and technologies
How do I describe, analyse and shape the world around me?

This category of the New Basics provides students and teachers with the opportunity to examine and critically participate in the physical world. It is based on the premise that our environment, and
the technologies we use to manipulate it, can be studied and understood through active participation in real world contexts. Both natural and built environments impact on each other in complex and interactive ways, and issues of sustainability and adaptability are not exclusively the domain of one or the other.

The Environments and Technologies category of the New Basics combines transdisciplinary knowledges and skills from various scientific, technological and environmental domains with design processes and practices to complete practical activities. Study should focus on the application of basic scientific understandings to relocate learning within real-world contexts.

This category stresses the importance of people developing a harmonious relationship between natural and built environments. In this context, ecological and economic sustainability have become both cultural and curriculum imperatives. Living in and building sustainable environments involves careful planning and consultation and is an area in which schools have become increasingly involved. The implementation of this category means that students will have the opportunity to apply their scientific, technological, environmental and design understandings within a practice-oriented framework.

Issues of adaptability and transformability, which are normally associated with technological progression, take on new significance. The 1999 Department of Environment and Heritage discussion paper, Environmental Education for a Sustainable Future, proposes that, in order to address environmental challenges, we need people who think broadly and who understand systems, connections, patterns and causes. These issues have social, scientific, cultural, economic and ethical aspects—all of which are important for incorporation into a school program. The report also argues that specialist discipline-based knowledge, while providing critical contributions to our understanding, is no longer adequate by itself. Such knowledge needs to be harnessed and applied to the broader environmental and technological issues facing the world today (Department of Environment and Heritage, 1999).

The Environments and Technologies category is concerned with enhancing activity in context. Such activity should not be regarded as merely ancillary to learning (Seely, Brown, Collins & Duguld, 1989). Unless it is integral to learning there is a risk that scientific understanding and processes will be regarded as irrelevant to the lives of the vast majority of students who do not choose to study advanced science in higher education institutions.

Key issues

• Developing a scientific understanding of the world

This includes selections from physics, chemistry, geology, biology, design, manual arts and technology as they are appropriate to practical, relevant, real-world activities and social practices. Drawing on specific discipline traditions and resources, teachers and students will be able to further select and contextualise skills and knowledges for access to powerful ways of working in the world.

• Working with design and engineering technologies

These technologies potentially form the basis of the implementation of curriculum in new and interesting ways when they are presented as part of a series of practically orientated tasks. The development of skills associated with design and engineering can work in a range of contexts, bringing together both new and old technologies in ways that are designed to encourage the MCEETYA (1999) goals of innovation and enterprise.

• Building and sustaining environments

Sustainability is at the heart of this category. Fien (1998) argues that in recent years there has been a shift in the nature of environmental education in Australian schools from teaching about the environment to teaching for the environment. The study of environmental issues has become a
staple component of many classroom work units. Much of this practice, however, assumes or
emphasises conflict between concern for the environment and human manipulation of that
environment; for example, through industrial development, land use practices and advances in
technology. Environments and Technologies will provide opportunities for schools to examine
local environmental issues as part of an integrated curriculum program taking into account, not
only the physical implications but also the social, ideological, political and cultural implications of
environmental and technological issues.
2.2 Rich Tasks

In this section, the concept of a Rich Task, introduced in Section 1.4, is provided.

Conceptual Overview

The concept of a Rich Task is based on several sources:

- Dewey’s concepts of the “enterprise” and the “project” as unifying devices for the curriculum;
- Vygotsky’s concept of the classroom as a “zone of proximal development” for teaching and learning;
- Freire’s concept of “problem-posing” and “problem-solving” education to teach students how to analyse and act upon their worlds;
- Sizer’s concept of “demonstrations of mastery” as a way to focus pedagogy and accountability in school renewal.

As mentioned in Section 1.4, Dewey’s theory of learning is that people optimally learn, and human development and growth occur, when they are confronted with substantive, real problems to solve. His argument is that curriculum and instruction based on integrated, community-based tasks and activities engage learners in forms of pragmatic social action that had real value in the world (Garrison, 1995). This would have the effect of dealing with what Newmann et al. (1995) call “connectedness to the world” and may confirm the SRLS observation that a great deal of motivation and behaviour management problems arise from students’ sense of the “irrelevance” of much classroom work.

For Dewey the possible range of enterprises varied from the planning of school activities, to the analysis of a community problem or issue, to the construction of a facility. Yet it is important to note that the New Basics Project is not a progressive educational agenda. It has a strong emphasis on rigour, accountability and teacher knowledge and expertise.

The focus on the teacher as expert is central to Vygotsky’s learning theory (Davydov, 1995). Cognitive development does not proceed through innate age-based developmental thresholds but it is the product of social and cultural interaction around the development and use of tools (Cole, 1996), tools of a cognitive, linguistic, physical and electronic nature. Pedagogy occurs in a zone of proximal development where authoritative tool users—teachers acting as mentors—initiate and lead students as novices into use of technologies. This structured introduction into using tools is called “scaffolding” (Cazden, 1988). Cazden and Clay (1992), for example, use the model to explain what occurs in Reading Recovery lessons.

Drawing from Vygotskian theory, Rogoff (1986), Moll (1990), Heath (1983), Gallimore and Tharp (1990), and others have shown that structured pedagogy can be used to enhance considerably the achievement of the most at-risk learners. This body of work advocates a pedagogy similar to the CORS studies undertaken by Newmann and his colleagues in Wisconsin. This pedagogy involves a teacher-led, structured introduction to uses of technologies of print and oral language. Rogoff and Moll structured the work around projects that demanded that students engage with the solution of a particular community, school-based or regional problem of significance and relevance to their worlds. Moll and Heath’s work trained primary school students to become social scientists, with a high premium placed on the collection, analysis and presentation of data. This is reflected in the repertoires of practice described in Section 2.4.

Freire’s work is premised on the assumption that the most authentic and powerful pedagogy is one that focuses on the identification, analysis and resolution of immediate problems in learners’ worlds. Hence, his approach is referred to as problem-posing and problem-based pedagogy. For Freire, learning to read and write is about learning to analyse the world around students, while the principal task of teachers is to facilitate an analysis of that world and the analysis of specific community problems. Like Newmann’s CORS work, Freire argues that any pedagogy must be of
demonstrable relevance to the immediate worlds of the students and it must enable them to analyse, theorise and intellectually engage with that world.

Freire refers to traditional education as a “banking system”. Schools design a curriculum and then present the information and facts in classes. Students are then expected to digest and regurgitate the information and facts for credentialling. In work with the Coalition of Effective Schools, one of the largest school reform studies in the US, Sizer documented the effectiveness of a “less is more” response to curriculum and school reform (cf. Muncey & McQuillan, 1993). Sizer argues that the more packed and crowded a curriculum becomes, the shallower, thinner and more superficial the educational experience becomes. In other words, his position is that the attempt to overspecify the curriculum actually backfires, with particularly disastrous effects on the most at-risk learners. Sizer’s premise is that students should study fewer things in greater depth in order to achieve greater levels of understanding and more appropriate learning outcomes. The first imperative of school reform, according to Sizer, is to give teachers and students focus and room for intellectually rich activities.

These activities and their demonstration and exhibition are at the centre of the development of what Sizer calls “mindful schools”. They become a focus for pedagogy and curriculum, a means of accountability and a celebration of the intellectual life of the school. Sizer argues that the doing of these Rich Tasks provides a stronger basis for accountability to parents, stakeholders and other teachers than is possible from standardised achievement tests or examinations per se. The demonstration of the tasks may engage the whole school community in their planning and presentation. The result, he argues, is crucial: Instead of an enforced accountability agenda that students and teachers feel is imposed on them, the demonstrations of mastery model provides a public confirmation for all involved in the Rich Tasks. (The concept of the recitation harkens back to the 19th century British common school and the oral viva harkens back to the 15th century German university.)

In the New Basics Project, all students will engage in Rich Tasks. Schools will select appropriate ones for public display and demonstration.

The Rich Tasks model thus provides:

- teachers and community with a publicly accessible statement about the kinds of knowledge that the school values;
- teachers with a clear point for focusing, coordinating and integrating instruction from key operational fields;
- learners with motivating activities which have a visible connection to the world;
- contexts for the assessment of student skills and knowledge.

 Teachers’ work is to scaffold and enhance the actual learning and development that would occur through the Rich Tasks, which are based on the notion that teachers work best inductively rather than deductively. Specifically, this means that teachers work from whole, educationally meaningful and valuable tasks and goals—in turn using professional judgment to break these down into sequences of instruction around repertoires of practices and operational fields. To confront the problems of unfocused pedagogy identified by Freebody et al. (1996), the Rich Tasks will require careful curriculum planning and entail rigorous assessment and moderation systems. This should set the conditions for focused, purposive and integrated teaching.

This is the inverse of a technocratic approach. The technocratic approach asks teachers to operate deductively, to assemble meaningful educational experiences in order to ensure that that itemised and deconstructed skill and knowledge outcomes are met. There are several principal problems with the deductive, technocratic approach to pedagogy identified in the literature. As outlined in detail in Part 1, these include:

- fragmentation or molecularisation of the curriculum;
• overcrowding of the curriculum;
• limited transfer of training (Bransford & Schwartz, 1999);
• deskilling of teachers.

In summary, the Rich Tasks model is not a call for integrated, holistic teaching. It is a call for a rigorous intellectual focus for student work that cuts through a crowded and potentially diffuse curriculum. As in Horace’s School (Sizer, 1992) it is also meant to focus all of the school’s organisational capacity on intellectual engagement and relevant work, the two characteristics that Newmann et al. and the SRLS argue are necessary for improved outcomes.

The Rich Tasks all deliberately engage with “high-stakes discourses” (Luke & Elkins, in press)—those knowledges, fields and paradigms that have power and salience in researching, analysing and interpreting the world. They do not assume that children can invent or have access to these discourses. Further, pedagogy is viewed as occurring in a mentor–student relationship, wherein teachers’ professional expertise and knowledge of the world are crucial.

**Purposes for the current set of Rich Tasks**

A draft set of Rich Tasks has been developed for use in the first stage of the trial of the New Basics. During 2000 it is intended that this set of tasks will be scrutinised and critiqued by teachers in trial schools and by specially constituted panels (see Section 2.4). The panels will be formed to bring a variety of perspectives to bear on the tasks: equity; particular key learning area experience; assessment experience and so on. It is also intended that, through their position on the project website, the tasks will trigger responses from a wide range of school-based and non-school-based persons within Queensland, from other parts of Australia and from overseas.

This analysis of the draft set of Rich Tasks is intended to:

• ensure that each task meets all the principles that were used in the initial development of the tasks;
• ensure that each set of tasks at a juncture provides balanced and comprehensive coverage of the four categories of New Basics;
• generate shared understanding about the tasks themselves and about what forms of student performance constitute evidence that a task has been satisfactorily completed.
Principles for design of Rich Tasks

Teams involved in the development of Rich Tasks began with the following set of principles. Each task was required to be:

- representative of an educational outcome of demonstrable and substantial intellectual and educational value;
- transdisciplinary, engaging knowledge and skills from more than one of the New Basics categories;
- problem based, with relevance and power in new worlds of work and everyday life;
- of recognisable face validity with educators, parents and community stakeholders as being significant and important;
- sufficient in developmental, cognitive and intellectual depth and breadth to guide curriculum planning across a significant span of schooling.

Teams were also aware of the following design parameters for the New Basics Project. In relation to curriculum, the project was intended to provide:

- alternative conceptions of existing subjects and pathways;
- uncrowding, simplification and integration of existing subjects;
- identification of mandated student knowledge, skills and practice outcomes at critical junctures of schooling; and
- conditions for local school-specific curriculum development in response to community needs as part of school differentiation.

Strategy for development of the draft set of Rich Tasks

The draft set of Rich Tasks was developed in four stages through a process that began with groups of classroom-based practitioners and that gathered reactions from several hundred stakeholders.

Stage 1
A team of researchers and academic experts from across Australia was convened for a two-day seminar to conceptualise the New Basics categories and the assessment strategies. Approximately 30 people, including teachers, school administrators, district directors and officers working on the New Basics Project gathered at Bardon Professional Development Centre for two days. Work began with a full presentation of the project background, initial understandings of the four categories of New Basics, the concept of the Rich Task and the meaning of reporting junctures at Years 3, 6, 9 and 12. Four separate groups then considered task development and reporting at each juncture. The seminar participants did not develop Rich Tasks in any detail, although considerable progress was made regarding big issues.

Stage 2
A second group comprised approximately 20 people. It included teachers and administrators from the first group and three officers from the Teaching and Learning Branch at Education Queensland. After an initial brief update, three subgroups were formed to consider the Years 3, 6 and 9 junctures. Officers working on the New Basics Project coordinated the subgroups. Each of the subgroups developed a set of fairly complete tasks and several tentative ideas for further investigation.

Stage 3
Officers working on the New Basics Project, each assisted by one member of the subgroup responsible for the juncture, took the ideas generated by teams of teachers and prepared a first-draft set of tasks. A wide range of source materials was used in filling out the categories of knowledges.
and skills attached to each task. Sources included: QSCC syllabuses in Science and HPE and any
draft syllabuses currently available; the Victorian Curriculum Standards Framework Version II; and
materials from South Australia and Western Australia.

Stage 4
A decision was made not to circulate the first-draft tasks widely via the website. Approximately
300 copies were made and circulated to groups including:

- heads of department at Glenala State High School and Corinda State High School;
- students at an alternative high school campus;
- two meetings of teachers and parents at Eagleby State School;
- officers in KLA Units of the Teaching and Learning Branch, the Low Incidence Support
  Centre at Annerley and in Student Support Services Units;
- all members of the original writing team.

In addition, a panel of three academic experts was commissioned to provide reaction to the team in
a full-day meeting. Project team members shared the materials with a variety of other audiences as
part of their schedule of face-to-face meetings throughout the State. These included a full-day
seminar with an expert consultant team on assessment and evaluation. An additional half-day
seminar was presented to the principal curriculum officers of other Australian States, who provided
critique and feedback. Presentations were made to the South Australia Department of Education
and Community Services curriculum team and senior management team, and to the Tasmania
Department of Education staff. The model and tasks were also presented at the 1999 UNESCO
Conference on Curriculum and Futures.

Tasks were redrafted in line with the directions agreed upon. All tasks were amended to some
degree, some tasks were amalgamated and several number of new tasks were written. The revision
made the purpose of all tasks clearer and tidied up inconsistencies in the categories of knowledges
and skills for each task. The Year 3 tasks, in particular, were expanded to make their purpose more
evident.

The second-draft tasks were then placed on the website and response invited. To date, most of the
web discussion has been about big-picture issues rather than the particular tasks. The trial schools
will have further involvement in refining these tasks and in planning curriculum around them in
sessions facilitated by “critical friends” (Section 2.4).

Much of the website discussion has related to assessment issues: How will achievement be
reported? What criteria schools will use to make judgments about achievement? Should the criteria
arise out of each Rich Task rather than be a generic set of criteria to be applied across all tasks?

Trial schools will have a number of responsibilities in regard to the second-draft Rich Tasks. These
include consideration of:

- appropriateness of each task for students at the given juncture;
- comprehensiveness of the set of tasks at each juncture;
- usefulness of the categories of knowledge and skill as guides to curriculum planning;
- practicalities of curriculum organisation for delivery on these tasks;
- criteria for making judgments about standards of achievement on the tasks.
Draft set of Rich Tasks (at January 2000)

Year 9 RICH TASK No. 1
A health issue – explore and take action

Students will show that they are able to identify a health issue of local concern and participate in developing an initiative within school communities to address the issue. They identify possible contributing factors, including policies, rules, social attitudes and behaviours and communicate with target groups about potential strategies for intervention. They prepare a plan for resolving the issue and negotiate with target groups so that action takes place.

