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Draft Curriculum Feedback Ministry of Education PO Box 1666 Thorndon Wellington

Dear Sir/Madam

Attached is PPTA's submission on the New Zealand curriculum: Draft for consultation 2006.

Yours faithfully

Judie Alison Advisory Officer



Submission to Ministry of Education

on

The New Zealand Curriculum

Draft for Consultation

2006

PPTA welcomes this opportunity to make a submission on the Draft Curriculum. We represent approximately 16,000 teachers in secondary, intermediate and area schools. Our submission is informed by consultation with that membership, through a variety of means.

PPTA wishes to affirm the Ministry's efforts to consult with the profession during the process of development of this document. There have been many ways in which teachers have been able to be involved, e.g. through learning area reference groups, through online discussions, through consultations over the values and the key competencies, and through trialling of the key competencies and school-based curriculum development. It is a concern to us, however, that in general the amount of involvement of secondary teachers has been less than optimum, and we would attribute this to the competing workloads of NCEA implementation, and also to over-dependence by the Ministry on online communication, which we are aware is still problematic for many of our members. We would also comment that two half-days for schools to wrestle with the big questions raised by the document left many teachers with more questions than answers and no time to explore further. For the profession to be fully involved, more time was needed.

This submission does not use the provided questionnaire, because it is not appropriate for a submission from a national organisation such as PPTA. We also believe that the questionnaire printed in the document unduly constrains the kind of responses able to be provided. Nevertheless, we have addressed most of the areas asked about in that questionnaire, in some form. The submission is organised around the sections of the draft, generally in the order of the draft but with comment on all aspects of the learning areas at the end.

General

It is a concern to PPTA that we have heard that some schools have been using the consultation exercise to begin to make plans as to how to implement the curriculum, rather than considering whether this is the document that they would wish to see become the curriculum document. It is important that there be very clear messages given to schools as soon as possible to say that until the submissions have been able to be processed and considered fully, this document is a draft only and should not be the basis of final decision-making in schools.

PPTA endorses the comment by Professor Guy Claxton of Bristol University, at a recent NZCER seminar, that policy-makers often seem to believe that writing a curriculum document is about 70% of what is needed to achieve change in the classroom, whereas it is in fact only about 3% of what is needed. The draft curriculum is silent on what the Ministry plans to do to assist schools to turn these 'fine words' into a reality in every classroom in every school in New Zealand. The fact that the draft was developed in consultation with some members of the profession does not ensure that it will be readily adopted by the whole profession. A lot more needs to happen before that can be expected to be the case.

signals given that schools should take greater control over contextualising the curriculum are supported. The messages about the extent of school control over curriculum have been 'muddy' since the Curriculum Framework document of 1993, and this draft clarifies this, both by specifying that "each school will design and implement its own curriculum in ways that will engage and motivate its particular students" (p.26) and by providing guidance as to the issues schools should consider when doing this. At the same time, there is a real need for a clearer statement in this document that all students have an entitlement to opportunities to experience success in all the learning areas, as specified in NAG 1. While the National Administration Guidelines will need some revision as part of implementing this new curriculum, that principle must not be sacrificed. PPTA suggests that the appropriate place for such a statement, linking it to NAG 1, is the section 'Designing a School Curriculum', where currently the only reference is in the diagram on p.27.

It would be fair to say that the school-level flexibility apparently accorded by this draft was not universally endorsed by our members. One said: "There doesn't seem to be enough direction to inform any school. Schools will pick and choose and do what they want to do, rather than following a consistent This will leave big opportunities for inconsistency and directed path. throughout New Zealand." Teachers will need reassurance that their schools cannot go off onto wild tangents that abandon whole learning areas by, for example, choosing not to offer the Health and Physical Education, or the Arts, or the Technology curricula at all, focusing instead on a very narrow, Schools are most comfortable with traditionally academic curriculum. flexibility within broad national parameters. A school should be able to have confidence that other schools are covering a generally similar curriculum, so that students who move schools are not seriously disadvantaged, and so that adverse competition does not develop because of different curriculum Teachers need quality guidance about approaches between schools. appropriate curriculum for their learning area(s), particularly when there is a range of initial teacher education approaches, many new teachers coming from overseas, and many subject specialists in isolated circumstances in small schools.

