



A paper from Executive

Managing the paradigm shift: Secondary schooling and change

1. Introduction

- 1.1. Change is endemic in education, and teachers do not expect it to be otherwise. But the two tests for change always need to be whether it is justified by the evidence and implemented properly. In many cases, these two tests are not met.
- 1.2. PPTA has been studying some of the changes that cluster around the notion of "21st century learning". In many cases, these changes are occasioned by the opening of new secondary schools in "21st century learning spaces".
- 1.3. There is an extensive literature around the concept of "21st century learning", but it is hard to describe its concepts succinctly. Often the literature about 21st century learning asserts that even the meaning of knowledge is different now.
- 1.4. The work of Jane Gilbert, a Chief Researcher at NZCER, is influential in New Zealand with regard to this. The essence of her argument is that the conception of knowledge in the past has been that it is content, whereas its new conception is as something that 'does' things. This shifts the learner from being seen as a passive receptacle to being an active creator and user of knowledge.¹
- 1.5. The explanation for this change always includes technological developments, but also regularly refers to changes in social structures away from traditional hierarchies and toward the development of different types of networked or multiple identities, particularly for young people.
- 1.6. A claim often made is that these changes require schools and teachers to undergo a 'paradigm shift' in order to maintain relevance.
- 1.7. The literature tends to focus on ICT skills that students will need in this "new age", but also on skills for lifelong learning, new kinds of literacies, critical thinking, problem-solving, personalisation of learning, and much more.
- 1.8. This paper does not attempt to cover the huge topic of 21st century learning, but instead discusses some of the more notable changes observed in new secondary schools in New Zealand, and also in some existing schools which are making major shifts in their approaches to teaching and learning. Members will no doubt have many other examples of such shifts to discuss.
- 1.9. The paper then goes on to consider issues around the proper management of change in education, and proposes that the union seek to negotiate change management protocols at the local level, between PPTA branches and their Boards of Trustees, and nationally between PPTA and government.

¹ For a list of Jane Gilbert's publications, see <http://www.nzcer.org.nz/research/jane-gilbert>



2. 21st century schools

2.1. 21st century learning spaces

- 2.1.1. Schools built or substantially renovated this century tend to have far more shared and open-plan spaces, with one or more walls of classrooms being glassed and opening into a shared space. The purpose of these designs is to break down what is seen as the traditional privacy of the secondary teacher's classroom, and to provide "spaces where students can work independently, or cross classroom, in an informal environment"².
- 2.1.2. These shared learning spaces appear to be leading to more shared teaching and team responsibility for larger groups of students. Many teachers find this a positive experience for student learning and for their own professional development.
- 2.1.3. On the other hand, school designers need to consider the possible impact of this on some students. Teachers work hard to develop a trusting and caring environment where everyone is happy to 'be silly' sometimes and take risks, which may involve doing role-plays or discussing feelings openly. In shared or highly public spaces it may be difficult for some students to feel safe if they are in sight or hearing of students beyond their own class group.
- 2.1.4. Many of the new schools have teacher work areas placed within these "commons" areas, with windows strategically located to facilitate passive monitoring by any teachers working at their desks. This leads to a collaborative approach to the wider group of students.
- 2.1.5. However, not all new schools have teacher work areas at all, and teachers are expected to work alongside students in the commons areas or in the staffroom. This is despite the fact that the Ministry's own 'Modern Learning Environments – School Assessment Tool'³ specifies that these should exist.

2.2. Personalising learning

- 2.2.1. 21st century learning theory emphasises personalisation of learning with programmes tailored to the individual learners. Building design therefore assumes that not all students will be engaged on the same tasks at the same time.
- 2.2.2. This is evident in specialist spaces. The food technology room might have cooking stations for 16 students, the assumption being that other students will be doing something else, and the teacher will be moving between groups.

² MOE Request for Proposals for Modern Learning Environment Advisor, published 28-06-12.