Year 9 RICH TASK No. 2
A structure – design, plan and display

Students will show that they are able to design a building, structure or community facility for a specific purpose within their local area. They work within a given budget and investigate a wide range of constraints and community considerations including safety, aesthetic reactions, government regulations, access and equity. They identify sources of materials, and discuss supply and suitability of materials and maintenance issues. They consider some economic and conservation issues concerned with obtaining particular materials within Australia and from overseas sources. They use measuring, calculating and drawing tools to prepare budgets, graphs and a scale model or plan as part of a public display of their work.

Year 9 RICH TASK No. 3
Business enterprise and career planning

Students will show that they are able to undertake a career planning process. They describe features of a range of small and large businesses. They discuss issues concerning product design, service delivery and marketing techniques. They identify their own existing skills, strengths and achievements and map fields in which they would like to develop further knowledge, skills and personal attributes. They produce and update a resume and an individual development plan.

Year 9 RICH TASK No. 4
Financial planning and spreadsheets

Students will show that they are able to prepare a financial plan for a school, family or community activity or event. They construct spreadsheets using an industry-standard software package such as Excel®. They use these and other commercially available spreadsheet tools, such as those used by banks, to carry out real financial transactions, including analysis of cash flows and funding options.
Year 9 RICH TASK No. 5
Biotechnology – emerging issues and future trends

Students will show that they are able to debate a range of issues, including ethical and moral questions, to do with emerging scientific advances in biotechnology. They use their knowledge of living organisms to prepare summaries, arguments and counter-arguments to use in public forums. They make reasoned predictions and prepare a plan for a world conference to be held five years hence, taking account of purpose, themes, presenters and audiences.

Year 9 RICH TASK No. 6
National identity, war and migration

Students will show that they are able to identify historical influences on the meaning of the term "being Australian". They debate issues of global conflict, war and peace, keeping both past and present with a focus on how these have contributed to national identity. They map the waves of immigration that have produced a multicultural Australia. They interview persons of different cultural communities who have been participants in or personally affected by war, migration, resettlement or family dislocation. They prepare and participate in a joint presentation to a public audience using selected forms of artistic and cultural expression.

Year 9 RICH TASK No. 7
Community organisations – participation and action

Students will show that they are able to play an active role in a community organisation and make suggestions for forming or refocusing an organisation. They explore a range and diversity of organisations, locally and internationally, identifying the degree to which organisations meet the needs of members, promote or hinder dynamic interaction and communicate with a variety of cultural and linguistic groups.

Year 9 RICH TASK No. 8
Human growth and physical activity

Students will show that they are able to collect, organise and apply information about human physical growth and development. They gather information from a variety of technical and informal sources, discuss ways of checking the reliability of sources and organise an information folio as a personal resource. They analyse their own needs and interests and engage in physical activity on a regular basis over an extended period of time. They monitor their participation and response and prepare a report on this for inclusion in their personal folio.
Year 9 RICH TASK No. 9
Trade and communication

Students will show that they are able to report on trade data and the importance of trade to the Australian economy. They identify ways in which a particular trade makes a contribution to both the Australian economy and to the economy of a trading partner. They explore trade information and cultural perceptions to decide on a product that could be exported to, or imported from, a target country. They develop a means of communicating with a specific audience about the product, using a language other than English (either their first language or a second language they are learning) and a small range of visual and written materials to promote the product.

Year 9 RICH TASK No. 10
An artistic event – contribution and collaboration

Students will show that they are able to make a significant contribution to the production, presentation and marketing of an artistic event. They explain the different roles (painter, sculptor, set designer, singer, musician, arranger, choreographer, acrobat, lighting designer, make-up artist, photographer, market researcher etc.) that are involved in communicating meaning for a specific audience and contribute personally through one or more of these roles. They select and use different media in order to make their presentation available to at least two different audiences.*

* For example, a stage musical or play might be presented to a live audience and, via video, shared with students from another culture or country. A collection of paintings created by students and based on an agreed theme might be shown locally and sent, via scanned images, to students in a hospital school.

Note. Rich Task No. 10 was added in December 1999 in response to suggestions that The Arts learning area was not sufficiently explicit in the set of tasks at Year 9. Its place in the set is still tentative.
Year 6 RICH TASK No. 1
Narrative texts

Students will show that they are able to critically interpret a range of narrative texts and share their ideas within group discussion. They write and collate reviews, conduct Internet searches for sites to link to their work and produce justifiable opinions about collections of texts on a topic or theme. They prepare their interpretations for sharing with a wider audience in an interactive forum using a selected communications medium.

Year 6 RICH TASK No. 2
Product design and display

Students will show that they are able to identify and make a product that could add to the quality of life of individuals or groups. They design (or improve the design of) a product and use mathematical skills and tools to construct a full sized version or scale model of the product. They gather information about the suitability of materials for larger scale manufacture of the product. They develop a marketing plan for the product and prepare their work for public display.

Year 6 RICH TASK No. 3
Oral histories and changing lifestyles

Students will show that they are able to collect oral histories from older members of their own community and from people in different cultural groups. They explore a range of lifestyle changes that have taken place during the 20th century with particular reference to the changing nature of work. They prepare a multi-media presentation for a selected audience to show significant changes in work practices that have occurred in the past and predict how practices might change in the near future.

Year 6 RICH TASK No. 4
Legal or political issue

Students will show that they are able to identify a legal or political issue that is of interest and significance to local communities. They gather information from a variety of groups with vested interests in the issue and from published sources of related information. They make predictions about the impact of this issue on themselves and local groups and prepare a written report for a selected audience.
Year 6 RICH TASK No. 5
Environmental issue

Students will show that they are able to identify and take action concerning an environmental issue that is of interest and concern in local communities. They collect information and opinions about the issue from technical sources, media reports, interviews and presentations by significant persons in the local area. They interpret and create data displays. They work within a group to develop a strategic action plan to deal with the issue. They make recommendations for action to raise awareness about the issue and present these to selected audiences.

Year 6 RICH TASK No. 6
Personal health program

Students will show that they are able to prepare and implement a short-term personal program for developing some aspects of their physical and emotional health. They identify a variety of influences including: family values; expectations of children; pressure to take risks and advertising; that impact directly on students at this age level. As part of the plan, they explore their own physical needs and interests and undertake to participate in a period of regular physical activity. They present their plan to a supportive peer or family member and gather reaction concerning its scope and practicality.

Year 6 RICH TASK No. 7
A celebratory event

Students will show that they are able to work in a team to plan, organise and present a celebratory or artistic event or festival to mark an occasion of significance within the school or within a particular local community.
Year 3 RICH TASK No. 1
Multimedia profile

Students will show that they are able to create a multimedia presentation profiling a member of the school community. They identify people in the various communities associated with the school, collect information about them, check the accuracy of their ideas and involve the persons as members of the audience for their presentation.

Year 3 RICH TASK No. 2
Web page

Students will show that they are able to create an interactive web page in order to communicate with students from other schools about themselves, their school and their community. They gather and organise information, present it in imaginative formats and respond in appropriate ways to questions and requests from other students.

Year 3 RICH TASK No. 3
Design an object

Students will show that they are able to design and make an object, such as a toy, a prop for a stage presentation or a household aid using local and recycled resources. They explain how the object works and how it will suit the need or purpose for which it was designed.

Year 3 RICH TASK No. 4
Endangered animal or plant

Students will show that they are able to prepare a plan and take some action to assist in the survival of an endangered animal or plant. They gather information about endangered species in Australia and in other countries and relate this to events occurring in their local area.

Year 3 RICH TASK No. 5
Travel itinerary

Students will show that they are able to design a short itinerary for a family, or an exchange student of their own age, from a non-English-speaking nation who will be visiting an Australian State. They identify and address a range of issues including transport options, tourist attractions of all categories and sites of historical and cultural significance.
Year 3 RICH TASK No. 6
Personal health plan

Students will show that they are able to prepare a personal plan for a healthy lifestyle considering food intake, a range of leisure activities, physical activity, fitness levels and cultural expectations. They can put the plan into operation for a specific period, monitor their participation and assess whether their personal goals have been achieved.

Year 3 RICH TASK No. 7
Read and talk about stories

Students will show that they are able to read and view fiction stories, talk about characters and settings, and compare representations in different stories and in different media with their own experiences of people and places. They present their ideas in words and through performance involving visual images, music, drama or dance.
How Rich Tasks reflect the categories of New Basics

Each of the Rich Tasks is accompanied by a list of significant discourses, or fields of knowledge and practice with which students will need to engage within a 3-year span of schooling in order to be in a position to demonstrate achievement on the task. These lists are intended to guide curriculum planning in schools. They are not intended as a checklist of knowledge and skills to be recorded as evidence of task achievement. (The matter of making judgments about performance on tasks is dealt with in Section 2.4.)

The lists of significant discourses are organised in terms of the four categories of New Basics. The following examples show the links between Rich Tasks and New Basics.

**Year 9 RICH TASK No. 5**
Biotechnology – emerging issues and future trends

Students will show that they are able to debate a range of issues, including ethical and moral questions, to do with emerging scientific advances in biotechnology. They use their knowledge of living organisms to prepare summaries, arguments and counter-arguments to use in public forums. They make reasoned predictions and prepare a plan for a world conference to be held five years hence, taking account of purpose, themes, presenters and audiences.

<table>
<thead>
<tr>
<th>New Basics</th>
<th>Students develop knowledge and skills about:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life pathways and social futures</td>
<td>• Future job opportunities and changing labour market forces in an Australian economy based on emerging technologies.</td>
</tr>
<tr>
<td></td>
<td>• The influence of innovation, enterprise and scientific research on business and trade in Australia and its trading partners.</td>
</tr>
<tr>
<td>Multiliteracies and communications media</td>
<td>• How techniques of language use influence interpretations of, and responses to texts involving challenging themes and issues.</td>
</tr>
<tr>
<td></td>
<td>• Sources of information about scientific advances and forums available to the general community for discussing controversial issues and learning about emerging fields of knowledge.</td>
</tr>
<tr>
<td></td>
<td>• How language is used in different ways to report research findings in order to meet the needs, interests and expectations of specific audiences.</td>
</tr>
<tr>
<td></td>
<td>• Ways in which societal fears and concerns about scientific advancement are reflected in science fiction in a variety of media.</td>
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<tr>
<td>Active citizenship</td>
<td>• Population growth rates and changing demographic patterns locally and globally.</td>
</tr>
<tr>
<td></td>
<td>• Relationships among scientific research, technological application and changing social attitudes.</td>
</tr>
<tr>
<td></td>
<td>• Interactions between religious beliefs and scientific endeavour.</td>
</tr>
<tr>
<td></td>
<td>• How laws relating to medical practice and research have changed over time and legal issues, such as those relating to work with embryos, which are yet to be resolved.</td>
</tr>
<tr>
<td>Environments and technology</td>
<td>• The structure of matter, cell chemistry, organic structures and life systems.</td>
</tr>
<tr>
<td></td>
<td>• Reproductive processes and strategies that influence the survival of individuals and species.</td>
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<td></td>
<td>• The genetic basis of inheritance and theories concerning the evolution of organisms.</td>
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<tr>
<td></td>
<td>• Scientific advances in genetic manipulation, animal and plant reproduction and the human genome project.</td>
</tr>
<tr>
<td></td>
<td>• Past strategies, successes and failures in disease control in plants and</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The rapid nature of species decline and implications for the future of the gene pool on Earth.</td>
</tr>
<tr>
<td>- Ways in which technological change has impacted on work patterns and job opportunities over time.</td>
</tr>
<tr>
<td>- Strategies that individuals and groups have used in order to play a part in management and decision making about technological research and development.</td>
</tr>
</tbody>
</table>
YEAR 6 RICH TASK No. 3
Oral histories and changing lifestyles

Students will show that they are able to collect oral histories from older members of their own community and from people in different cultural groups. They explore a range of lifestyle changes that have taken place during the 20th century with particular reference to the changing nature of work. They prepare a multi-media presentation for a selected audience to show significant changes in work practices that have occurred in the past and predict how practices might change in the near future.

<table>
<thead>
<tr>
<th>New Basics</th>
<th>Students develop knowledge and skills about:</th>
</tr>
</thead>
</table>
| Life pathways and social futures| • Factors that contribute to society’s understanding about work and roles undertaken by various groups: employer-employee relations; contract and part-time work; stress levels; moving from a product to a service orientation.  
• Changing demands on family and kinship groups and how these have impacted on participation of males and females in paid work. |
| Multiliteracies and communications media | • Technologies for increasing efficiency and accuracy in collecting and recording qualitative data.  
• Questioning techniques and strategies for eliciting responses and validating information.  
• Ways in which grammatical conventions differ in oral and written communications and how these can be captured in summary presentations.  
• Strategies in cross-generational communication to take account of cultural, gender and generation sensitivities, including fear of technology.  
• Culturally appropriate ways for communicating with and interviewing people from a range of different communities.  
• People and groups who can assist in making contact with and in communicating with people who do not speak or write in English.  
• Use of multi-media to assist in the construction of a biography, including text editing, digital images and sound-bytes. |
| Active citizenship               | • Ways in which concepts of gender, identity and work are represented in media and popular culture.  
• Contributions made by local individuals and groups in the past to foster economic life of the region and how the value attributed to these contributions has altered with changing industry structures.  
• Changing patterns in non-work time available to citizens, and avenues for using this time for personal and community advancement. |
| Environments and technology      | • Positive and negative effects of electronic communications technology on social connectedness within Australia and globally.  
• Changes in local physical environments over time and how these relate to past work practices and economic pressures.  
• Changing energy sources and levels of use and the possible impact of these on environments in the future.  
• Perceptions of people about the technological developments that have had the most dramatic influence on lifestyles during the 20th century. |
YEAR 3 RICH TASK No. 3
Design an object

Students will show that they are able to design and make an object, such as a toy, a prop for a stage presentation or a household aid using local and recycled resources. They explain how the object works and how it will suit the need or purpose for which it was designed.

<table>
<thead>
<tr>
<th>New Basics</th>
<th>Students develop knowledge and skills about:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life pathways and social futures</td>
<td>• Ways of working collaboratively to identify what is to be done and to achieve goals.</td>
</tr>
<tr>
<td></td>
<td>• Advantages and challenges involved in initiative, risk-taking, creativity and imaginative thought.</td>
</tr>
<tr>
<td></td>
<td>• Strategies for personal planning in order to focus on tasks and timelines for completion.</td>
</tr>
<tr>
<td>Multiliteracies and communications media</td>
<td>• The need for care in making observations, measurements, and drawings.</td>
</tr>
<tr>
<td></td>
<td>• Simple calculations involving addition and subtraction.</td>
</tr>
<tr>
<td></td>
<td>• Interpretation of two-dimensional pictures and drawings of three-dimensional objects.</td>
</tr>
<tr>
<td></td>
<td>• Ways of preparing and presenting short texts to explain the purpose of what they have produced.</td>
</tr>
<tr>
<td></td>
<td>• Labels, design and patterns to enhance the appearance of what they produce.</td>
</tr>
<tr>
<td></td>
<td>• Habits of listening, questioning and summarising ideas to discuss products prepared by peers.</td>
</tr>
<tr>
<td></td>
<td>• Strategies for seeking ideas and collecting examples of toys, which appeal to young audiences.</td>
</tr>
<tr>
<td>Active citizenship</td>
<td>• Examples of responsible behaviour by people in the local community to conserve resources.</td>
</tr>
<tr>
<td></td>
<td>• Ideas for identifying needs and people who could benefit from the product they have selected.</td>
</tr>
<tr>
<td></td>
<td>• Ways of making the product available and distributing it to</td>
</tr>
<tr>
<td>Environments and technology</td>
<td>• Advantages of re-cycling materials.</td>
</tr>
<tr>
<td></td>
<td>• Examples of waste and how the volume of waste might be reduced.</td>
</tr>
<tr>
<td></td>
<td>• Ideas for packaging the product using environmentally appropriate materials.</td>
</tr>
<tr>
<td></td>
<td>• Characteristics of common materials and ways in which they can be used.</td>
</tr>
<tr>
<td></td>
<td>• Ideas for cutting, joining and gluing shapes to make simple objects.</td>
</tr>
<tr>
<td></td>
<td>• Software packages and construction materials that can be used to assist design purposes.</td>
</tr>
<tr>
<td></td>
<td>• Nature and applications of technology in the local area.</td>
</tr>
</tbody>
</table>

How Rich Tasks relate to the KLAs

Work has been undertaken to determine the extent to which completion of Rich Tasks at a juncture might indicate that discipline-based learning outcomes have been covered. An analysis of published and draft QSCC KLA syllabuses produced a detailed listing of links between tasks and syllabus outcomes. There are clear linkages between each Rich Task and several KLA syllabuses. Some general points can be made about the linkages.