Furthermore, PPTA considers that the current emphasis on outcomes-based education, as reflected in both the 1990's curriculum and in this document, is a paradigm shift that has gone too far. There is still a need for the education system to recognise that the processes of teaching and learning are critical to the success of students. This document reflects the continuation of a 'tight-loose-tight' approach to education management, in which the government specifies the outcomes it wishes students to achieve, and puts in place accountability measures that seek to ensure that those outcomes are achieved, but leaves a gap in the middle (the 'loose' part) where schools are left to work out how to make the pre-specified outcomes happen. While this document is an improvement on the 1990's document, in that it tries to give some guidance to schools about how they might go about achieving these outcomes, this is still at a very general level.

PPTA recommends that this document be supplemented by a wide range of support material, at both the general and learning area levels, and professional learning initiatives that go along with that material.

Consultation Timeline

It is PPTA's view that the timeline for implementation of the new curriculum is insufficient to ensure schools can put the necessary thought into interpreting it for their particular contexts. The draft envisages that both the current draft and Te Marautanga o Aotearoa (which has not yet reached draft form) will be implemented by the end of 2009. This is unrealistic, and may be one of the reasons why some schools appear to be leaping to implementation considerations (see General above) rather than giving due consideration to this as a draft.

The current curriculum documents were implemented one at a time over the 1990's and early 2000's. In each case, a period of about two years was given to schools to put practical effect to the new learning area statement. This meant that teachers who were responsible for implementation in more than one learning area could focus on them one at a time.

While the intention of the Curriculum Stocktake was for this re-drafting of the curriculum to involve quite minor change, this is not in fact the case in some of the learning areas. Furthermore, the 'front end' of the draft that replaces the 1993 Curriculum Framework document potentially involves quite significant work for schools. In many schools today, that 1993 document can no longer even be located, and is certainly not a 'live' guide to teachers' everyday thinking. The sections in this draft concerning values and key competencies will seem, to many teachers, completely new. The sections on effective pedagogy and curriculum design are in fact new; comparable sections were not in the 1993 document.

The Ministry of Education needs to keep in mind Clarence Beeby's warning that it takes twenty years for a curriculum change to percolate all the way from the development of policy to implementation in every classroom. While such a timeframe is no doubt unpalatable in a time of such rapid change as today, it is worth remembering that many educational reform efforts fail to be given the levels of practical effect that policy-makers hoped. Allocation of sufficient time and sufficient opportunities for teacher professional learning are crucial.

Of particular concern to PPTA members, although not to our primary colleagues, are the flow-on consequences of curriculum changes on NCEA assessment. There will have to be changes in achievement standards as a result of some of the learning area changes. These will require time for drafting by expert panels, for consultation, and then for registration by NZQA. Experience shows that this takes at least a year and often more.

PPTA recommends that implementation of the new curriculum be phased over a significant number of years. The generic parts of the curriculum, because much of this thinking is new, could be mandated from the beginning

of 2010; the learning areas where there has been minimal change could be mandated from the beginning of 2008, and other learning areas mandated for the beginning of successive years from then, one or two at a time.

A Vision

This is a valuable section with an attractive and appropriate visual. PPTA is pleased that in the initial paragraph there is clear reference to both facets of education's role: enabling students to participate fully in society and to contribute to our economic prosperity. However, under 'Confident', we are concerned that the latter role of education is being over-emphasised in the use of both 'entrepreneurial' and 'enterprising'. The Concise Oxford Dictionary defines 'enterprising' as 'ready to undertake enterprises' (which are defined as undertakings, especially bold or difficult ones). An 'entrepreneur' is defined as 'person in effective control of commercial undertaking', which is not what is envisaged here. It is our view that the word 'enterprising' would more than adequately serve both senses intended here, i.e. that students will be adventurous, innovative, etc, both in their personal lives and in their working lives. From this basis, many entrepreneurs will be formed.

PPTA supports all the other elements of the vision.