³ www.minedu.govt.nz/~.../ModernLearning/MLEAssessmentToolV5.xls



- 2.2.3. There can, however, be health and safety implications in the assumption that the teacher can adequately monitor student safety while moving between groups who may be dispersed over quite a large area. PPTA has published new Health and Safety Guidelines for schools which will be useful for teachers concerned about this⁴.
- 2.2.4. Even non-specialist spaces are not necessarily built for big classes, the assumption being that students can also flow into the commons area.
- 2.2.5. While this does provide students with a range of options for where they work, and facilitates students working in small groups in informal settings, it can present significant challenges for teachers in terms of monitoring their students.

2.3. The learning potential of ICT

2.3.1. ICT is a core element of “21st century learning”. Change in this area is exponential, and opens up some exciting new opportunities. Student engagement is often higher, and there is considerable potential for students to take more responsibility for their own learning.

2.3.2. The kinds of changes happening include:

- “Bring your own device” (BYOD) schools where every student is expected to equip themselves with a laptop or Ipad for all or most of their learning;
- Schools which use entirely open source software, with students and teachers locating the software they need as and when they need it;
- Schools where teachers are expected to place all their learning programmes, resources and assessments on the school’s intranet for students (and often parents) to access at any time;
- Schools which have entirely abandoned textbooks, and provide all their work online;
- Schools where students can email their teacher about their learning at any time;
- Schools in which students submit assessment work electronically rather than in paper form.

⁴ PPTA (2012) Health and Safety Guidelines for Secondary and Area Schools, www.ppta.org.nz
New Zealand Post Primary Teachers’ Association Annual Conference Papers 2012



2.4. The darker side of ICT

- 2.4.1. The rapid rate of ICT change means that teachers have to spend a considerable amount of time upskilling themselves.
- 2.4.2. Furthermore, while ICT changes may be well-resourced and well-managed, this is not always the case. Even in some new schools, PPTA has heard complaints from teachers about a lack of technician support, inadequate wireless connections, insufficient server capacity, and the like, and such complaints are common from older schools.
- 2.4.3. There are sometimes expectations that teachers will be available online 24/7, and unreasonable expectations about response times to emails.
- 2.4.4. Clearly this is an ongoing area of challenge.

2.5. Flexibility of the NZ Curriculum

- 2.5.1. The openness of the *NZ Curriculum* (2007) and its encouragement to schools to develop their own unique approaches to the school curriculum serves 21st century learning well.
- 2.5.2. This is reflected in very different timetable arrangements, a greater emphasis on learning to learn, and a strong emphasis on co-construction of the curriculum with students.
- 2.5.3. None of this requires new learning spaces, necessarily.

2.6. Creative timetabling

- 2.6.1. Timetables are moving away from the standard senior timetable of six “lines” of subjects for students to choose from, with each subject having four periods of roughly an hour each per week, and a junior timetable that may have more subject choices with fewer periods per week per subject, but follows roughly the same pattern.
- 2.6.2. The length of periods now ranges up to 100 minutes per lesson, and the number of “lines” in the timetable may be anywhere between five and eight. The areas of learning offered is much more variable.

2.7. Self-directed learning

- 2.7.1. Secondary schools are experimenting with a range of approaches to self-directed learning. In one school, students spend a whole day each week on self-directed learning projects titled “impact projects”, which the school explains as follows:

This is your chance to follow and explore your passions in an authentic project that makes a positive contribution to our community. You will be in charge of your learning.



2.7.2. In other schools, time spent outside traditional subjects varied from one session a week to one session every day. For example, one school has a programme called DEEP (Discovery, Essentials, Enrichment and Passions) which includes 150 options over the week, of which an individual student would be able to do up to five.

2.8. The opportunities and challenges of co-construction

2.8.1. Diversification of the school curriculum, and re-packaging of learning into constructs that are more appealing to students, plus increased student choice about their learning, are likely to promote much higher levels of student engagement.