English language
Several of the tasks have explicit linkages to the outcomes in the English KLA. It is also clear that completion of any task at any juncture will require significant skills and knowledge in one or several of the areas of speaking, listening, reading, writing and viewing. Thus the identification of, and planning for, development of English language skills and knowledge will be a crucial factor in curriculum planning based on New Basics and Rich Tasks.

KLAs with multiple linkages
In addition to linkages with the English KLA, there are significant linkages between the tasks at each juncture and the following KLAs—Mathematics, Science, SOSE, and HPE. (See separate discussion about the Technology KLA.)

Arts KLA
With regard to the Arts KLA, there are linkages to particular tasks at both the Year 3 and Year 6 junctures. Since links at the Year 9 juncture were less obvious in the second-draft set, an extra draft task with explicit links to the Arts area has been developed and circulated for discussion. On the website it is currently labelled Task No. 10 and has only tentative status in the list.
With regard to the LOTE KLA, the only explicit link exists in Task No. 9 Trade and communication at the Year 9 juncture. This is consistent with the current requirement that students in state schools undertake studies in LOTE at least in Years 6 to 8 so that some basic skills acquired in those years could contribute towards achievement of this task. On the other hand, ESL students would have the opportunity to draw upon their first language skills in achieving this task.

Technology KLA
This presents particular problems when trying to identify linkages. The current draft of the QSCC syllabus is organised around a four-step process of investigating, devising, producing and evaluating. Neither the Technology processes strand nor the other strands of Information, Materials and Systems provide more than very general outcomes. It is therefore very difficult to identify just what information, materials or systems students might be expected to work with. In a general sense, the 4-part process might assist students towards achievement of several Rich Tasks. The Technology KLA in its current syllabus form, however, relates explicitly to only one of the tasks at each juncture. The link at Year 6, for example, is Task No. 2 Product design and display.

On the other hand, the Technology KLA could be interpreted as having to do with a wider range of outcomes focusing on aspects such as: business enterprise; interactions between technology and the environment; local, national and overseas trade; management; and emerging information and communication technologies. Using this type of interpretation the Technology KLA would have links to many of the tasks at each juncture.

In the analysis that has been done for Year 9 tasks a broad interpretation of the Technology KLA has been adopted even though this intent is not apparent in the outcomes of the current draft syllabus.

Caution regarding the analysis of linkages
While linkages between Rich Tasks and particular KLAs can be identified, care must be taken as to how these are interpreted. Despite the fact that a KLA has not been identified as linked to a particular Rich Task, it is quite likely that experiences in that KLA could contribute towards achievement of the task. For example, Year 9 Task No. 3 Business enterprise and career planning has explicit links to English, SOSE and Technology KLAs. Learning experiences in any of the other KLAs could also take a business or career orientation at times and assist students as they move towards achievement of this task.

Alternatively, Year 9 Task No. 2 A structure — design, plan and display could, for some students, be based on the design, production and installation of a major piece of artwork for the school or community. Thus this task could have significant linkage to the visual arts outcomes of the Arts KLA for those particular students and very little linkage to the Arts for other students engaged with the design of a different type of structure.
Major linkages between Rich Tasks and KLAs are presented in the following tables:

### Year 9 Major KLA links

<table>
<thead>
<tr>
<th>TASK</th>
<th>Eng</th>
<th>Maths</th>
<th>Science</th>
<th>SOS E</th>
<th>Technology</th>
<th>Arts</th>
<th>LOT E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>a</td>
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</tbody>
</table>

### Year 6 Major KLA links

<table>
<thead>
<tr>
<th>TASK</th>
<th>Eng</th>
<th>Maths</th>
<th>Science</th>
<th>SOS E</th>
<th>Technology</th>
<th>Arts</th>
<th>LOT E</th>
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<tbody>
<tr>
<td>1</td>
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</tbody>
</table>

### Year 3 Major KLA links

<table>
<thead>
<tr>
<th>TASK</th>
<th>Eng</th>
<th>Maths</th>
<th>Science</th>
<th>SOSE</th>
<th>HP E</th>
<th>Technology</th>
<th>Arts</th>
<th>LOT E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>a</td>
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</table>
2.3 Productive Pedagogies

The New Basics Project is about refocusing schools, teachers and Education Queensland as a system on pedagogical innovation and renewal.

For many years, teachers, teacher educators and researchers have searched for 'correct' or universally effective approaches to teaching. The contenders have ranged from 'focused instruction' to 'constructivism' and 'integrated teaching'. Yet generations of teachers see such approaches come and go with variable effects. If there is one thing that the researchers on teaching over the last three decades would agree upon it is this: that different approaches to pedagogy have variable effects at teaching different things to different groups of students. However self-evident and mundane this may sound, it is a valuable insight for the New Basics Project.

The SRLS reported in Part 1 invented the term 'productive pedagogies' to describe teaching as a broad repertoire of teacher strategies. The claim made in the New Basics Project is that teachers need expanded and flexible pedagogical repertoires for classroom teaching. They then need to be encouraged to make principled decisions about what strategies to deploy based on the curriculum to be taught and the backgrounds, styles and capabilities of their students.

Therefore the New Basics Project does not endorse or propagate a particular approach to teaching. Instead the approach is based on two principles:

- To expand and build teachers' repertoires in productive pedagogies;
- To build professional expertise at deciding which strategies to use, when, where, for what students.

The approach to pedagogy in the New Basics Project is taken from the SRLS study, reviewed in Part 1. The SRLS study began from the CORS study, which argued that 'authentic pedagogy' had four dimensions:

- **intellectual quality**;
- **sustained conversation**;
- **depth of knowledge and understanding**; and
- **connectedness to the world**.

These items were expanded to 20 and clustered in 4 overarching categories drawn from the statistical analysis.
Table 1: Categories* of Productive Pedagogy

<table>
<thead>
<tr>
<th>Intellectual Quality</th>
<th>Relevance</th>
<th>Supportive Classroom Environment</th>
<th>Recognition of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher-order thinking</td>
<td>Knowledge integration</td>
<td>Student control</td>
<td>Cultural knowledges</td>
</tr>
<tr>
<td>Deep knowledge</td>
<td>Background knowledge</td>
<td>Social support</td>
<td>Inclusivity</td>
</tr>
<tr>
<td>Deep understanding</td>
<td>Connectedness</td>
<td>Engagement</td>
<td>Narrative</td>
</tr>
<tr>
<td>Substantive conversation</td>
<td>Problem-based curriculum</td>
<td>Explicit criteria</td>
<td>Group identity</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Knowledge</td>
<td>Self-regulation</td>
<td>Citizenship</td>
</tr>
<tr>
<td>problematic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metalanguage</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: School Reform Longitudinal Study (Literature Review), University of Queensland, 1999.
The Intellectual Quality and Relevance categories were proxies for what the Wisconsin CORS study found to be the most important variables in changing student achievement. The other categories were augmented and developed specifically for Queensland schools. The claim of the SRLS is that different combinations of these strategies are effective for different students.

Table 2 provides brief heuristic glosses on each coding category. The asterixed items are those that are part of the authentic pedagogy proxy that the CORS and SRLS study would suggest are key to changed student outcomes:

**Table 2: Heuristics on categories of Productive Pedagogy**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher-order thinking*</td>
<td>Are higher-order thinking and critical analysis occurring?</td>
</tr>
<tr>
<td>Deep knowledge*</td>
<td>Does the lesson cover operational fields in any depth, detail or level of specificity?</td>
</tr>
<tr>
<td>Deep understanding*</td>
<td>Do the work and response of the students provide evidence of depth of understanding of concepts or ideas?</td>
</tr>
<tr>
<td>Substantive conversation*</td>
<td>Does classroom talk break out of the initiation/response/evaluation pattern and lead to sustained dialogue between students, and between teachers and students?</td>
</tr>
<tr>
<td>Knowledge problematic*</td>
<td>Are students critiquing and second-guessing texts, ideas and knowledge?</td>
</tr>
<tr>
<td>Metalanguage*</td>
<td>Are aspects of language, grammar, technical vocabulary being foregrounded?</td>
</tr>
<tr>
<td>Knowledge integration*</td>
<td>Does the lesson range across diverse fields, disciplines and paradigms?</td>
</tr>
<tr>
<td>Background knowledge</td>
<td>Is there an attempt to connect with students' background knowledge?</td>
</tr>
<tr>
<td>Connectedness to the world</td>
<td>Do the lesson and the assigned work have any resemblance or connection to real-life contexts?</td>
</tr>
<tr>
<td>Problem-based curriculum</td>
<td>Is there a focus on identifying and solving intellectual and/or real-world problems?</td>
</tr>
<tr>
<td>Student control</td>
<td>Do students have any say in the pace, direction or outcomes of the lesson?</td>
</tr>
<tr>
<td>Social support</td>
<td>Is the classroom a socially supportive, positive environment?</td>
</tr>
<tr>
<td>Engagement</td>
<td>Are students engaged and on-task?</td>
</tr>
<tr>
<td>Explicit criteria</td>
<td>Are criteria for student performance made explicit?</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>Is the direction of student behaviour implicit and self-regulatory or explicit?</td>
</tr>
<tr>
<td>Cultural knowledges</td>
<td>Are diverse cultural knowledges brought into play?</td>
</tr>
<tr>
<td>Inclusivity</td>
<td>Are deliberate attempts made to increase the participation of all students of different backgrounds?</td>
</tr>
<tr>
<td>Narrative</td>
<td>Is the teaching principally narrative, or is it expository?</td>
</tr>
<tr>
<td>Group identity</td>
<td>Does the teaching build a sense of community and identity?</td>
</tr>
<tr>
<td>Citizenship</td>
<td>Are attempts made to foster active citizenship?</td>
</tr>
</tbody>
</table>

Source: *School Reform Longitudinal Study* (Literature Review), University of Queensland, 1999.

A 'proxy' item extending Newmann's concept of "authentic pedagogy".
In the New Basics Project this coding scheme will be used by teachers. This 1-5 Likert coding scheme was introduced in Education Queensland inservice work in 1999 to over 400 teachers. Teachers were taught to code each others' teaching as a way of generating professional dialogue around teaching in schools. The purpose of this was not to create a 'checklist' mentality or to judge good or bad pedagogy - far from it. It's purpose was to create environments in trial schools where teachers are sharing practices, strategies, decisions about how to teach; where teachers are visiting each others' classrooms for mentoring and coaching.

The overall aim is a school where teachers are working together in a dialogue on pedagogy. The main purposes of the use of productive pedagogies approach is to:

- Focus a trial schools' teachers on pedagogy; and
- Create a school environment of dialogue and 'internal accountability' about pedagogy between teachers.

The IDEAS Project has made major contributions in this area. It is based on four principles that distinguish it from most other school improvement approaches:

- It assumes equivalence of teacher leadership and administrator leadership in school development processes. The strategic leadership role of the principal is emphasised at the same time as pedagogical leadership is emphasised as a professional responsibility of teachers.
- School development is viewed as a two dimensional process, encompassing schoolwide operational planning and a school-based approach to pedagogy. It is through the creation of a 'school approach to pedagogy', and alignment between the school vision and the school's agreed approach to pedagogy, that significant school improvement is believed to be possible. It is also assumed that historically this 'alignment' has been difficult to achieve in state schools, but quite clearly need not be so.
- Management structures for IDEAS Project schools include school-based management teams, a facilitator who is attached to the school and access to a small team of university consultants.
- Schools manage their own time and resources, with maximum flexibility assured. The 1999 trial suggests that where such flexibility is in place the majority of schools will nevertheless achieve anticipated goals, but will do so with enhanced teacher participation and with minimum disruption to school activity.

According to Fullan (1993) and Newmann et al. (1997), the concept of 'internal accountability' is crucial to the development of a professional learning community. This occurs when teachers create an environment where issues of pedagogy become focal points for within school dialogue. It furthermore fits with the key finding of school improvement studies since the Coleman report, that: within school difference in pedagogy seems to be more important than across school difference in altering student outcomes (Ladwig, Luke & Lingard, 1999). This important point will be considered in more depth in the sections that follow.
2.4 ASSESSMENT AND MODERATION SYSTEM FOR RICH TASKS

This section proposes a developmental approach for a systemic assessment system for the New Basics and Rich Tasks. This system includes: development of panels to specify key features and performance criteria; school-based discretion over assessment approaches and timing; and moderated teacher judgments of standards of student performance on the tasks.

Proposed model for development, assessment, moderation and reporting

The model outlines procedures for:

- The development of Rich Tasks
- The assessment of student performance on a Rich Task
- The moderation of teacher judgments of standards of student performance
- The reporting of student attainment.

This, of course, is only part of the whole picture. In the foreground is the Pedagogy Premise, a systematic focus on the teaching-learning process. In the background is the building and maintenance of critical partnerships with professional, parent and community stakeholders. These are central concerns if the New Basics Project is to develop credibility for the New Basics as curriculum categories. They are also crucial if the project is to stand as an effective alternative to standardised testing as a means for community and systemic accountability. Contrary to the section title, then, the model does not begin with assessment and end with moderation: It begins with task development and ends with reporting.

Assessment and moderation are based on the existence of tasks worth assessing and capable of transparent and educationally productive assessment. Resources must therefore be committed to the development of 'good' Rich Tasks. The community expects judgments about the outcomes of learning to be transparent and open. Parents and stakeholders expect evidence of students' minimum competence, developmental achievements, and degrees of excellence. Teachers at all levels make curriculum and instructional judgments on the basis of data about outcomes. Therefore, levels of student performance must be reported.

The proposed model for development, assessment, moderation and reporting has seven phases. The listing below implies that these phases occur in a conceptually ordered sequence, in part for purposes of convenience of description. In practice, the phases are recursive and overlapping, with some repeated.

These phases will be developed, evaluated and refined in conjunction with the trial schools. The model has resource implications. The costs of the development of a bank of Rich Tasks and the professional development of teachers have been included in draft budgets in the Framework Implementation Plan.
The model presents a developmental approach that:

- contends with complexities of implementation in trial schools
- adapts and incorporates the best features of current moderation and testing practices at the highest possible professional and technical levels
- provides indicative advice on common issues as they will arise in the trial
- provides an educationally constructive high-stakes assessment to provide feedback on student outcomes in a more decentralised system
- involves teachers and community members in validation procedures in ways that deliberately build professional and consultative expertise
- retains a flexibility that will allow tasks and assessment to be developed and redeveloped in relation to futures scenarios.