Principles

Under 'Cultural Heritage', PPTA is not happy with the second sentence as it is phrased currently. It implies that only students who identify as Maori should have this opportunity, but it is our opinion that all students should have the opportunity to experience a curriculum based on te ao Maori. We suggest that the sentence be re-worded as follows: "All students have the opportunity to experience a curriculum that reflects and values te ao Maori." If New Zealand is to build a more 'connected' bicultural society, it is important that all New Zealanders have a good understanding of te ao Maori.

Maori members have expressed a concern that while the document, in a number of areas, seeks to give effect to the Treaty of Waitangi, it does not accord to the Treaty itself the status that as the founding document of Aotearoa/New Zealand it should be accorded. They would wish to see a more specific recognition of the Treaty in the document.

Under 'Equity', we endorse the submission of SS4Q that this should be reworded to specifically recognise diversity of sexual orientation and gender identity, i.e. to re-word it as follows: "All students' cultures, languages, talents, and identities, *including sexual orientation and gender identity*, are recognised and affirmed."

Values

PPTA supports the approach to the teaching of values here, in that students will, "through their learning experiences" develop the ability to express their own values, explore other people's values, critically analyse values, discuss disagreements about values and make ethical decisions. We are also aware that the final list of values here was developed after quite an extensive consultation process. Nevertheless, it will be hard to get consensus on what

the values privileged by inclusion in this list should be. That being so, the proviso that follows the list, that schools will have the ability to decide how the values find expression in their particular context, is very important.

As a minor change, PPTA supports the recommendation from SS4Q that students should be encouraged to value diversity "as found in different cultures, languages, heritages, gender identities, and sexual orientations."

Further, PPTA reminds the Ministry that if anything is really going to happen as a result of these fine words, there will need to be a huge initiative to produce supporting material and professional development for teachers.

Key Competencies

PPTA's representative on the reference group for the NZ Curriculum Project has repeatedly expressed dissatisfaction with the term 'key competencies', as being technicist in connotations, and this view has been supported by other members of the reference group. The Ministry's Assessment Advisory Group also expressed concerns about the term at its meeting on 30 June/1 July 2005.

The Ministry response has generally been that the OECD uses the term 'key competencies' and that therefore it is non-negotiable, yet in Australia at least two states have used the term 'essential learnings', and Professor Alan Reid has suggested the term 'capabilities'. Either of these would be preferable to 'key competencies'. Interestingly, the words 'capabilities' and 'capable people' are used in the introduction to this section. It is PPTA's view that it is not too late to change the terminology here.

One problem with the term 'competency' is the implication that someone is either competent or not, rather than making progress on a continuum of competency. This implication is reinforced by the word's use in the Qualifications Framework for unit standards, and this was a major reason why secondary teachers refused to implement a unit standards-based qualifications system for schools because of their belief that levels of learning should be recognised, rather than using a simple pass/fail model of assessment. The use of the word here is therefore highly problematic to secondary teachers.

Competencies are very much about capabilities that relate to stages of development of the student and their particular context, so the word chosen needs to imply this progression. A Year 1 student who can be relied upon to take home and return their homework reader each day may well be assessed as competent in that aspect of managing self, but they certainly have a lot more to learn to be able to manage their study time at Year 13!

The groupings of the competencies themselves are probably reasonable, and PPTA is conscious that quite a lot of work has been done in New Zealand adapting the OECD version to our context. Nevertheless, there will need to be a lot more work done on teasing out what these competencies mean in practice, and how they can be developed through the essential learning

areas. We acknowledge that p.29 begins this work, but it is only that, a beginning.

Professor Guy Claxton, at a recent NZCER seminar on the draft curriculum, commented that while some of the key competencies were expressed very well, some were too abstract, providing teachers with little guidance as to what they needed to do to develop them in their students. One example he gave was the term 'intellectual curiosity', as used in 'Thinking'. What does this mean, he asked? How is it demonstrated? Is it asking more questions? Is it about the quality of the questions? Or is it something else? A second example was 'respond appropriately as a group member' under 'Participating and contributing'. What is deemed to be appropriate response? PPTA agrees with his concern here.