2.8.2. On the other hand, teachers must be very nimble in their preparation for these kinds of non-traditional offerings, especially when they are combined with strong elements of co-construction with students.

2.8.3. This may mean preparing for a topic at very short notice. Once the students and the teachers have decided what they are going to do, the teacher needs to set up the framework for the unit of work and be ready to start as soon as the following day.

2.8.4. The range of offerings in a school can also mean that teachers have a large number of different groups of students and subjects to teach, e.g. five elective modules in various areas plus up to two other 'traditional' subjects at different class levels. While it may be enjoyable to range outside one's 'traditional' subjects, the workload can be intense.

2.9. Assessment change

2.9.1. Junior Graduating Diplomas are increasingly common in Years 9 and 10. These provide students with clear messages about how they need to prepare themselves for the demands of the senior secondary school. The requirements usually cover both achievement and work ethic.

2.9.2. In one school, the assessment for the graduating diploma is linked to the Key Competencies as demonstrated through particular tasks in each subject, with credit values defined and rubrics describing Achieved, Merit and Excellence levels.

2.9.3. One very positive trend is that assessment may follow learning, rather than the learning programme being designed around available assessment in the form of NCEA achievement standards.



2.9.4. For the “impact projects” described above, for example, the student determines the focus of the project, perhaps in the form of an open-ended question, and decides how to go about the investigation. (The topic has to be approved by the school.) If the supervising teacher can see opportunities for the student to provide evidence for assessment, then that will happen, but gaining NCEA credits is not the primary goal of the projects.

2.10. Changing pedagogy

2.10.1. A greater emphasis on self-directed learning is shifting the role of the teacher from being primarily the source of knowledge and skills to being primarily a facilitator who assists students to access knowledge and skills. It is important not to overstate the newness of these ideas, however; this is not an entirely new notion, but has been threaded through the progressive education literature since at least the writings of Dewey⁵.

2.10.2. Self-directed learning can occupy significant parts of a student’s week. In this time they may be working on tasks arising out of their teacher-directed classes, or they may be working on individual projects/investigations.

2.10.3. Even within the context of a class, there is a much greater expectation that students will be managing their own learning. One school aims for a ratio of 80:20 student-directed to teacher-directed use of time within each period.

2.10.4. Teachers are embracing this with enthusiasm, but it is important to recognise that some students will need more support to develop their skills at self-direction than others.

2.10.5. As discussed above, the design of learning spaces in new schools may make it impossible for any whole-class teaching to take place, because the spaces that have been constructed are simply not large enough for some larger secondary classes or there are not enough specialist work stations for everyone to be doing the same thing at the same time.

2.10.6. This can present new challenges for teachers, because there are times when it is still appropriate to work with a whole class as a group.

2.11. The form teacher as mentor

2.11.1. The role of the form teacher is changing radically. The very title “form teacher” is being replaced with title such as learning adviser, tutor, and academic counsellor or academic mentor.

⁵ E.g. Dewey, J. (1916) *Democracy and Education: An Introduction to the Philosophy of Education*, United States: McMillan.
New Zealand Post Primary Teachers’ Association Annual Conference Papers 2012



- 2.11.2. This is part of a larger shift to an emphasis on the relational aspects of teaching. In programmes like Te Kotahitanga, and its associated leadership-focused He Kakano, there is much talk of the relationship-building work of a teacher, with every teacher engaging with every student as an individual with their own cultural and other kinds of identities.
- 2.11.3. Whereas once the form teacher had a primarily administrative role checking attendance, punctuality and uniform and conveying notices, with some small expectations about pastoral care, the role may now be much larger.
- 2.11.4. It may include significant pastoral care responsibilities, and/or academic mentoring or being a learning adviser to the group of students. Time with form classes may include some much longer sessions than traditionally, perhaps up to an hour on some days.
- 2.11.5. The role may involve the form teacher assisting students to set and monitor learning goals across the curriculum and even perhaps for their extra-curricular activities.
- 2.11.6. A manageable group is critical to the success of this work. Successful examples tend to be where every teacher, barring perhaps the principal and the guidance counsellor, is a form teacher, bringing the size of the groups down to 12 to 15 students. It also helps enormously if the group is 'vertical', i.e. it consists of students from all year levels, and the teacher stays with the group from year to year. This means that only a few students are new to the group and the form teacher each year.