Seven phases in the model

- Development and refinement of a bank of Rich Tasks using the New Basics as guiding principles.
- Selection of a balanced suite of Rich Tasks for each key juncture.
- Immersion of teachers in the suite of Rich Tasks for a particular 3-year span.
- Setting of standards for student performance on each Rich Task and ensuring that there is a common understanding of the standards descriptors.
- Teacher judgment of student performance on each of the completed Rich Tasks according to holistic assessment with pre-specified criteria and, optionally, of student performance on the subskills associated with the Rich Tasks.
- Ensuring of comparability of standards across the State for reporting student performance on each of the completed Rich Tasks through public demonstrations by students and peer review of teacher judgments.
- Reporting of student performance on each Rich Task at each key juncture according to a common format and, at the school's discretion, of student performance on the subskills associated with the Rich Tasks

Indicative advice on key issues

These key issues mark the starting point of a 4-year journey, the trial period. It is not until the second year of the trial that students are directly affected. That is, the first 3-year span for completing Rich Tasks begins in 2001, rolled out year by year until the entire system is in place in 2004.

The completion of the Framework Trial will occur before the QSCC KLA implementation roll-out is complete in 2005.

The New Basics are the overarching referent for task development. The draft tasks in Section 2.2 were developed directly from the four New Basics categories and not from other curriculum categories. While teachers may map back from Rich Tasks to various operational fields (e.g. KLAs, traditional subjects, the new Basics themselves), the tasks will be developed from the New Basics categories and refined by panels. This will foreground the Futures Premise introduced in Education 2010.
Time span for completing a suite of Rich Tasks: Years 1–3; Years 4–6; Years 7–9.

The Year 7-9 span is deliberately set across the primary–secondary interface. This has important implications for generating curriculum dialogue and on joint planning and reporting between high schools and their feeder schools.

For the Year 1–3 span, the special nature of early childhood education will be respected (e.g. whether the Rich Tasks are developmentally appropriate for this span; whether pre-school should be treated as separate or part of the continuum; whether the pre-school curriculum and current levels of participation have implications for articulation into Rich Tasks for this span).

Timing for completion and assessment of Rich Tasks: any time within the 3-year span that suits the school’s curriculum planning.

Standards against which student work is to be judged will be pitched to the later half of Years 3, 6 and 9. This will remain the same even if students complete the tasks earlier.

Caution: Schools will have to identify and orchestrate assessment windows for teachers, to avoid disorganised assessment ‘traffic’ or intensification of workload.

There are two advantages to the variable timing for completion of assessment. First, the system recognises that students develop at different rates. It allows some students to complete the tasks early and move on to enrichment activities, a more strongly differentiated curriculum etc., while other students can work on the tasks right up until the latest date at which assessment can occur, in some cases having repeating aspects of the task that were unsatisfactory. It also encourages teaching and learning in a multi-aged environment.

Second, students would be more likely to have some say over the pace, directions and outcomes of lessons and units in a more flexible system. Teachers would, therefore, be able to encourage excellence by expanding the fields of knowledge and repertoires of practice of certain students beyond those typically acquired by their peers in conventional programs. Teachers would also be able to encourage relevance by varying the fields and repertoires according to community and cultural contexts.

Key junctures for reporting: end of Years 3, 6 and 9

Caution: The combination of a common juncture for reporting and flexible timing for completion and assessment of Rich Tasks will require careful organisation in the trial schools. Moderation of teacher judgments is to occur after assessment and before reporting. There would be competing demands on schools during this period: time for negotiations about standards, remediation of certain students, preparation for articulation to senior school, the tendency to wind down after an assessment point, participation in school-specific curriculum and so on.

Order of 'attacking' Rich Tasks within a suite of tasks: serially or concurrently, at the school’s discretion.

Caution: Different rates of completion will have an impact on teachers and students who transfer between schools. The creation of portable student records will be necessary. By detailing repertoires and operational fields mastered in preparation for Rich Tasks, it is quite likely that teachers in schools receiving such students would receive more detailed student developmental data than typically available under current reporting and transfer systems.
**Number of Rich Tasks:** tentatively seven, seven, ten at Years 1–3, 4–6, 7–9 respectively; plus one optional task (after submission to EQ panels for consideration).

Caution: Schools are encouraged (but not required) to submit one optional task per key juncture to EQ panels for consideration. Such tasks are subjected to the standard refinement procedures before being accepted or rejected.

**Class time spent on Rich Tasks:** typically 40% to 60%

For the Rich Tasks presented in Section 2.2, it is estimated that, on average, between 40% and 60% of class time would be spent on preparation for the tasks. The amount of time devoted to Rich Tasks is determined at the school level, taking account of local conditions and school decisions about the way the New Basics are being implemented in that school. The amount of time would also vary in relation to the prior developmental capabilities and achievements of students. After further refinement of the tasks and immersion of teachers in the tasks and the standards descriptors, it is possible that some schools might plan to devote even more time to the tasks. An audit of range and balance is part of the moderation process.

Schools will have flexibility to make local curriculum choices with the remaining time beyond that allocated to the Rich Tasks. This may enable greater specialisation, enrichment and remediation. The primary principle behind the utilisation of that time is that no student should be disadvantaged in progressing to whatever senior schooling pathway that s/he may select. This means that schools must ensure that students are able to proceed towards specialised high-stakes academic or vocational pathways with prerequisite knowledges and skills should they choose to.
Mandatory in trial schools? Yes.
Diagrammatic representation of the phases
The flowchart that follows summarises the seven phases. It should be read in relation to Section 2.4.

PHASE 1: Development and refinement of a bank of Rich Tasks

- **Create Rich Tasks** and indicative standards descriptors, using New Basics to generate tasks (within EQ using existing technical expertise with trial school teacher input according to documented attributes of a 'good' Rich Task.)

- **Panel** (Panelling is a mechanism for ensuring content validity. Expert, technical, editorial, and equity panels are established to vet and fine-tune tasks.)

- **Trial** (Trialling is a mechanism for ensuring reliability; perhaps on a small scale in other states who have expressed interest in participating; to obtain qualitative data only. This would only apply if there is general implementation.)

- **Revise** (in the light of advice from panels and information from trials).

- **Reject** (if beyond redemption).

- **Bank** (that is, file Rich Task and associated documentation for retrieval as required).

PHASE 2: Selection of a balanced suite of Rich Tasks for each juncture

- **Search and locate** (within the bank, the requisite number of Rich Tasks for each of the three key junctures for a particular 3-year span).

- **Balance** (that is, for the suite of Rich Tasks selected for each juncture, consider the range and balance of New Basics categories, other operational fields and repertoires that the suite of Rich Tasks invites students to engage in and use).

- **Panel** (A single panel, the scrutiny panel, is established to check each suite of tasks for range, balance and face validity.)

- **Reflect** (Reconsider all advice received and adapt Rich Tasks if necessary.)

- **Publish** (high-quality production versions of the Rich Tasks accompanied by pre-set statements of standards).

- **Present** (in a timely and efficient way, three suites of Rich Tasks to schools).
PHASE 3: Immersion of teachers in the suite of Rich Tasks for a particular 3-year span

Immerse (at district, cluster or state conference session, with electronic 'takeaway').

Plan (the curriculum, at the school level through a school-based 'induction panel' convened by the Critical Friend (see 2.5)).

PHASE 4: Setting standards for student performance on Rich Tasks

In immersion sessions, teachers come to a shared understanding of the meaning of desirable features of high-level performance on a particular Rich Task (based on the pre-set standards descriptors already circulated). Teachers also receive and discuss guidelines for formative assessment in the subskills identified for that same Rich Task.

PHASE 5: Assessment by teachers of Rich Tasks and associated subskills

- Teachers judge student work on the completed Rich Tasks in terms of pre-stated desirable features for a high-level production.

- Teachers assess student achievement in associated subskills as determined by the particular school. (This is not mandatory.)

PHASE 6: Obtaining evidence of student achievement on each Rich Task

- Trial school conference at end of first year of 3-year cycle
- School decision about set of evidence to submit
- Public demonstration of mastery (without over-committing potential audience members)
- Peer review of teacher judgments (comparing evidence with pre-stated standards descriptors)
- Negotiation and consultation about the application of standards to student work (where necessary)

PHASE 7: Reporting of student attainment on each Rich Task

- On the Rich Task (the completed product): Performance on a Rich Task is expressed as a grade that must be reported at the corresponding key juncture. Grades are obtained from holistic judgments (based on statewide standards). Teacher judgments are moderated.

- On the subskills (required to complete the Rich Task): Achievement in the necessary repertoire subskills (which could be deemed to be different from school to school) may be reported to parents and others at the discretion of the school in the usual way that formative assessment is treated. Subskill reporting also may be used for reporting on transfer students.
Scope of the Rich Tasks

The design of an assessment and moderation system is predicated on the existence of tasks worth assessing and capable of transparent and educationally productive assessment. To review the previously noted characteristics of a Rich Task, each must be:

- an integrated intellectual and linguistic, social and cultural practice
- representative of an educational outcome of demonstrable and substantial intellectual substance and educational value
- transdisciplinary, drawing on a range of operational fields and engaging of knowledges and skills from more than one of the New Basics
- problem-based and relevant to new worlds of work and everyday life
- of face validity for educators, parents and community stakeholders
- of sufficient intellectual, cognitive and developmental depth and breadth to guide curriculum planning across a significant span of schooling
- enabling school’s flexibility to address local context
- reasonable in workload expectations for teachers.

Combining rich tasks into a suite of seven or ten tasks for a particular reporting juncture requires consideration of issues of advantage and disadvantage, exclusion and inclusion, depth and breadth, fairness and rigour. A suite of Rich Tasks would have:

- range and balance over operational fields and repertoires
- subskill repertoires with maximum combined coverage of generic skills
- suitable difficulty
- accommodation of diversity (with respect to gender, socioeconomic status, geographical location, cultural background)
- content validity
- face validity
- appropriate developmental demands on all students
- capability of being developed and assessed with reasonable objectivity
- clear and unambiguous communication of requirements and expectations to students through the wording of the task and pre-set standards descriptors.

Purposes of the Rich Tasks

If, as defined in Section 2.2, a Rich Task is "a specific practice of educational value, intellectual depth, and relevance", it also has a trio of attributes of good curriculum and assessment practice. Taken as a whole, the Rich Tasks are:

- An educational strategy: A systemic attempt to address key educational challenges facing Education Queensland as expressed in the five fundamental educational premises of The New Basics Project.
• **A curriculum description:** A summary statement of the unifying experiences of curriculum, pedagogy and assessment for students in Years 1 to 9 in trial schools. That is, they are what the system professes to be important knowledge.

• **An accountability mechanism:** A verification for students, parents and stakeholders that their successful completion is indicative of having achieved in the New Basics to the requisite levels set by Education Queensland.

Rich Tasks deliberately engage with operational fields of knowledge—discourses that enable students to solve problems and to understand, research and interpret their worlds. This does not assume that students can invent or have access to these operational fields without instruction and guidance based on the genuine epistemological authority and methodological expertise of the teacher. Pedagogy is seen as a mentor-student relationship, with the "student as worker" as in Sizer's (1992) metaphor, and the teacher's expertise directed at enabling learning. For students to excel within such a context, they must develop and construct repertoires of practice for the Rich Tasks at hand.

From the student's perspective, a Rich Task is one of several multi-faceted and challenging pieces of work to be undertaken during a 3-year period.

From the teacher's perspective, a Rich Task directly and deliberately links curriculum and assessment in a simple way that attempts to focus—rather than clutter—classroom pedagogy.

For the school, the Rich Tasks and the New Basics supply 'organisers': organisers of institutional capacity; for planning the curriculum and devising timetables, physical space and so on. For the community, Rich Tasks are a guarantee that students will achieve competence in the New Basics. Their successful completion is a statement that the student understands the world and her place in it, can handle a future of intellectual challenges and complexities, and can apply learning habits to novel situations when and as they arise in unpredictable ways.

**Implications for assessment of Rich Tasks**

The New Basics Project builds a deliberate and intrinsic link between student performance and the curriculum. For schools this means backwards mapping from the Rich Task to broader repertoires and operational fields. Assessment, therefore, is viewed as a central part of the message system, not an after-thought or a bolt-on to curriculum. Where such bolt-ons are the case, as in the current benchmark testing systems, questions about domain validity may arise.

Assessment is not something to be avoided or undermined, or tolerated as if it were intrinsically anti-educational. In the Framework there is no attempt to mystify or conceal the grounds and criteria of assessment from students or the community—as in some traditional examination systems. The Framework treats assessment as a transparent frame of reference, feeding back into curriculum and pedagogy, thereby enhancing them. In this way, assessment is not only a form of accountability: Its processes and products are also accountable to teachers, communities and students in a clear, comprehensible way (Myford, 1999).

Rich Tasks raise a number of key assessment issues. Rich Tasks become high-profile educational goals of the system. Therefore, care must be taken to ensure that no aspect of the assessment system trivialises schooling or reduces it to that which can be easily or superficially assessed. This was the most negative aspect of the original 1970s US minimum competency movement where Florida students and teachers undertook much work for a low information yield on what students know and can do (e.g. Turlington, 1979). There the entire educational message system was torqued towards catching a relatively small percentage of students who had not adequately achieved basic skills.

A Rich Task is an invitation to engage with operational fields and employ a variety of repertoires. Its assessment requires more than extracting a single piece of information about student performance. The 'richness' of a Rich Task requires a model that extracts information not only.

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about the quality of the product (the completed task) but also about which desirable intellectual strategies have been acquired and used by the student, culminating in the Rich Task.

Transparency in assessment demands the existence of a priori criteria for judging student work. Criteria will be set out to specify desirable features of task performance, but not be so specific to preclude or discourage discourse innovation, novelty, and local contextualisation.

Rich Tasks, by definition, are characterised by complexity. By enabling variable and creative responses, they cater to student diversity without compromising standards. Their actual propositional content is notional but imprecise, maintaining validity while not demanding the rote representation of the same content by all students. And for these reasons they do not lend themselves to precise quantified or analytic grading but rather to holistic grading.

For each Rich Task, teachers will make judgments on several criteria, trading off inconsistent performances across criteria, and assign an overall grade. This is not unlike the classic wine-judging model. Separate (analytic) scores are not applied to three criteria (e.g. bouquet, palate and colour) and then aggregated. Rather, a well-informed judge trades these off and makes an overall judgment. Provided s/he is not a maverick, 'chateau cardboard' will always be ranked lower than Grange Hermitage.

Tasks that lend themselves to only two levels (satisfactory and unsatisfactory completion) would not be considered for inclusion in the central bank of tasks. There is an argument against having only two categories available for reporting performance:

- Given that Rich Tasks are 'high-stakes', teachers would be hesitant to 'fail' students.
- If there is no differentiation in student performance on Rich Tasks, why go to so much trouble in the first place?
- There is consistent educational evidence that higher expectations raise standards of attainment. Students learn more if they are taught more and are expected to perform better as a consequence.
- A good Rich Task is inherently capable of generating a range of decisions about student performance. This information is worth having.

Marking and reporting systems:
Student performance on each Rich Task will be reported holistically (for the completed task), on a scale from A (highest) to C or E (depending on the task) with U (ungraded) applying to the student who does not complete the task or whose work is judged to be unsatisfactory against the pre-specified standards for the lowest available grade.

Subskill reporting and transfer provisions:
Students will keep records of evidence of progress and performance. Teachers likewise will maintain formative 'report cards' on developmental progress towards Rich Task completion. Achievement in subskill repertoires will be reported at the school’s discretion, in the genre of formative assessment. This would accompany or augment existing report cards. This assessment could be analytic, criteria-based or competency-based, a decision for individual schools. It is highly probable that different schools would identify different subskills as being essential to the completion of a given Rich Task. Some of the subskills may be common to the three 3-year curriculum plans and, therefore, would lend themselves to developmental reporting. These developmental profiles will accompany students when they transfer to new schools, trial and regular. Parents and teachers of a transfer student will therefore receive detailed information of the student's developmental progress towards the task, plus any standard report card and testing information usually provided. This is probably more detailed diagnostic and achievement information than presently provided. The school's documented record of that same progress and performance will be transferred (eventually, electronically) between schools.