He suggested that the curriculum should be peppered with vignettes showing ways that teachers have found to integrate the key competencies into learning areas, for example, but that these should not be so finely drawn that they become, for some readers, 'what I must do tomorrow'. The examples need to remain 'a bit ragged', with areas that teachers must develop to incorporate them into their own practice. This suggestion could be extended to other areas of the document, e.g. values, effective pedagogy, and designing a school curriculum.

PPTA would be very concerned to see any moves to assess the key competencies in isolation from the learning areas. We endorse an approach that encourages teachers to seek to develop students' capabilities **through** the learning areas. This would necessitate a lot more work being done by subject experts to exemplify for teachers how they might blend into work towards an achievement objective the development of particular competencies/capabilities.

Effective Pedagogy

It is somewhat surprising that this section does not relate more closely to the findings of the Ministry's own *Quality Teaching for Diverse Students in Schooling: Best Evidence Synthesis* (Alton-Lee, 2003). The characteristics identified in that BES that are not clearly reflected here are as follows:

- Quality teaching is focused on student achievement (including social outcomes) and facilitates high standards of student outcomes for heterogeneous groups of students
- Quality teaching is responsive to student learning processes
- Curriculum goals, resources including ICT usage, task design, teaching and school practices are effectively aligned
- Pedagogy promotes learning orientations, student self-regulation, metacognitive strategies and thoughtful student discourse
- Teachers and students engage constructively in goal-oriented assessment.

PPTA would not advocate that the ten characteristics of quality teaching identified by Alton-Lee be used as worded above in this document, because there is a definite need to use more teacher- and parent-friendly language.

However, it is of concern that there is relatively little connect evident between this high quality New Zealand research evidence and this description of effective pedagogy.

Designing a School Curriculum

This section is useful for schools, but note PPTA's recommendation (in General above) that there be more explicit reference to NAG 1's requirement that students have opportunities to succeed in all the learning areas.

The bulleted list on p.26 of 'significant themes' around which schools might organise learning is not entirely a list of themes, however. The paragraph on 'Critical literacies' is not about a theme but about a skill area, and this skill should be addressed in the context of a theme or an aspect of a particular Furthermore, the concept of critical literacies is seriously learning area. undermined by this paragraph. Critical literacies are about students learning to analyse texts in terms of issues of power. They require students to question, to challenge and to critique texts. 'Financial literacy' is a far less 'critical' skill; it is about learning to manage one's finances, to understand the processes of the economy, and so on. But it is not predominantly about questioning and challenging the way power is exercised in the world, in the way that 'critical literacy' is. Some of our members have recommended the Tasmanian Ministry of Education's definition of critical literacy, and PPTA look at this (see the Ministry have а that sugaests http://wwwfp.education.tas.gov.au/English/critlit.htm).

In addition, the emphasis on the economy is added to by the paragraph above on 'Enterprise', which again over-emphasises an economic view of education at the expense of a broader view. Earlier in this submission, under 'Vision', PPTA has expressed concern about the use of the term 'entrepreneurial' as well as 'enterprising'. This paragraph reads as if the prime job of schools is to turn out small business people. While schools need to develop a wide range of generic skills in students that include such skills as the ability to be innovative, to take risks and to think creatively, all of which are useful in the modern business world, they are also valuable in many other parts of people's lives. PPTA rejects the implication here that education's prime task is to prepare people for their role in the capitalist economy.

The example in the paragraph on 'Globalisation' implies a narrow view of what might be covered under such a theme, and fails to recognise that issues of power, equity and justice are fundamental to a consideration of globalisation, and fails to recognise New Zealand's place in the Pacific and the wider world.

PPTA does not believe that the bulleted list of 'significant themes' would actually be useful to schools, because they would be very unlikely to want to organise learning around such huge themes. We recommend that this bulleted list be omitted from the document.

With reference to the diagram on p.27, please note PPTA's comment under 'General' above on the need to highlight NAG1 further to ensure that students experience the full breadth of the curriculum. We would further note that the

arrow part of the diagram relates mostly to the first and third priorities of the schooling strategy, and fails to acknowledge what is required for learning to be "nurtured by families and whanau". The diagram is largely about the annual school planning cycle, and minimises the complexity of the many factors that lead to better outcomes for all students. For example, a further major contributor to better outcomes for students, related to the first priority, is teachers' access to high quality professional learning opportunities.