2.12. **New approaches to family/whanau interviews**

- 2.12.1. In some schools, form teachers convene three-way conferences with the student and their family/whanau. These may be teacher-led or student-led.
- 2.12.2. These conferences are a far more satisfying experience for everybody than the traditional parent-teacher evening where parents grab a five-minute superficial conversation with each of their child's subject teachers, and possibly with their form teacher, and where the student may or may not be present.
- 2.12.3. On the other hand, three-way conferences can involve a very large amount of preparatory work, gathering and analysing data from the subject teachers of the form class students, contacting parents to ensure their attendance, and preparing the students for their role in the conferences.



2.13. Form time as learning skills time

2.13.1. In some schools form teachers also provide programmes about learning skills. Guy Claxton's Building Learning Power⁶ is a popular resource for these programmes.

2.13.2. Form teachers may also deliver "citizenship" programmes which include some community service work.

2.14. New understandings of "teaching"

2.14.1. Secondary teachers indisputably have responsibilities well beyond teaching their subject, and expectations about these appear to be expanding. This expansion of responsibilities is largely in the areas of student well-being and guidance.

2.14.2. The Registered Teacher Criteria and professional standards, the "front end" of the curriculum, and the NEGs and NAGs define the role of a teacher.

2.14.3. The importance of responsibilities for student well-being and guidance is not in dispute in this paper. However, in some schools there are issues around the recognition of time spent on these responsibilities as part of "teaching".

2.14.4. Where the form teacher role has moved beyond being minor administrative tasks completed in a short period of time, then it must be recognised as "timetabled hours" in terms of the STCA.

2.15. What professional learning and development (PLD)?

2.15.1. Teachers and professional leaders in new and innovative secondary schools all say "We are on our own when it comes to PLD".

2.15.2. While the Ministry of Education has a New Schools group, much of which is based in its Northern Region office, its role appears to be largely to support the Establishment Board of Trustees in the construction phase of the school.

2.15.3. None of the secondary-level PLD contracts for 2012-13 have any particular emphasis on new approaches to school-wide curriculum design or pedagogy, especially within the context of new designs of teaching areas.

2.16. Evaluation – what evaluation?

2.16.1. There also appears to be no systematic evaluation being conducted to identify the particular learning needs of teachers in these schools, despite the fact that the new designs present significant new challenges for teachers.

⁶ <http://www.buildinglearningpower.co.uk/>



3. Thoughtful and coherent change

3.1. The risks

3.1.1. There is a risk that schools will read the literature on 21st century learning, see change happening in other schools around them, and leap into whatever seems to be the “flavour of the month” without putting in place proper processes to manage the change.

3.1.2. Further, in the absence of attention to the process of change, the chances of successful outcomes are poor: “A good plan is nothing without effective implementation”⁷.

3.2. Asking the right questions first

3.2.1. The goal should always be thoughtful and coherent change. When change is proposed, it is valid and professionally responsible for teachers to ask questions such as:

- What are the objectives of this change?
- Where is the evidence suggesting that this is likely to be valuable change?
- Is there an inquiry cycle in place to monitor that the objectives of the change are being achieved?
- How well resourced is the change, in terms of time, money, facilities, spaces, equipment, etc?
- What professional learning and development is being provided to support teachers to learn new skills required?
- Are the STCA requirements, especially about contact time and maximum average class size, being observed?
- How will time be found to implement the change effectively?