Where there is assessment and reporting there will undoubtedly be cheating, or claims that cheating has occurred, or inconsistencies in the system. These will have to be dealt with. At the trial stage, any such incident will be investigated and documented. Until then, there can be no more than an
Awareness of, and dialogue about, unacceptable practices in assessment of group work, unacceptable levels of parental involvement, unacceptable recycling of 'mega-projects'.

**Strategic planning for systemic assessment**

The Rich Task assessment model should not contribute in any way to 'low-stakes' behaviour. Popham (1987) describes two major types of high-stakes assessment:

- examinations and tests with major consequences for individual students (e.g. matriculation and credentialling)
- examinations and tests used for systems performance and reporting and decision-making.

The context here is different but parallels can be drawn. In high-stakes assessment, the load for internal accountability is carried by its consequences, as in (1) above. Because performance on a Rich Task (or suite of them) is a measure of the extent to which the student understands the world and his place in it, not performing has dire consequences for the individual. In high-stakes assessment, the load for external accountability is carried by connotations of reflection, which can be derived from (2) above. In the previous section, technical caveats on the use of Rich Tasks for systems reporting were stated. Nonetheless, because group performance of students is a measure of the efficacy of the system, widespread poor performance reflects badly on the system and/or the school.

Technically, Rich Tasks will not be tied to traditional matriculation or credentialling. It is expected that the failure to complete a Rich Task will lead to the student reworking or undertaking the Rich Task again until s/he can meet a moderated standard. If, however, the Rich Tasks constitute verification that the student has or has not achieved the New Basics—within a stated philosophy that the New Basics are indeed basic for social and economic participation—then the Rich Tasks become high-stakes. The assumption is that inability to complete the Rich Tasks to the standard level leaves one at risk.

The New Basics Project proposes augmenting existing basic skills testing with moderated teacher judgments of performance on Rich Tasks. The result would be a systems-wide approach to assessment that balanced standardised testing (which presently tends to assess limited basic skills) with Rich Task moderation (which will assess the higher-order and futures-oriented repertoires of students). This would allow any high-stakes decision-making about individuals or policies to rely on balanced, triangulated data of different types—rather than a forced over-reliance on standardised testing. The resultant model might be as follows:

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Genre of Assessment</th>
<th>Repertoire Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2 Diagnostic Net</td>
<td>Qualitative, developmental diagnostic face-to-face, diagnostic</td>
<td>Early reading, writing, number knowledges and skills</td>
</tr>
<tr>
<td>Year 3 Benchmark Tests</td>
<td>Standardised Achievement Test</td>
<td>Basic literacy and numeracy skills</td>
</tr>
<tr>
<td>Year 3 Rich Tasks</td>
<td>Teacher Moderation</td>
<td>Curriculum knowledges, core and higher-order skills</td>
</tr>
<tr>
<td>Year 5 Benchmark Tests</td>
<td>Standardised Achievement Test</td>
<td>Basic literacy and numeracy skills</td>
</tr>
<tr>
<td>Year 6 Rich Tasks</td>
<td>Teacher Moderation</td>
<td>Curriculum knowledges, core and higher-order skills</td>
</tr>
<tr>
<td>Year 7 Benchmark Tests</td>
<td>Standardised Achievement Test</td>
<td>Basic literacy and numeracy skills</td>
</tr>
<tr>
<td>Year 9 Rich Tasks</td>
<td>Teacher Moderation</td>
<td>Curriculum knowledges, core and higher-order skills</td>
</tr>
<tr>
<td>Year 11/12 Senior Results</td>
<td>Teacher Moderation and Core Skills Test</td>
<td>Curriculum knowledges, core and higher-order skills</td>
</tr>
</tbody>
</table>

This would establish an oscillating system of assessment that ensures:

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• early intervention is covered in appropriate, development-sensitive ways

• basic skills safety nets are in place at key junctures

• basic skills tests are not the principal drivers of the system, but are augmented by an emphasis on intellectual engagement and relevant work at key junctures

• assessment culminates in senior results.

There remains the issue of the interface between Years 9 and 10 (Smith et al., 1999). Would the New Basics adequately prepare students for existing academic pathways in Years 11 and 12? What would make sense for articulation purposes? These issues will require tracking—both in terms of establishing range and balance across the suite of Year 9 Rich Tasks, and in terms of ensuring that students acquire the requisite depth to take the full range of senior subjects. As stated earlier, trial schools will ensure that no student's access to senior subjects or pathways is precluded or hindered by local curriculum planning.

The answer could be the concept of the "common curriculum element" (Allen, Matters, Dudley & Gordon, 1992) because common curriculum elements (CCEs) link the repertoires for the Rich Tasks to the generic skills that thread the senior curriculum. A miniature QCS Test could be administered to a stratified sample of students from the Year 9 cohort. The purpose of this test would be to produce a separate piece of evidence at the system level on achievement in a suitable subset of the CCEs. These represent broader domains than mere literacy and numeracy. Actually, the QCS Test, despite its name, is not a test of 'core skills', a term which is more aligned with the notion of key competencies (defined for an era) than it is with transferable skills in the higher-order repertoire (identified for the present and the future).

The literature review (later in this section) includes only passing mention to the content and construct of the QCS Test. The test's international recognition (Trost, 1992, 1996), high level of acceptance by the Queensland community, and transdisciplinary nature augur well for its adaptation to the Rich Task agenda should there be further need for triangulation. Should concerns be expressed about fairness (e.g. lack of comparability, cheating, lowering of standards) during the trial, individual QCS units could be administered for 'spot-checking'; that is, for localized administration. It would not be sensible to sanction yet another testing regime for even a stratified sample of students, much less statewide. In preparation for the possibility of spot-checking, the minimalist position would be to incorporate a trial of item/instrument development into the implementation plan. This would allow the trial to track and preclude any transitional problems.

Key aspects of a moderation system

According to Pitman, O'Brien and McCollow (1999), "consistent and valid moderation depends on three key aspects: standards, evidence and consensus". How might this blueprint, which already has successful Queensland application in Years 11 and 12, translate into a moderation process for the Rich Tasks at the key junctures of Years 3, 6 and 9?

The table below presents the three key aspects of a moderation system as column headings. The first row presents a general statement of each of the key aspects; the second row, the translation of the key aspect into practice as in the Queensland senior system; the third row, a possible translation of the key aspect into practice for moderating the assessment of student performance on Rich Tasks.
<table>
<thead>
<tr>
<th>Key aspect of a moderation system</th>
<th>Standards</th>
<th>Evidence</th>
<th>Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td>General statement of a key aspect</td>
<td>Use official statements to describe standards at each level.</td>
<td>Use actual student work as the evidence upon which judgments are made about standards of student work.</td>
<td>Attain consensus among judges that the work tendered matches the pre-stated standards.</td>
</tr>
<tr>
<td>Translation of key aspect into practice as in the Queensland senior system</td>
<td>Through the trial stage of syllabus development, identify standards for each criterion. Compose descriptors of standards at each of 5 levels for each criterion, and embed these statements in a criteria &amp; standards schema. Publish the resultant schema in the subject’s approved syllabus document.</td>
<td>For each subject in each school across the state, collect folios from a sample of students, with rules governing type and number of folios per school submission.</td>
<td>Discuss the matching of student work to the criteria &amp; standards schema and then have the application of them reviewed at verification meetings (also confirm distribution of results for reporting).</td>
</tr>
<tr>
<td>Possible translation of key aspect into practice for moderating performance on Rich Tasks</td>
<td>Develop, with teachers and the community, agreed-upon standards to be set. Compose descriptors of standards. Express these as desirable features for the highest level only of those available for each Rich Task.</td>
<td>For each Rich Task in each school across the state, where appropriate, produce a public exhibition of mastery. Judge the standard of performance against the pre-set descriptors.</td>
<td>Come to a shared understanding of the meaning of the pre-stated desirable features before students commence work via an immersion session that includes reaching a shared understanding of the meaning of the Rich Task itself, and accompanied by model plans of attack. Have teachers’ judgments in one school verified by teachers from other schools.</td>
</tr>
</tbody>
</table>
The Rich Task is both the curriculum and the assessment for this segment of the school program. The traditional view of the role of the syllabus in relation to a moderation system needs adjustment to fit. In the New Basics Framework, there is no single prescribed syllabus—an official document outlining the body of knowledge to be taught, the skills to be developed, and the way these are to be assessed. It then follows that there can be no work program accreditation—a process whereby a central authority approves a school’s program of study after checking it against the requirements of the corresponding syllabus.

Also, moderation is primarily for ensuring that certificated results match the requirements of syllabuses. Therefore, review (that part of moderation concerned with monitoring standards and verifying student results) would have a quite different meaning. It would require teachers from other schools to validate the judgments of teachers from the student’s school.

Nevertheless, the fact that "moderation involves contextualised teacher judgments and a system of verification of school decision-making" (QBSSSS, 1999) provides a key link for adaptation to the Framework’s futures orientation and the distinctive nature of the P–9 span of schooling.

**Moderation procedures associated with Rich Tasks**

Education Queensland’s public guarantee of high-quality learning experiences for students and the Equity Premise of valid assessment practices require a moderation process. Moderation has extrinsic and intrinsic properties. Extrinsic properties include comparability of standards across the state and professional development of teachers. Intrinsic properties include the positive backwash effects on pedagogy from authentic assessment systems.

The moderation system involves three procedures. Two procedures occur at the beginning of the 3-year Rich Tasks teaching cycle, and replace the conventional syllabus-to-work-program-to-accreditation steps. The third occurs between assessment and reporting (i.e. in the final six months of the 3-year span). Chronologically, they are:

- **a focused exploration by teachers in deciphering Rich Tasks and, together with community members, setting standards for student performance on them.**
  
  This is referred to as immersion in Phase 3 above. It is a vital step in the moderation system.

- **the school’s audit of its plan for building curriculum around the Rich Tasks at the outset of the 3-year span**

  This involves three stages. The first is for the school to complete a 'balance matrix' (see prototype later in this section) for each Rich Task.

  The second is for the school to produce an overlay of the matrixes for all the Rich Tasks in the suite. Each completed overlay represents the school’s response to a suite of Rich Tasks in terms of the various operational fields and repertoires.

  The third stage is for the school to check for appropriate range and balance in terms of operational fields and repertoires across a suite of Rich Tasks. (Criteria for evaluating range and balance will be centrally developed.) Once the school’s plan meets the published criteria, students can be exposed to the Rich Tasks. The school’s 'plan of attack', including timetables and allocation of resources, would follow from this.

  It is the school’s decision about how to optimise its organisational capacity to prepare students for the New Basics. It could organise timetables, subjects and departments, as it sees fit. This degree of curricular flexibility would be added to the existing management flexibility described by Newmann et al. (1996).

  Once the 3-year teaching cycle has begun, different situations and changed meanings can be expected. Flexible pedagogy and developmental appropriateness would require modification of
plans as students progress. This is one of the reasons why any process resembling accreditation of work programs or lesson plans would be artificial (and, therefore, not in this proposal).

- **peer review for verification of standards at key junctures**

Peer review by teachers of student work can occur online between trial schools. Also, there are repeated opportunities and expectations for students to deal with serious material, and in public; that is, some standards verification would occur when teachers from other schools join the audience for student demonstrations of their work, work judged by teachers at the 'home' school to match the desirable features for the highest standard of achievement on a Rich Task. Not all tasks would be appropriate for school/community demonstration because of the inherent nature of the task. Members of a particular community (related to a school or a cluster of schools) have a finite amount of time to devote to attendance at the large number of demonstrations generated in a particular year, so the schedule would have to be closely monitored.

The aim of the New Basics Project is a systemic promotion of innovation in pedagogy directed towards improved student outcomes. The challenge is for this to happen without diminishing rigour. In fact, the aim is to raise expectations and standards—through a standards-setting exercise that is part of curriculum design, includes community participation, and occurs within a collaborative framework.

This verification of standards will look different from current practices of verifying exit levels of achievement for senior students. It will capitalise on the expertise already existing in this State, but without any sense of superimposing one system on another. The special nature of P–9 schooling will be respected. Further, electronic, on-line techniques for assessment and moderation will complement live demonstrations wherever possible. Effective practices will have to work within teacher workloads, and they must provide affordable economies of scale.

In summary, the moderation process could deliver valid and reliable assessments of student performance on the Rich Tasks if:

- schools give due consideration to range and balance in their curriculum plans
- teachers are supported to function well in a transdisciplinary environment
- teachers are supported in the process of making judgments about standards
- peer review has an intellectual (not a clerical) focus, and encourages camaraderie
- online communications are used where feasible (e.g. for negotiation and consultation).

**Development and provision of Rich Tasks**

Section 2.2 outlined the process of development of the Rich Tasks completed to date. The Rich Tasks must be 'water-tight' technically, editorially and academically; they must be subject to ongoing evaluation and feedback. A bank of Rich Tasks will be developed and refined by an expert group working within Education Queensland in a transparent process. Panels of teachers will be convened to give advice to the group on newly composed Rich Tasks.

Each year, a suite of Rich Tasks is provided for each of the following phases: Years 1–3 (seven tasks), 4–6 (seven tasks), and 7–9 (ten tasks). The suite of tasks must satisfy *a priori* requirements noted above in this section. Schools will be encouraged to submit one optional task for each key juncture (3, 6, 9) that expresses their particular curricular specialisation, differentiated identity, and local context. These will be subject to the same rigorous quality-control panels and reviews as Rich Tasks created within Education Queensland.
School-community compacts will give assurances that all students (except those to whom special consideration applies) will have completed the suite of tasks (serially or concurrently as the school decides) in time for assessment and moderation to occur by the corresponding key reporting junctures (end of Years 3, 6 and 9). During a 3-year period, it is expected that some students will require repeated opportunities to deal with some or all aspects of the suite of Rich Tasks.

Trial schools will not commence work with students on any Rich Task until after participation in immersion and auditing sessions (the first two procedures in the moderation system described earlier in this section).

**Professional development through immersion and panelling**

A key by-product of an effective moderation system is the professional development of teachers. There are two important aspects of professional development through moderation in the Framework. The first is to immerse teachers in the New Basics and the transdisciplinary nature of Rich Tasks as a catalyst for pedagogical reform and futures orientations. The second is to engage teachers in designing valid and reliable assessment instruments to focus and expand their own classroom assessment and pedagogical practices. The development and refinement of Rich Tasks thus requires the expert model of construction with teacher panels providing advocacy for students and specialised advice to the construction team. This in itself is a form of content validation.

Rich Tasks are "transdisciplinary", requiring practices and skills across disciplines, following Gibbons, Limoges, Nowotny, Schwartzman, Scott and Trow’s (1994) exploration of changes in the mode of knowledge production in contemporary society. White’s (1998) Consilience refers to "fluency across boundaries" as necessary for clarity of world view in new conditions. This is not quite the same as the traditional interdisciplinary approaches that seek links between disciplines but actually attempt to retain the integrity of each disciplinary methodology, epistemology and canon. Transdisciplinary competence thus is what was aimed for in the cross-curriculum nature of short-response items (SRIs) on the QCS Test (Matters, 1991a) and "Mode 2 knowledge" (Brockman, 1996).

Immersion and panelling sessions would have the benefit of moving teachers towards a transdisciplinary focus. By virtue of their disciplinary training, secondary school teachers historically have been more captive to a subject-specific school timetable than their primary school counterparts. To work in a transdisciplinary environment requires a decompartmentalisation of knowledge, a rudimentary challenge to many teachers (Gray, 1998). The tendency of specialist teachers is to value most highly their subjects' operational fields and repertoires when judging the standard of student performance on a given task—instead of focusing on complex transdisciplinary combinations of skills and knowledges. This phenomenon was observed during the scan of the senior curriculum to identify the common elements (Allen, Matters, Dudley and Gordon, 1992) and in the early stages of marking SRIs (Matters, 1991b).

On the other hand, many involved in thematic or interdisciplinary studies are generalists, without specialisation in one or more operational field. Hence, much interdisciplinary work runs the risk of lack of depth rather than learning about fields and subfields of knowledge.