Planning with a Focus on Outcomes

The comments above under 'General' about outcomes-focused education apply here. This section, while recognising that students will learn in different ways and at different speeds, does not specifically recognise that students will also learn different things from those intended by an outcomes-focused education. While it is accepted that a student needs to know what a teacher's learning intentions for them are, it also needs to be recognised that a student may learn something that is equally important to them but not part of the teacher's learning intentions.

There is little recognition in this section, either, that students need opportunities to set and prioritise their own learning goals, and that these may not always clearly fit within the framework of the outcomes specified in this curriculum. The complex interaction between the teacher's intentions in their programme and the learning experienced by students is glossed over in this section.

Planning for the Development of the Key Competencies

PPTA has expressed concerns about the Key Competencies above, and will not reiterate them here, but wishes to focus on the issue of their assessment.

PPTA is aware there are already misconceptions among the profession that this document expects schools to assess the key competencies in isolation. We endorse the reference in paragraph 4 of this section to implementation of them through the learning areas; it is important that schools be encouraged to integrate them rather than to treat them separately. However we are not sure that the message here is sufficiently unequivocal. Furthermore, without extensive materials development and professional learning to show what is intended in terms of integrating them with the learning areas, some very unfortunate experimentation may take place in schools involving assessment of key competencies in isolation.

It is vital that the Ministry move urgently to produce material in all learning areas that shows how assessment of the key competencies can be integrated into assessment of learning area outcomes.

Planning for Purposeful Assessment

PPTA supports the thrust of this section, in that it prioritises assessment for learning rather than for qualifications. Secondary teachers have been feeling in recent years that the workload of implementing a new qualifications system has taken undue attention away from teaching and learning. The list of

characteristics of effective assessment is a useful and valid summation of the research evidence on this.

On the other hand, the section on assessment for qualifications makes some statements that need support in terms of guidance for schools. Saying that "Schools should take care to avoid excessive high-stakes assessment in years 11-13" is all very well, but secondary schools struggle to reconcile such a goal with the expectations of parents and communities, especially given the fierce competition for students that happens in many areas. Schools desperately need leadership from the centre on this. This is a major task for the Secondary Leaders Forum to address.

It is important that this section refers to 'standards' rather than to 'achievement standards' and 'unit standards'. Consideration is being given by the sector and the Ministry to reconciling some of the inconsistencies between these types of standards, and the use of the neutral term provides some durability to this section.

Planning for Coherent Pathways

PPTA is interested that the stages of learning are grouped the way they are; it is more normal to group years 7-10 together, as representing 'the middle years'. Years 5-10 does not reflect any known school structure either. We are curious to know what the rationale is for the grouping used here, as it does not seem appropriate.

In the section 'Learning in years 11-13', PPTA suggests that a different way of expressing the first sentence in the second paragraph be found. The use of the words 'students gain credits' tends to focus unduly on the credits that are used to recognise achievement in the Qualifications Framework, but there has been a problem identified under the NCEA that has variously been called 'credit shopping', 'credit farming' or 'credit accumulation'. The problem is around some students taking a minimalist approach to NCEA by seeking out the easiest ways to gain credits towards a level certificate, rather than aiming for their own potential highest level of achievement, including aiming for Merit and Excellence. PPTA suggests that the sentence could read "In their senior school years, students work towards achieving a range of recognised school qualifications."

The predominantly economic language of the second paragraph of the 'Tertiary education and employment' section concerns PPTA. There needs to be a further sentence or two recognising that the key competencies are also important for students to be able to participate in their families and whanau, their communities and their society. This is just as important as their ability to "face many economic challenges ..." etc.

The diagram looks good but is problematic. It is hard to see why 'Participating and contributing' becomes part of 'Acting autonomously' rather than part of 'Operating in social groups' at tertiary level. It is also hard to see how 'Using language, symbols and texts' becomes 'Using tools interactively'. In fact 'Using tools interactively' probably comes out of 'Thinking', but until

these tertiary competencies are explained somewhere, it is hard to know what it is referring to. Perhaps some further explanation of these competencies, and a more complex diagram that had arrows pointing in a number of directions, might resolve these problems.