3.3. The sad reality of incoherent change

3.3.1. The history of education in New Zealand is littered with examples of change that was poorly conceived, lacked an evidence base, inadequately resourced, not properly evaluated, and eventually turned out to be of no benefit to students, and sometimes even damaging to students, despite enormous efforts being put into the change by well-intentioned teachers and school leaders.

⁷ Levin, Ben (2012 forthcoming) System-wide improvement in education. *Education Policy Series 13, International Academy of Education, International Institute for Educational Planning.*



- 3.3.2. If school leaders embark on new initiatives without thorough change processes being used, they risk failure. The teaching as inquiry cycle outlined in the curriculum⁸ must be a minimum requirement for change in schools.
- 3.3.3. Furthermore, teachers' time and energy is not infinite. Over a long period of time, teachers have observed that new initiatives are simply piled onto existing work, with no compensatory reduction elsewhere in the workload.
- 3.3.4. The quality of implementation of any new initiative, and the quality of existing work, will be compromised if insufficient time is available to do anything justice.

4. The recommendations

- 4.1. Recommendation 2 reaffirms PPTA's longstanding position of welcoming thoughtful and coherent change. Successive conference papers over many years have conveyed this message. Change becomes a problem for teachers only when it is not thoughtful and coherent.
- 4.2. At Annual Conference 2012, PPTA will be launching a Change Management Toolkit. This will set out the union's position on quality change processes. It will include a template for a change management protocol.
- 4.3. Recommendations 3 and 4 are about the use of that change management protocol.
- 4.4. In Recommendation 3, the union is asked to seek, nationally, to establish a change management protocol with the government. This could be a very good way for the government to demonstrate its commitment to sincerely engaging with the secondary sector in our efforts to effect systemic improvements in education.
- 4.5. If the government were to show leadership in developing sound practices for effecting change, it could enable a cultural shift in the way that things operate right down to the level of individual schools.
- 4.6. There are all too many examples available of where change has not been implemented with a systemic focus and has therefore not achieved the desired results. The expectation of successful integration of ICT into schools, for example, has not been matched by effective system-wide planning and resourcing. This has resulted in a very wide range of ICT experiences for teachers and learners, dependent on individual schools' capacity to prepare for and finance it. Another example is PLD. It is pointless for an individual school to have professional development goals and aspirations if there is not systemic planning and provision of appropriate PLD.

⁸ NZ Curriculum (2007) page 35.



- 4.7. In Recommendation 4, branches are asked to take the change management protocol to their Boards of Trustees and ask them to sign up to an agreement to well-managed change in their own school. It would be much easier for branches to engage with their Boards if the government had committed to the protocol, but even if it hasn't, it would still be valuable to discuss thoughtful and coherent change for that individual school and get agreement to the protocol. Support material will be provided in the Change Management Toolkit to assist branches to have these discussions with their Boards.

Recommendations

1. ~~That the report be received.~~
2. ~~That PPTA reaffirms that we welcome thoughtful and coherent change in secondary schools.~~
3. ~~That PPTA seek to negotiate a change management protocol with government.~~
4. ~~That PPTA branches ask their Boards of Trustees to sign up to a change management protocol for the school.~~

2012 Annual Conference

Minutes

Minutes of the Annual Conference of the New Zealand Post Primary Teachers' Association (Inc) held at the Brentwood Hotel, Kilbirnie, Wellington, commencing at 9.45 a.m. on Tuesday 2 October 2012, continuing at 9.00 a.m. on Wednesday 3 October and 9.00 a.m. on Thursday 4 October 2012.

Managing the Paradigm Shift: Secondary Schooling and Change

C12/95/07

1. THAT the report be received; and
2. THAT PPTA reaffirms that we welcome thoughtful and coherent change in secondary schools; and
3. THAT PPTA seek to negotiate a change management protocol with government.

Carried

C12/95/08

4. THAT PPTA branches strongly recommend to their Board of Trustees that they sign up to a change management policy for the school.

Carried