By contrast, the transdisciplinary nature of the Rich Tasks stresses the need for depth of knowledge in both traditional and non-traditional operational fields and disciplines (Sizer, 1994). The point of Rich Tasks is not to discard or replace disciplinary knowledge, but rather to use the New Basics categories to enable a futures-oriented selection and focus of those knowledges. Sizer’s (1993) approach to rich tasks suggests that such a model has the potential to yield more depth than the current approaches to disciplinary content and outcomes described in Part 1 above.

Primary school teachers would also benefit from being immersed in each Rich Task’s features. Apart from the curriculum dialogues associated with the Year 2 Net, primary school teachers have not had many opportunities for comparing notes on aspects of assessment. For primary school teachers, the development of consensus on standards of student work is a way of focusing on intellectual quality, relevance and student outcomes.
Although teacher education courses are required by the Board of Teacher Registration to include studies of assessment technical aspects of assessment have typically not received extensive coverage. No teacher education course presently features full subjects on evaluation and assessment. Nonetheless, the typical teacher spends between a third and half of his or her time engaged in assessment-related activities (Crooks, 1988; Herman & Dorr-Bremme, 1992; Stiggins & Conklin, 1992). Would it be a great surprise, then, if teachers in trial schools felt ill prepared to carry out panelling and assessment activities associated with the Rich Tasks without further training in evaluation practices?

Even when an assessment instrument reflects curriculum practices, as is the case with the QCS Test, many teachers feel inadequately prepared to create items and marking schemes. For example, in item-writing courses Queensland teachers were not readily productive in designing transdisciplinary tasks (short-response items). Their view was that the professional development aspect of the course was more valuable than learning item development. Teachers often comment that they did not realise how much work was involved in creating a 'good' task. But they certainly can recognise one when they see one and they can readily generate inexhaustible critical commentaries. This also was the experience of teachers in the 1999 development of draft Rich Tasks.

Participation in panelling and moderation provides teachers with valuable professional development. In the proposed model of developing and refining Rich Tasks, teachers and members of the community would be invited to attend panel meetings. Different panels are convened at different times in the cycle of Rich Task development, critique, and refinement. Panels early in the cycle would also be involved in writing indicative standards descriptors for tasks. Different selection criteria apply for membership of the different panels so that advice is received from different perspectives (e.g. equity, editorial, academic).

Two key phases in the proposed model—immersion sessions for teachers and the panelling process associated with development of a bank of Rich Tasks—would facilitate ownership of the Rich Tasks, generate professional dialogue and new ways of working (Sizer, 1992), and contribute to the development of a "professional learning community" (SRLS, 1998), as well as fulfilling a designated primary function in assessment.

In this way the development and moderation of Rich Tasks would become central professional development strategies in the New Basics Project.

Linking the proposal to the literature

In many ways, the current proposal has its closest parallels in a review of school-based assessment in Queensland secondary schools; a project conducted over 20 years ago. According to the major ROSBA Report (Scott, 1978), the main purposes of assessment are:

- to provide, for the teacher and the student, information which can contribute to an evaluation of the learning process
- to provide, for the student, the parent, and other interested people [the system, the government], information which can assist in determining educational and vocational goals
- to provide, for the student, official information concerning his/her achievements in secondary school studies, which the student may regard as, his/her personal document to use as he or she wishes.

Both ROSBA and the New Basics Framework focus on the need for formative and summative assessment on educationally significant learning and not just basic skills, an essential component of classroom work for improved student outcomes (Black & William, 1998). These features have maintained currency for Queensland secondary schools, even though times have changed in so many other significant ways. It is proposed here to translate these principles together with updated assessment technologies into Years 1 to 9 through the Rich Tasks.
Authentic assessment (Hambleton & Murphy, 1992; Newmann, 1994; Cumming & Maxwell, 1999) has become de rigueur in recent years. Queensland already has an "assessment culture" (Wolf, Bixby, Glenn & Gardner, 1999) at the senior secondary level, which involves "a conception of learning and assessment quite different from what standardised testing currently offers". Allen and Bell (1996) state that it is "multidimensional, takes place in context, requires depth of understanding, and involves classroom practices of open discussion about the standards for good work". Myford (1999), of the US-based Educational Testing Service, describes the Queensland system as "cutting edge", and maintains that it is "hard to find other examples that rival what is going on in this part of the world". It seems logical to capitalise on this expertise and technology to address the educational challenges of the New Basics Project.

The current senior system operates as follows. There has been a system of moderated school-based assessment in Queensland since the abolition of external examinations in the early 1970s (Radford, 1970). During the first decade of school-based (internal) assessment, results (teacher judgments) were norm-based and reported on a scale from 7 (highest) to 1. Since the change to criteria-based assessment in 1980, results have been reported as one of five levels of achievement from Very High to Very Limited. In the intervening years, an official credentialling document, the Junior Certificate, was abandoned. There remains, therefore, a system of externally moderated school-based assessment at the high-stakes (university entrance) end of senior secondary studies.

For each Board subject there is an approved statewide framework syllabus including a criteria and standards schema defining the requirements for each level of achievement. Each school offering the subject has a work program accredited by a district review panel, a work program describing how, within the requirements set by the syllabus, the subject will be taught and assessed. The review panel also provides the school with advice about the appropriateness of the standards in its assessments after reviewing sample student folios. A student folio is the collection of material—assignments, tests, orals, practicals and so on—used for determining a student’s results in this subject at the exit level of achievement: the end of the two-year course of study in it.

The system involves teachers in setting and marking assessment instruments and in making complex on-balance judgments in order to reduce a profile of results to a single exit level of achievement. Students taking the same subject in different schools have different educational experiences: from syllabus topics to organisation to assessment instruments.

Allen and Bell (1996) state that the Queensland system has characteristics identified by Radnor and Shaw (1995) as the new way forward in assessment:

- the integration of the process of planning, teaching and assessment
- the location of assessment and moderation in schools and integrated in teachers’ professionalism
- the emphasis on positive assessment and on process as well as product
- social ratification through outside bodies
- the emphasis on assessment of the ability to use and apply information and on practical skills rather than just on the recall of retained and well-patterned information
- consensus and negotiation.

Moss et al. (1992) propose a model in which "teachers and students are encouraged to collaborate with one another to make intellectual and creative choices consistent with their own goals and..."
interests, to engage in ongoing reflection about their work and to participate in the development of strategies by which achievement and development are shared with various stakeholders outside the classrooms” (emphases added).

The Queensland system exemplifies Linn’s (1993) definition of social moderation (also called consensus moderation see Bell, Burkhardt & Swan, 1991; Wilson, 1992). It matches his description: 'Performances on distinct tasks are rated using a common framework and interpreted in terms of a common standard", and it matches his requirement for "the development of a consensus on definitions of standards and on the performances that meet those standards. Staff development and review of discrepancies are critical. Ratings assigned by local teachers may be compared to independently assigned ratings from other raters and the latter may be used to adjust local scores. Documentation needs to be provided regarding the degree to which different sets of judges agree that given responses to different tasks meet common standards”.

The need for common standards for assessing the Rich Tasks has already been stressed. Because allowing varied means for expressing those standards is part of a more loosely coupled system, Linn’s requirement for the documentation of judges’ decisions at student demonstrations of mastery should be heeded. It would seem to be essential for reliability in the assessment of Rich Tasks and necessary in the post-demonstration negotiations about standards.

Assessment of student performance on Rich Tasks forces schools to confront underperformance, poor achievement and, indeed, failure. Failure, however defined, means that students will be steered to aspects of the task to redo if unsatisfactory. Note that this is quite different from the prospect of repeating a subject, test or examination. Teachers would provide students with guidance about how to undertake aspects of the task that were deemed unsatisfactory in the assessment.

"Students who are not motivated by their teachers, by school, or by life in general, do all in their power to interact in a way to get what they need. These students are often characterised as 'at-risk'. Part of this interaction is 'connecting' with the teacher" (Gilbert, 1999). Smith et al. (1999) conclude that it is often the case that at-risk students in Years 10 to 12 have been alienated from school by the time they reach Year 9. A climate that is focused primarily on production and outcomes reinforces (student) insecurities (about classroom performance). They associate the classroom environment with failure; expecting to fail, they often do" (Pierce, 1994). Such a climate would probably not meet the needs of an at-risk learner. Hence the New Basics Project has a strong need for flexibility in pedagogy (see Section 2.3, "Productive Pedagogies").

The 'balance matrix' proforma

The need for a framework for evaluating range and balance, a balance matrix, was introduced earlier. The goal of each Rich Task is that students master a number of repertoires and are competent in a range of operational fields. The balance matrix is a device for a school to use in auditing its curriculum plan. That is, it provides a plan of attack for a particular suite of Rich Tasks, for adequate coverage on these. Beyond that, teachers and schools make their own decisions about how to organise the school day, plan experiences for students over a 3-year span, and whether or not to write lesson plans. The aim here is to develop a 3-year plan of required coverage for the Rich Tasks, without overburdening teachers with extensive paper program development.

The balance matrix requires two cuts through curriculum space:

<table>
<thead>
<tr>
<th>Repertoires</th>
<th>Operational fields</th>
</tr>
</thead>
</table>

Operational fields (column headings) could be expressed as:

- New Basics
- Key Learning Areas (KLAs) (QSCC, 1999)
• traditional disciplines
• UNESCO pillars of learning (Delors, 1998)
• epistemic areas (Phenix, 1964)
• multiple intelligences (Gardner, 1983)
• any other way of organising fields of knowledge that teachers and schools have adopted.

That is, while the Rich Tasks themselves are derived from the New Basics, there is no single, mandated way for describing operational fields for their teaching. This will allow teachers and schools to map back to their current or revised organisation of curriculum fields. In trial schools, these currently range from traditional subjects to New Basics-style sub-school reorganisations.

Repertoires (row headings) must be expressed as clusters of genres, skills and competencies; that is gathering, knowing, doing, and producing, either working individually or in teams. The clusters could be:

• comprehend and collect
• structure and sequence
• analyse, assess and conclude
• create and present
• apply techniques and procedures
• express and perform.

Five of these six categories are drawn from the QCS Test; the sixth one captures an extra dimension of Rich Tasks—substantial practical performance involving creative arts or physical arts or expressive skills or a combination thereof. Parallels, however, could also be drawn to the "pedagogy of multiliteracies" developed by the New London Group (1996). These parallels and elaborations will be developed in the first year of the trial. In the example that follows, these six clusters are used for describing repertoires. The eight KLAs have been chosen for describing operational fields. The result is a matrix with blank cells:

<table>
<thead>
<tr>
<th>Comprehend &amp; Collect</th>
<th>English Language</th>
<th>The Arts</th>
<th>LOTE Technology</th>
<th>Maths</th>
<th>Science</th>
<th>SOSE</th>
<th>HPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure &amp; Sequence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyse, Assess &amp; Conclude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create &amp; Present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply Techniques &amp; Procedures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teachers from the one school working on the same Rich Task fill in the matrix. To assist them in their deliberations, EQ supplies an aide mémoire, not a prescription but a wide-ranging list of possibilities. Filling in of the matrix details the coverage of fields and repertoires in the particular school’s curriculum plan. The mechanics of evaluating range and balance over a suite of Rich Tasks are not detailed here. Whatever the case, decisions will have to be made when working with the trial schools regarding appropriate balance (e.g. not all KLAs are equivalent), and this balance would not be the same from task to task. Over a suite of tasks, however, an entry would be expected for every cell, although not necessarily of the same weighting.

An illustration follows of one subskill (drawn from many possibilities) from each of the six repertoires for each of the key junctures:

<table>
<thead>
<tr>
<th>Repertoire</th>
<th>1–3</th>
<th>4–6</th>
<th>7–9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehend &amp; Collect</td>
<td>Recognise letters, words and other symbols</td>
<td>Identify shapes in two and three dimensions</td>
<td>Compile lists/statistics</td>
</tr>
<tr>
<td>Structure &amp; Sequence</td>
<td>Perceive patterns</td>
<td>Classify</td>
<td>Interrelate ideas/themes/issues</td>
</tr>
<tr>
<td>Analyse, Assess &amp; Conclude</td>
<td>Exemplify</td>
<td>Infer</td>
<td>Hypothesise</td>
</tr>
<tr>
<td>Create &amp; Present</td>
<td>Sketch</td>
<td>Expound a viewpoint in writing</td>
<td>Construct a graph</td>
</tr>
<tr>
<td>Apply Techniques &amp; Procedures</td>
<td>Calculate</td>
<td>Approximate a numerical value</td>
<td>Substitute in formulae</td>
</tr>
<tr>
<td>Express &amp; Perform</td>
<td>Explain to others orally</td>
<td>Construct an artefact</td>
<td>Interview</td>
</tr>
</tbody>
</table>

The audit should be shaped by the intellectual powers and competencies that students need rather than by conventional notions of 'syllabus coverage'. At this stage the New Basics serve as the referent in an overarching checklist.

### Summary of responsibilities across all seven stages

<table>
<thead>
<tr>
<th>Education Queensland</th>
<th>Schools/Teachers</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Rich Tasks and indicative criteria for assessment.</td>
<td>Teachers as individuals are invited to be members of panels.</td>
<td>Critical friends (ongoing role)</td>
</tr>
<tr>
<td>Convene panels.</td>
<td></td>
<td>Community members are invited to be members of panels.</td>
</tr>
<tr>
<td>Distribute suites of Rich Tasks and indicative criteria for assessment.</td>
<td>Study suite of Rich Tasks and indicative criteria for assessment for each juncture.</td>
<td></td>
</tr>
<tr>
<td>Circulate timeline for moderation processes.</td>
<td>Compose draft 'plan of attack' in response to what the Rich Tasks invite students to gather, know, do and produce.</td>
<td></td>
</tr>
<tr>
<td>Produce guidelines for evaluating curriculum balance.</td>
<td>Attend immersion sessions.</td>
<td>Comment on standards setting.</td>
</tr>
<tr>
<td>Conduct immersion on Rich Tasks and assessment criteria.</td>
<td>Audit balance in curriculum plan and redraft if necessary.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facilitate learning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess Rich Tasks and associated subskills.</td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Action</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>for peer review of teacher judgments.</td>
<td>on Rich Tasks via public demonstrations and other mechanisms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Negotiate, where necessary, on outcomes of peer review (online, not at meetings).</td>
<td></td>
</tr>
<tr>
<td>Circulate format for reporting of performance on Rich Tasks.</td>
<td>Report on student performance on Rich Tasks to parents and EQ.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Report on student achievement of subskills (at school's discretion).</td>
<td></td>
</tr>
<tr>
<td>Collate and analyse performance data.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Conclusion**

The Rich Tasks are an exercise in standards setting in a high-stakes environment. They will be developed in ways that are technically rigorous and credible, and that enhance classroom instruction and systems accountability. Processes have been proposed that suit the theoretical construct of the Rich Task and are cost-effective. These processes take into consideration and will address serious questions about the provision of teachers' professional development and planning time. Their development in the trial schools will use professional development that builds competence and confidence in assessment and curriculum planning. Within this model it is possible to produce high-quality Rich Tasks for students, accepted by them and the community as guaranteeing mastery of the everyday practices that people need for living in complex, networked societies.
2.5 Implementation Planning, Systematic Support and Accountability

This final section takes up implementation planning and the research and organisational support required to sustain the New Basics Project. It is meant as a companion to the Draft Framework Implementation Plan.

The New Basics Project is based on the assumption that successful reform requires substantive commitment to school and systemic cultural change. Such change will require high levels of professionalism, with teachers and school administrators participating as learners within dynamic learning communities. The shared ownership model of implementation requires that top-down initiative and support be integrated with bottom-up will towards continuous improvement in the core educational business of teaching and learning. Teacher dialogue and exchange, supported by targeted use of electronic communication, are key implementation strategies.