Learning Areas

The progressively more detailed explanation of each learning area through the essence statements on pp.13-23 and in the two kinds of charts is useful. It is also pleasing to see that the essence statements for the learning areas now clearly delineate what makes each area different from the others.

On the other hand, PPTA members have expressed concerns about the placement of the two kinds of charts of achievement objectives. The chart that will be most useful to primary teachers, that lays out the achievement objectives for a level across all learning areas on one page, is bound into the document. The chart that will be most useful to secondary teachers, that lays out the AOs for a particular learning area over all the levels, has been issued as an extra document that some of our members had difficulty accessing in their schools. In the final publication, both types of chart need to be bound into the core document.

Furthermore, some PPTA members say that the absence of numbering of the achievement objectives in the draft makes it less user-friendly. Most of the current curriculum statements do number the AOs in some way, and this has proven to be useful in schools. Design needs should not be prioritised over efficiency needs.

PPTA has been made aware by members of concerns about some aspects of the learning area statements, and these are detailed below.

Arts:

The term 'Sound Arts' does not have universal appeal. One irate member wrote about this: "Why on earth is Music now called Sound Arts? What a lot of politically correct nonsense. I don't see Dance being called Movement Arts or Physical Arts. I have a degree in Music. People work in the music industry, we all play music on the different forms of music technology we own, we are used to hearing background music in shops, in media, etc. Music technology/music notation/music software/obviously I could go on and on. Who on earth thinks up this nonsense?" While there may be some esoteric explanations for this re-naming of the area, PPTA believes that the document should use the terminology that is best known to the profession and the community, in the interests of accessibility.

Members in the Arts area are concerned that in their essence statement there is no section 'Why study the arts?' whereas this section is present in all other essence statements. They are sensitive about this because they are often denigrated as being not an essential learning area, and feel there are many misunderstandings about the importance of the arts. Arts are fundamental to the development of creativity, to a sense of identity, and to the very nature of being human. This needs to be spelled out in the document. If the reason

for leaving this out for Arts is because their statement would spread to two pages if it was there, Health and Physical Education already occupies two pages, as does Science, so this would not be a valid reason.

English:

English teachers have expressed to PPTA concern that the current English curriculum's emphasis on the development of critical literacy has disappeared from this document. The words "using skills to engage with tasks and texts that are increasingly sophisticated and challenging, and doing so in increasing depth" (p.35) tends to water down the importance of critical literacy. (See also above under 'Designing a School Curriculum'.)

Learning Languages:

In the essence statement on Learning Languages, there is no reference to the importance of students learning to use their own heritage languages. New Zealand is an increasingly multi-cultural society and there are many immigrant groups who are keen to see their languages maintained. Many of these groups go to inordinate lengths to have their children learn these languages. Schools should be encouraged, when considering what additional languages to offer, to try to offer the key heritage language(s) of their particular communities.

PPTA must also reiterate the concerns it has expressed many times over recent years about the proposal to extend Learning Languages to Years 7 and 8. These concerns are based on fears that there is not the teacher capacity to ensure that languages in Years 7 and 8 are able to be taught by teachers who are competent in the language they are teaching. It is not good enough to have students' first experience of learning an additional language be with a teacher who is reliant on Ministry-supplied teaching materials and who is only 'one page ahead of the students'. We advocate that compulsory implementation of this learning area at Years 7 and 8 be deferred until the government can be assured that teacher capacity and capability are adequate.

Maori members of PPTA are concerned that the status of Te Reo Maori, as one of the two official languages of Aotearoa/New Zealand, has been subsumed into this document under the 'Learning Languages' learning area, whereas English has been deemed to merit its own learning area. They recognise that the Marautanga document will cater to the needs of schools where Maori is the language of instruction, but they believe that this does not obviate the need to give Te Reo Maori its appropriate status in this document.