To do so, the role of central and district offices is as much to lead, facilitate and consolidate an open process of and focus on pedagogic reform, as much as it might be to provide definitive apriori directions and answers. In this way, the implementation and trial of the New Basics Project retains the spirit and approach of its initial 1999 development stages. Teachers in the trial schools will provide curriculum planning and classroom instructional solutions around the new basics and rich tasks.

The moderation system will provide teachers with feedback data on the efficacy of their curriculum and teaching choices in improving student outcomes. In this way, there is a dialogic implementation relationship - not a command relationship - between schools and central office, between teachers and curriculum/assessment developers and planners. The reality and the perception in the field of this changed relationship will be crucial to the success of the New Basics Project.

Cultural and structural change in educational reform

The 2010 Strategy found that there was a climate of change fatigue reported by many teachers and school administrators, and by some students and parents. Many school staff felt that imposed changes had impacted adversely on teachers' work, distracting them from their core business of teaching. Educational restructuring typically is perceived by teachers as more closely aligned with the cycles of government and politics than with sound, coherent alignments between curriculum, pedagogy and assessment.

The relationship between structural and cultural dimensions of educational change has been a focus of international debate for some years. In a meta-analysis of educational reform initiatives, Fullan (1993) hypothesises that educational initiatives initially focused on reculturing appear to lead to restructuring that is more effective and sustainable than if the reverse strategy was employed. While they may be necessary, structural reforms from the top of a system are not sufficient for the kinds of cultural change that leads to improved outcomes (cf. Elmore, 1995, 1996). Neither the restructuring of schools or of teachers' work in and of itself has been demonstrated to have direct consequences on student outcomes (Wohlsletter et al. 1994; Newmann et al. 1997). There is also considerable evidence that where top-down structural reforms are implemented too rapidly or with insufficient foresight, then confusion, ambiguity and conflict are likely results (Hargreaves, 1994; Fullan 1992).

Initial developments of school-based management, for example, focussed systemic prestige and resources on enhancing school-based management. The key operational assumption, drawn from the Wisconsin CORS project, was that improvements in student outcomes would flow on from greater school-based control (School Reform Longitudinal Study, 1998). What was not forthcoming at the design phase was specific programmatic strategies for progression from devolved management to enhanced student outcomes through realignments of curriculum, pedagogy and assessment.

The IDEAS (Innovative Designs for Enhancing the Achievements of Schools) Project was developed to take on this role. Initiated in 1997 as a joint research venture of the School-based Management Unit of Education Queensland and the University of Southern Queensland, its initial
goal was to explore ways of using principles of school-based management to enhance outcomes in Queensland State schools. In 1998, the first year of the project, Wisconsin models were used to develop a research-based framework for enhancing school outcomes and a four-phase school-based implementation strategy.

A formal evaluation completed at the end of 1999 indicated that a significant majority of participating schools had found the IDEAS Project had achieved its objectives to date. Positive effects on teacher morale and sense of professional community had been marked. It is expected that impacts of the IDEAS Project on student achievement will be assessed upon completion of a further year of implementation (i.e. by October, 2000).

In the latest Wisconsin CORS work, King and Newmann (in press) argue that when the professional community of the school engages collaboratively in school improvement, enhanced school identity can generate enhanced student achievement.

To summarise, educational change is likely to be more sustainable and profound where teachers and administrators begin working and thinking in new ways and discover for themselves that existing school structures and procedures are ill-fitted to the new orientations, and therefore require changing. The implementation design of the New Basics Project is based on this assumption.

**Applying the literature to project implementation planning**

From his review of educational reform initiatives Fullan identified what he called the "eight basic lessons of the new paradigm of change". These lessons integrate key features of both cultural and structural dimensions of educational change. Possible implications of the lessons for the school trial phase of this project are outlined in Table 3. The issues and questions raised in Table 3 will provide a heuristic template for the first-year’s debates and discussions by the implementation team, teachers and administrators, critical friends and partners.

These significant implications have also informed the project’s design principles and its strategies for initial development (see Table 4).

These and other research findings have informed the overall implementation model (see Figure 3).

<table>
<thead>
<tr>
<th>Change lesson*</th>
<th>Brief explanation*</th>
<th>Possible project implementation implications</th>
</tr>
</thead>
</table>
| 1. You can't mandate what matters | The more complex the change, the less you can force it | • The dynamic complexity of the New Basics & Rich Tasks requires an open approach to school trialling possibilities  
• School administrators need to nurture & enlist support from staff in trial schools and not just assume/coerce it  
• Up-front systemic mandating of all Rich Tasks, validation & moderation procedures should work within principles of subsidiarity; later peer procedural mandating envisaged |
| 2. Change is a journey not a blue print | Change is non-linear, loaded with uncertainty and excitement and is sometimes perverse | • New behaviour, beliefs, practical skills & knowledge of school staff will require time & commitment by all  
• Project team should not attempt to predict all likely implementation issues before schools identify them  
• Project team should expect early difficulties in most schools & some fear of the unknown among many teachers |
| 3. Problems are our friends | Problems are inevitable and you can't learn without them | • Early inquiry, question-posing & problem-seeking should be encouraged openly among all school staff  
• Problems & difficulties need to be identified early on  
• Identify cover-up/denial or shallow coping mechanisms |
| 4. Vision and strategic planning come later | Premature visions and planning can blind participants | • A provisional school vision for change should emerge from & not precede the early actions of school staff  
• Vision-building needs to be open-ended & shared  
• Strategic planning models will be iterative & cooperative |
| 5. Individualism | There are no one-sided | • Some creative tension can generate quality outcomes |

and collectivism must have equal power
solutions to isolation and groupthink

6. Neither centralisation nor decentralisation works
Both top-down and bottom-up strategies are necessary

- Top-down initiation, incentives & support are important
- Bottom-up ownership of pedagogic reforms is crucial
- Harmonising curriculum, pedagogy & assessment cycles requires focus & coordination, cooperation & initiative
- Pedagogic reforms requires harnessing teacher expertise
- Relationships and communications across the Project should be dialogic and open in tone

7. Connection to the wider environment is critical for success
The best organisations learn externally as well as internally

- Relationship of initiative to QSE 2010 analysis & wider change agenda needs to be clearly understood by trial school staff and school community
- Connections between curriculum change and larger social, economic change need to be made explicit to school community
- Parents, community and regional stakeholders need to provide formative developmental feedback to schools
- Scan of schools’ external environments are also important
- Premises & purposes of initiative will require discussion
- Trial schools need to be considered as part of school differentiation and other aspects of EQ reform

8. Every person is a change agent
Change is too important to leave to experts, personal mindset & mastery are the ultimate protections.

- Each school & teacher needs to take responsibility for their interpretations of changes initiated through this project
- Use of external experts & critical friends does not absolve school staff of this responsibility with students & community
- Schools & system to invest resources to sustain initiative through various implementation phases & challenges
- Sharing of experience is an expectation of participation.


Table 4: Mapping the project design principles and key development strategies against the educational change lessons*

<table>
<thead>
<tr>
<th>Project Design Principles</th>
<th>Key Development Strategies (used or planned to date)</th>
<th>Educational Change Lessons*</th>
</tr>
</thead>
</table>
| Participation             | • The New Basics Project as a transitional research and development initiative designed to transcend barriers to systemic reform as identified by Cain in Towards a Strategic Centre  
|                           | • Ongoing interactive consultation with diverse stakeholders, potential partners and practitioners  
|                           | • Selection of volunteer trial schools & staff briefings | 5. Individualism & collectivism must have equal power |
| Openness                  | • Provision & use of website to involve participants in an interactive way through the stages of recognizing the need for revitalisation, creating a new vision and institutionalising change  
|                           | • Making key project documents and issues freely available to all who choose to join the listserv  
|                           | • Use trial school communication systems & sharing of perspectives & materials to tackle specific problems | 1. You can't mandate what matters  
| Development               | • School staff to examine & review key project aspects  
|                           | • Negotiate involvement of critical partner agencies  
|                           | • Plan for selection & involvement of critical friends working with volunteer schools over trial period  
|                           | • Plan for first year of trial as immersion in implementation issues but with no systemic expectation of student work  
|                           | • Plan for key systemic mechanisms for ongoing development & networking of trial school teachers  
|                           | • Organise cooperative paneling reviews of Rich Tasks | 2. Change is a journey not a blueprint  

*DRAFT New Basics Technical Paper, Version: 3 April 2000*
### Autonomy

Autonomy refers to the relative degrees of freedom enjoyed by relevant individuals, groups and sites in the state education system to interpret, adapt and create key features of the project.

- Schools to audit their existing curriculum & plan time allocation & delivery pattern for New Basics
- Schools can submit an additional Rich Task for approval but must complete all Tasks within each 3-yr period
- Variable school & student pathways envisaged for successful performance on Rich Tasks
- Cooperative school implementation teams supported
- Peer-based panelling of standards & moderation

1. You can’t mandate what matters
5. Individualism and collectivism must have equal power
8. Every person is a change agent.

### Accountability

Accountability refers to the extent to which participants take responsibility for the decisions they take in their sphere of influence in implementing the project within the state education system for students and the community.

- Schools to submit implementation plan to panel for accreditation for three-year period
- Generic performance criteria supplied for each Task, but school to specify local context & conditions
- Some Tasks selected for public demonstration/exhibition
- Students to redo designated aspects of Rich Task if their initial performance is unsatisfactory
- Rich Task performance to accompany school Report
- Pass rate percentage to become over time a key system performance measure for the school

4. Vision and strategic planning come later
6. Neither centralisation nor decentralisation works
7. Connection to the wider environment is critical for success

* For details of change lessons, see Figure 3.
# TRIGGER FOR CHANGE – NEW BASICS PROJECT

## RECOGNISING THE NEED FOR REVITALISATION

### Individual Dynamics
- Transitional research and development model generates ideas & fosters professional interactions between many participants
- Growing support from many administrators, teachers & other educators
- Dimensions of need become clearer to many engaged in discussions

### Organisational Dynamics
- UNESCO Delors Report on learning
- School-based management, IDEAS experience & SRLS data as pre-conditions for focus on improved student outcomes
- 2010 Strategy identified that in a time of changing cultures & economy a new model of curriculum was required urgently
- Vision articulated by senior management
- Teacher professional development linked to Professional Standards for Teachers

### Change Dynamics
- Conduct of an open processes of online & face to face professional consultations
- Seeking partners from key stakeholders – teachers & unions, principals & professional associations, universities, parent, business & community organisations
- Normative/re-educative processes focussed on need to harmonise changes in curriculum & assessment with pedagogy
- Early research & development of key project concepts- New Basics & Rich Tasks

## CREATING A NEW VISION & TRIALING A NEW MODEL

### Individual Dynamics
- Challenge of sample Rich Tasks
- Many school staff interested in positive directions & innovative approaches to change
- Many seek closer involvement in project through school trial
- Implementation issues identified & focussed on in discussions

### Organisational Dynamics
- Motivating vision outlined & discussed among many staff - The New Basics Project: A Futures -Oriented Curriculum for Education Queensland
- Selection made of diverse trial schools
- Development of technical details
- Systemic trial/implementation planning
- Support for trial schools engagement

### Change Dynamics
- Rational-empiric change emphasis
- In-built monitoring & review
- Critical friends selected to assist trial schools with change process
- Critical partners monitor progress
- System evaluation model developed
- Implementation unit support trial schools & organise for evaluation

## REVIEWING & REVISING MODEL BASED ON TRIAL SCHOOL EXPERIENCES

## INSTITUTIONALISING DYNAMIC CHANGE WITHIN EDUCATION QUEENSLAND

### Individual Dynamics
- A paradigm shift to focus on the learning, thinking & working styles required for new times
- Increased capacity & desire for pedagogical enhancement to improve student learning outcomes
- Personal revitalisation through collaborative participation in valued school development activities
- Enhanced professionalism of school teaching staff via renewed involvement in planning & implementation of curriculum, assessment, and identification & enhancement of standards of student performance

### Organisational Dynamics
- Sustainability & renewal issues for system identified & addressed - e.g. use of time & space, teacher loads, flexible schooling structures, staff professional development, relationships with statutory authorities & universities, school-based research & collaboration
- Roles & communication patterns among central, district & school staff clarified to support teachers
- Differentiated public schools as professional learning communities within a dynamic education system
- Strengthen organisational capacities & internal accountability systems of schools

### Change Dynamics
- School reform as viewed as an ongoing problem-solving & renewal process
- Reflective, critical research culture becomes integral to the collaborative rethinking process in public schools
- Support for differentiation of schools assists reform/renewal
- One-size-fits-all mandated programs & use of power-coercive leadership strategies within Education Queensland are acknowledged as ineffective

References Bridges (1986), Tichy & Devanny (1986)

Figure 3: Implementation dynamics model for project
Proposed systemic implementation accountabilities

Trial Schools: The New Basics Project will be trialled in twenty (20) schools/clusters over the next four years. The ultimate goal is to involve all Education Queensland schools that have demonstrated that they have developed the requisite school organisational capacity. The purposes of the trial are to:

- fully develop and articulate the New Basics, Productive Pedagogies and Rich Tasks into mature and generalisable approaches to curriculum, pedagogy and assessment that lead to verifiable improvements in student outcomes
- determine the requisite school organisational capacities needed to successfully implement these approaches.

The selection criteria for trial schools were:

- innovative practices to date, with a particular emphasis on pedagogical reform
- high level of community support for curriculum innovation
- teacher access to the Internet
- demonstrated willingness to share experiences with other schools/clusters.

Schools in the original selection were notified on 30 November 1999. By the beginning of the 2000 academic year, the list was finalised to comprise:

<table>
<thead>
<tr>
<th>School clusters</th>
<th>Individual schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cairns Consortium</td>
<td>Cairns West SS</td>
</tr>
<tr>
<td>Edge Hill SS</td>
<td>Parramatta SS</td>
</tr>
<tr>
<td>Woree SS</td>
<td>Charters Towers Alliance</td>
</tr>
<tr>
<td>Charters Towers SDE</td>
<td>Charters Towers SHS</td>
</tr>
<tr>
<td>Charters Towers Central SS</td>
<td>Millchester SS</td>
</tr>
<tr>
<td>Richmond Hill SS</td>
<td>Suncoast Cyberschools</td>
</tr>
<tr>
<td>Burnside SHS</td>
<td>Burnside SS</td>
</tr>
<tr>
<td>Chevallum SS</td>
<td>Eudlo SS</td>
</tr>
<tr>
<td>Glenview SS</td>
<td>Mapleton SS</td>
</tr>
<tr>
<td>Montville SS</td>
<td>Mooloolah SS</td>
</tr>
<tr>
<td>Nambour Special</td>
<td>Nambour SHS</td>
</tr>
<tr>
<td>Palmwoods SS</td>
<td>Woombye SS</td>
</tr>
</tbody>
</table>

The trial schools will show just how far the New Basics can be pushed in innovative directions and also give a sense of the realistic limits of such innovation. A willingness to share experiences with other schools/clusters will be crucial.
Critical Friends: The provision of critical friends for trial schools and clusters is crucial to the success of the trial phase (for a more detailed description, see the implementation plan). In the New Basics Project, critical friends will work in the field with trial schools to:

- mentor teachers on pedagogy
- facilitate curriculum planning, assessment and moderation associated with Rich Tasks
- liaise with district staff and the New Basics Unit in Central Office
- assist the school administration with community and stakeholder representations of the New Basics agenda
- conduct school-based data collection for research
- assist teachers and administrators in developing relevant local action-research and case study work
- initiate and enable teacher participation in on-line discussions, especially those related to curriculum planning and the moderation of standards of student work
- contribute to the involvement of schools with critical partners.