In the same way, it has been suggested that New Zealand sign language is a legitimate language through which the New Zealand curriculum is delivered, and that therefore it should have greater recognition than the brief reference in the essence statement on Learning Languages (p.18).

ESOL teachers have told PPTA that they are not happy that their subject area appears to have disappeared from the draft. The Learning Languages area assumes that students will be learning a language additional to English, and

the English curriculum in effect assumes that students are working with their first language. One ESOL teacher commented: "In a document that spends almost a whole page on such basics as 'dance', the needs of about 40,000 students are ignored. The Ministry will no doubt say that the students are covered by the Key Competency 'Using language, symbols and texts' and by the paragraph under 'Effective Pedagogy', but ESOL students have a very specific need to learn English as a new language. They should by rights be included in the Learning Languages pages, but teachers in this area would be happy to have a generic statement saying needs must be catered for."

Mathematics and Statistics:

Mathematics teachers have told PPTA that they are not all happy that the longer term 'Mathematics and Statistics' has been used in this document. Some say that this is unnecessarily cumbersome, and that Mathematics teachers, and other teachers, understand that there are a number of specialist areas within Mathematics that include statistics, but also include measurement, algebra, geometry, trigonometry, calculus, and so on. In practice, the learning area will continue to be called 'Mathematics', and the change of term appears to give undue prominence to a particular area, statistics.

Science:

There is concern among some science specialist areas about the absence of specific reference to their particular areas. This is referred to further below under 'Senior Subjects'. PPTA has also heard criticism that there is no evidence of human biology in Science. We understand that this has been defended on the grounds that this would be best covered in Health and Physical Education, but there is no consensus around this. We suggest that the place of human biology under the Living World strand of Science needs to be spelled out more clearly.

Social Sciences:

The 'Social Inquiry' statement that overrides this learning area is problematic for Geography, in that it makes the assumption that everything studied is primarily about people and society, whereas in Geography the physical environment may be the primary focus.

Technology:

This was the learning area most commented on by our members. Technology teachers were initially really disappointed that all their achievement objectives were not ready for release at the same time as other areas. There has also been confusion caused by the fact that the essence statement issued on 18 September differs from that in the original draft. The reduction in detail in the second essence statement is a concern to our members.

Once the fuller draft was released, the kinds of comments we received can be grouped as follows:

 Staffing issues: Technology as a curriculum area makes demands on staff that the current workforce is not fully equipped to meet. One member

- commented: "We cannot rely on others [teachers] trained overseas to meet our own special needs."
- ICT, Computing, Information Management: These members are concerned that there is no mention of their subjects in the Technology curriculum. They fear for the survival of their subjects if this is not rectified.
- Graphics is also concerned that their subject is even less in evidence in the Technology learning area in this draft than it is in the existing document. The essence statement makes no reference to drawing and graphics as "essential in technological practice to depict and clarify ideas and proposed solutions" (*Technology in NZ Curriculum*, 1995), and yet is an essential communication tool in technological practice.
- Undue emphasis on theory rather than practice:
 - Members expressed concern that students could learn in Technology and almost never use their hands to create something. One wrote: "An attempt has been made to make practical subjects more 'intellectual' and 'analytical' by focussing on the process rather than the final product."
 - Another member wrote: "It is very similar to and probably worse in its direction than the existing curriculum. There is no opportunity to allow students to develop knowledge of skills that will enable them to develop practical solutions to practical problems... The Technology curriculum should be part of a pathway for students to move into skills-based trades. Instead the present and the draft veer students towards an academic pathway... This is unnecessary, as students moving towards university already have existing and recognised pathways in sciences and mathematics to take them into careers in Engineering, Architecture, etc. This curriculum will not help with the current lack of people in trades-based careers."
 - o It was also believed that this shift away from practical skills to theory was not supported by the community either. One member commented: "Has anyone asked the parents about the curriculum? Most are amazed that it has nothing to do with skills."
 - Another commented that the curriculum would put students off the subject rather than enthuse them. "Students do not appreciate the amount of writing and research required by the curriculum. The last thing I wish to do is have students that could probably move on to become very efficient in trades feel discouraged [by the curriculum]... To teach to a document that seems to have little relationship to helping students become interested in and move forward into trades-based careers is depressing, and is creating a feeling that I need to return to working in my trade and make use of the dwindling numbers of competent tradespeople to boost my salary." In the same vein, a member in the Foods area wrote: "Mine is a low decile school and the majority of the students are put off technology due to the amount of writing/planning that is required by it."
 - PPTA understands that the writers of the document intend that the knowledge and skills that are so precious to the teachers of

technology do have a strong and valid place in the teaching of this learning area, and that further supporting material will make this clear. However the tenor of the responses from PPTA members, as exemplified above, shows that this is not understood at this point. The processes of introducing this new curriculum need to demonstrate that the lessons of the past have been learned, and that appropriate and timely support material will be produced.

- Language: Members said that the document was written in a jargon that was difficult or even impossible for parents to understand and teachers and students to interpret. In the essence statement, where of all places there should be clear messages, the description simply creates confusion. For example, the use of the word 'dynamic' under the heading 'Why study technology?' does not reflect current usage. Materials technology, a key area of technology, has disappeared into the phrase "creative design processes and materials". Electronics and control technology, along with production and process technology, seem to have been assimilated into In Technological Knowledge, Level Three, there is a the word 'control'. reference to "the role played by the 'black box' in technological systems"; this kind of jargon has no place in a curriculum document whose audience is intended to be much wider than subject specialists. The more technical language of each subject should be in second or third tier publications produced to support this document. PPTA wishes to say strongly that while the status of technology is seriously in need of enhancement, this will not be achieved by publishing a curriculum document that uses language which obscures rather than illuminates the essence of the learning area.
- General: Submissions to PPTA from technology teachers strongly indicated disappointment that the draft curriculum was not an improvement on the current one, which has failed to receive a consensus of support from technology teachers. One member commented: "Back in the late 80's the government got it wrong by abandoning apprenticeships. They are getting it wrong again by changing the focus of Technology education." Another wrote: "I had hoped that the new curriculum would be substantially better than the last. It's worse. Can we please have some commonsense applied to this area, otherwise we will lose this whole subject area." The achievement objectives stand out from other learning areas as immensely detailed, complex and wordy.

Senior Subjects:

Some senior subject areas are also concerned about the absence of mention of their subjects. One example is Accounting, which is not mentioned in this document (and was not in the previous one either). One member wrote: "It is time the Ministry recognised business-related subjects as being valid at high school level (at least), and Accounting is not Mathematics, either." In the Social Sciences learning area, only some of the senior social science subjects are given specific recognition, i.e. History, Geography and Economics. What about Classical Studies? Art History? Science has chosen not to specifically mention the senior subject specialisms like Physics, Chemistry, Biology, Agriculture or Horticulture. The place of Graphics and Design, ICT and Computing within the Technology learning area continues to be unclear.

There is recognition in the document of ICT as a learning tool across the curriculum; there is no recognition of the place of ICT/Computing as a learning area in its own right, or as a subset of a learning area, e.g. of Technology. Yet in the Arts curriculum there is specific recognition in separate strands of the various subjects that constitute the learning area. This inconsistency between learning areas as to whether specific senior subjects are mentioned is highly problematic.

In fact, PPTA is very concerned that the issues around the senior curriculum are hardly touched on in this document at all. We have been pressing for it to be dealt with, and a separate consultation on the senior curriculum has been promised but has not materialised so far. It is really important that these issues be grappled with now, and not after this document has been finalised.

Conclusions

Generally the approach taken with this draft is appreciated, in particular the freeing up of schools to make curriculum decisions for their particular context However, this document raises as many questions as it and students. answers. The potential of the curriculum will only be achieved with thorough resourcing, professional learning, and time to successful implement it. bring teachers on board with this curriculum will require a number of major indications of good faith by the Ministry of Education. Over the years of implementation, as with the NCEA's introduction, this needs to include teacher only days for professional learning, extra resourcing to School Support Services so that they can provide enhanced services to schools, production of high quality and accessible support materials including creation and updating of curriculum exemplars across all learning areas and levels, an appropriate and realistic timeframe for implementation, and responsive problem-solving by the Ministry.