The critical friends will use a local case study approach because the trial schools will use "different journeys" (Fullan, 1993) to arrive at outcomes. A case study approach is appropriate in these circumstances because case study methods are rarely spelled out in advance, except in most general terms, and apprenticeship is the usual means of induction into its techniques (Merriam, 1988).

The critical friends will assist the New Basics Unit with data collection on pedagogic change and student outcomes for the overall formative research design.

The role of a critical friend in school-based research is reinforced by the recent DEETYA Innovation and Best Practice Project (IBP) (Austin & Crowther, 2000). The IBP required that the 107 participating schools select from a range of conventional research designs and methodologies to track both their processes of innovative practice and the educational outcomes of that practice.

The research documented 107 school projects with school-based researchers playing a key role in their success. Some issues from the project of relevance to the New Basics Project are as follows:

- Schools used a range of critical friends—external, university-based researchers, private research consultants, and internal researchers (appropriately skilled teachers released from normal duties).
- The use of implementation principles to govern procedures was reinforced as it was found that there was no one way of describing the internal–external critical friends relationship or the research process in the 107 schools.
- The nature of the school-based research process facilitated by critical friends was revealed as indicating a capability for disciplined professional critique and initiative that extends current understanding of teachers' professional roles.
- Five functions were found to be central to the critical friend role: conceptualisation of the school's research approach; strategic management; mobilisation of research support; ensuring ethical research standards and encouraging reflectivity.
- An inventory for successful school research was developed for use in varying contexts.

The IDEAS Project found that there are four junctures where schools required high-quality external facilitation (i.e. critical friends) if they are to progress with their improvement processes:
• creating a management team based on the principle of parallel leadership (i.e. equitability of teacher pedagogical leadership and principal strategic leadership)

• refining generic diagnostic inventories to reflect the culture of the school community and interpreting diagnostic results to include good news as well as bad news

• using teachers' best practices in relation to the school vision to generate a conceptualisation of the school's overall approach to pedagogy

• developing an implementation plan for a revitalised approach to pedagogy, also incorporating shared accountability.

The IDEAS findings have been consistent with Roundtable approach adopted by the National Schools Network in Queensland schools, evaluated by Yeatman and Sachs (1995).

Critical Partnerships:
The National Schools Network (NSN) has developed an extensive track record of school reform sponsorship, based on linkages of professional development, school-based research and curriculum support. An outstanding feature of the NSN work has been the focus on collaboration and dialogue between teachers and schools, working in partnership with parents, unions, professional associations and other organisations. The result has been a coordination of expertise from various sectors together with a cooperative approach to reform that anticipated and 'headed off' conflict before it occurred.

Critical partners would contribute field-based expertise to the trial schools. Specifically, it is proposed that various key stakeholders with expertise in such areas as school reform, curriculum development, school–community relations, pedagogy, and other areas be invited to negotiate active roles in the trial with Education Queensland. Issues that need to be considered in such negotiations include ethical and school-access protocols, confidentiality of data, and potential conflicts of interest.

Critical partnerships might include:
• mentoring administrators on pedagogic leadership and school reform
• mentoring teachers on pedagogy
• working with teachers on curriculum planning
• providing expertise for Rich Task preparation, assessment and moderation
• assisting teachers with local-action research and degree-upgrading projects
• assisting critical friends with data collection and analysis
• assisting in the networking teachers and communities from different trial schools.

The New Basics Project thus sets out to engage institutional stakeholders to collaborate with Education Queensland in the change process. To date, the QTU, QASSP, QSPA, special education organisations, indigenous organisations and several universities have expressed interest in negotiating critical partnerships.

Other relevant local stakeholders may wish to propose critical partnerships with specific schools or clusters. These will have to be examined and negotiated on a case by case basis by Education Queensland.

Project Monitoring:
The New Basics Project will be monitored by the following internal and external stakeholders:

<table>
<thead>
<tr>
<th>Internal</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Management Group; in particular</td>
<td>Reference Group comprising</td>
</tr>
</tbody>
</table>

These groups will review periodic reports on the trial and results of the New Basics Project Research Design.

**New Basics Project Research Design:**

The implementation plan outlines an initial research proposal for a large-scale, formative and summative, qualitative and quantitative study of the trial. An accompanying technical paper, *The New Basics Project Research Design* is in draft form.

The overall research design is a selective replication of the SRLS study with a focus each of the four concentric domains of the CORS project (see Figure 1). The replication would enable the comparison of changes in pedagogy and student outcomes between the 24 schools in the SRLS sample and the 20 trial schools in the New Basics Project.

Critical friends and a research team in Central Office will collect systemic and school-wide, qualitative and quantitative data across the trial period on:

- student outcomes (conventional outcomes indicators and Rich Task data)
- classroom pedagogy (SRLS coding scheme for observation of changed pedagogy)
- school organisational capacity (survey and interview data on changes in school culture and leadership)
- external supports (case studies on level of centralised and systemic support provided and needed to support pedagogical change).

Data handling protocols to ensure ethical research, confidentiality, and protection of the rights of students, teachers and administrators will be developed and negotiated.

It should also be noted that the study of ‘external supports’ means that the research design would provide formative and summative evaluation of the resource and administrative support from Central and District Offices for the trial.

The *Framework Implementation Plan* also proposes an annual external review of the research project data and findings by an independent panel of educational evaluators.

**Project articulation:**

The project would be progressively linked with a number of other Education Queensland projects. A shortlist of potential articulations is provided in Table 5 over.
<table>
<thead>
<tr>
<th>Project</th>
<th>Possible Articulation with New Basics Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010 Strategy</strong></td>
<td>The 2010 Strategy argued that in a time of changing cultures and economies a new model of curriculum was required. The New Basics Project is EQ's major initiative in response to the &quot;Futures Premise&quot;.</td>
</tr>
<tr>
<td><strong>Year 10-12 Reconceptualisation</strong></td>
<td>Smith et al. was a critical analysis of the capacity of the Years 10-12 curriculum to deal with new life pathways, equity and tertiary participation patterns. The trial schools could develop multiple pathway counseling models and innovative approaches to Year 10.</td>
</tr>
<tr>
<td><strong>Key Performance Measures</strong></td>
<td>The Rich Tasks data on student achievement offers a non-reductionist augmentation of benchmark testing as part of the School Planning and Accountability Framework.</td>
</tr>
<tr>
<td><strong>QSCC Syllabus Implementation</strong></td>
<td>Establishment of the New Basics and Rich Tasks may provide guidelines for systemic 'core curriculum' in response to planned 2005 completion of KLA roll out.</td>
</tr>
<tr>
<td><strong>Literacy Projects</strong></td>
<td>Research to be undertaken on the relationship between successful implementation of productive pedagogies and rich tasks and literacy achievement.</td>
</tr>
<tr>
<td><strong>School Reform Longitudinal Study</strong></td>
<td>The Framework is a policy response to the Research Premise of the SRLS. Trial schools will be used to implement and test findings of SRLS on productive pedagogies and productive leadership. SRLS will provide baseline data for comparative and longitudinal analysis of changes in pedagogy and student outcomes. Several trial schools are SRLS schools, which will mean we will have 7 years longitudinal data by the completion of the trial.</td>
</tr>
<tr>
<td><strong>Framework for Students at Risk</strong></td>
<td>'At risk' students in the trial schools will be tracked to determine the extent to which application of the New Basics may lead to improved outcomes. Rich tasks will provide alternative indicators of student performance for 'at risk' groups.</td>
</tr>
<tr>
<td><strong>IDEAS Project</strong></td>
<td>Some trial schools are also included in the IDEAS project. The extent to which the 'cohesive school community' concept provides a more effective framework for productive pedagogies implementation will be examined. IDEAS approaches to building school ethos and differentiation may be used in trial schools. Schools may opt to use Neumann's &quot;authentic pedagogy&quot; for pedagogical renewal.</td>
</tr>
<tr>
<td><strong>Cape York Partnership</strong></td>
<td>Indigenous community curriculum compacts will be trialed in Hopevale, Aurukun and Thursday Is. State Schools. Framework will provide the platform for educational reform for Partnership, constituting a study of the effectiveness of Rich Tasks, New Basics, Productive Pedagogies with Torres Strait Islander and Aboriginal students in diverse settings.</td>
</tr>
<tr>
<td><strong>ConnectED</strong></td>
<td>Two websites will be trialed, one 'open' Internet site about the New Basics Project available to all general users, and a second 'closed' site with password protection for trial school communication &amp; sharing of resources.</td>
</tr>
<tr>
<td><strong>Special Needs Framework</strong></td>
<td>The use of alternative scales for assigning rich tasks achievement levels will be trialed in Special Schools and Low Incidence Units. Separate research projects documenting results will be initiated.</td>
</tr>
<tr>
<td><strong>Alternative Education and Behaviour Management strategies</strong></td>
<td>Longitudinal study of the impact of implementation of the New Basics on curriculum reform and behaviour management strategies will be undertaken in trial schools.</td>
</tr>
<tr>
<td><strong>Professional Development and Training Program</strong></td>
<td>The trial schools will provide an opportunity to test the application of PDT entitlements towards a coordinated school approach to implementation of the New Basics Project.</td>
</tr>
<tr>
<td><strong>Career Education</strong></td>
<td>Opportunities will be provided for trailing the linking of rich tasks and the 'life pathways' new basic to career planning.</td>
</tr>
</tbody>
</table>
KEYWORDS

Authentic assessment
Associated with the work of Newmann (1996), the term refers to assessment that is both valid and useful in practice. That is, it assesses accurately what it purports to assess and it provides accessible and understandable data on students and programs in ways that teachers are able to translate into practical curriculum and pedagogic decisions via curriculum conversations.

Curriculum
The "selective traditions" (Luke, 1988) of knowledge and texts, skills and competences, processes and practices that educational systems deem to be of value for construction and transmission to successive generations of learners. Curriculum development by necessity involves inclusions and exclusions of 'valued' knowledge, and by definition is a value-laden, normative set of decisions.

Curriculum development – contrasting models of
Linear approaches to curriculum development are particularly associated with work by Tyler. His model, elaborated in Basic Principles of Curriculum and Instruction (1949), is a linear process-based model involving consultative assessment of societal and systemic needs, specification of behavioural and cognitive outcomes, and sequential phases of curriculum design and development, trial, and implementation.

Reconceptualist approaches are associated with Pinar (1975), and draw from phenomenological approaches to education. This model argues that curriculum construction begins by envisioning the kinds of human subjects and life worlds that educators want to contribute to and build. The model works backwards from this to identify the repertoires of knowledge and skill that people will need to operate in such a world. Finally, the task is to identify appropriate curriculum clusters and systemic and school organisational structures to support learning.

Curriculum conversations
Discussion and group planning concerning pedagogy and assessment that are undertaken as part of a school's response to a curriculum document or assessment requirement.

Globalised economies
Contexts in which decision making and flexibility in any national economy are limited by the ability of trans-national corporations to engage in rapid global flows of capital, goods, services and information. For a particular economy, this can result in the loss of many jobs in traditional sectors, the emergence of new sectors of employment, and hence, new levels of employment insecurity, job change and career shift.

High stakes testing
A context within which formal assessment, generally based on one or more standardised tests, is used to make important decisions about the futures of students, teachers or schools.

Lifelong learning
Knowing how to learn through a range of media: from traditional face-to-face instruction and workplace mentoring, to print self-instructional materials and on-line resources. It increasingly involves a fluency of adaptation to new instructional media.

Life pathways
Based on the sociologist Pierre Bourdieu's (1984) concept of the "life trajectory". The idea is that students take different kinds of knowledge, skill and credentials with them and move into and across various "social fields" of employment, further education, civic and family life. Smith et al. argue that the life pathways of Queensland children and students now follow different patterns than those of post-war children, but that the educational systems have not 'caught up' with these pathways.

Message system
A concept attributed to Bernstein (1990) in which it is crucial that there be coordination, articulation and harmonisation across a triad of educational message systems: curriculum; pedagogy and
assessment. Unless all three are pulling in a coordinated fashion towards clear systems goals, the achievement of those goals can be compromised.

**Moderated teacher judgment**
In general terms, moderated teacher judgment is a process that involves standards setting, gathering of evidence, contextualised teacher judgment about student achievements and peer review of those judgments.

**Moderation**
In Queensland, the QBSSSS uses the term 'moderation' to describe a particular set of procedures to ensure that results recorded on Senior Certificates match the requirements of syllabuses.

**Middle schooling**
A time of curriculum transition for students from a largely integrated primary school mode of curriculum organisation to a secondary school system that, in most cases, consists of a disintegrated 'collection code' (Bernstein, 1990) of subjects with highly variable levels of integration. The time also can involve pedagogical shifts from 'student-centred' teaching in primary schools to 'subject-centred' teaching in junior secondary years. It can be characterised by discontinuities in personal support as a result of highly variable emphases on self-development, life-planning, physical and psychological health. The actual years of middle schooling are subject to debate but are often identified as Years 4 to 9.

**Multiliteracies**
A term associated with the New London Group (1996) to incorporate different kinds of social and cultural practices necessary to engage simultaneously with blends of oral, print, visual and multimediated communications.

**Networked society**
A society in which learning takes place on a vast civic scale through a variety of technological media (including television, music, Internet, speech, performance and print). Much of this learning takes place outside the traditional educational institutions controlled by school, church and government.

**New work order**
A view of work that is driven by the realities of globalisation, technological innovation and changing work practices. The view encompasses not only skills in new technology and print literacy, but also skills in verbal face-to-face social relations and public self-presentation, problem identification and solution, and collaborative and group capacities.

**New Basics**
Clusters or families of practices required for contemporary and future social, cultural and economic life worlds. They describe the interactive requirements of identity, communications and social relations, work and citizenship, consumption and leisure. The clusters are:

- **Life pathways and social futures** (Who am I and where am I going?)
- **Multiliteracies and communications media** (How do I make sense of and communicate with the world?)
- **Active citizenship** (What are my rights and responsibilities in communities, cultures, and economies?)
- **Environments and technologies** (How do I describe, analyse and shape the world around me?)

**Pedagogy**
In the late 19th century, William James defined pedagogy as the art and science of teaching. In current terms, pedagogy refers to the instructional interaction between students and teachers that occurs in teaching/learning situations. In this way, teachers and students 'reconstitute' or remake curriculum selectively through their everyday interactions.
• **Authentic pedagogy**: A description of pedagogy associated with the work of Newmann (1996) and the Wisconsin CORS research. It involves a focus on: higher order thinking; depth of knowledge; depth of understanding; sustained classroom dialogue; and relevance of the lesson to the real world.

• **Productive pedagogy**: A description of pedagogy associated with the SRLS research, which builds on the work of Newmann. It identifies a repertoire of 20 classroom strategies that teachers can use to focus instruction and improve student outcomes. The strategies are clustered in four forms of classroom interaction: social support; intellectual engagement; relevance; and recognition of difference.

**Rich Tasks**
Sets of specific activities that students are expected to complete at specified junctures (Years 3, 6 and 9). The activities are developed from New Basics categories to have intellectual depth and real-world value and use. Each rich task can be mapped back to:

• **Repertoires of practices**: The cognitive and cultural, linguistic and social skills needed to be acquired developmentally in order to complete the Rich Task.

• **Operational fields**: The disciplinary, key learning area or transdisciplinary fields of knowledge that will have to be brought into play by the student in order to complete the task.

**School organisational capacity**
The requisite cultural, administrative and educational resources required to enable change at the level of the school. Capacity and infrastructure do not refer simply to managerial practices, but also the capacity of schools as cultural organisations to set enabling conditions for reform of curriculum, pedagogy and assessment (King.

**Social capital**
The extent to which individuals, groups or institutions are able to contribute valued knowledge, skills and practices to the social infrastructure. In a climate of market driven economic reform, access by individuals to new forms of social capital is seen as essential for their participation within a globalised economy (Cox 1995; Latham 1998).
REFERENCES

(Entries not complete as at 3 April 2000.)


