

3 July 2009

Freepost 203 656  
National Standards  
Ministry of Education  
PO Box 1666  
Wellington  
By email: [national.standards@minedu.govt.nz](mailto:national.standards@minedu.govt.nz)

To Whom It May Concern:

### **SUBMISSION OF MAXIM INSTITUTE ON THE *NATIONAL STANDARDS CONSULTATION 2009***

1. Thank you for the opportunity to make this submission to the 2009 consultation on the draft National Standards for Reading, Writing and Mathematics. Maxim Institute is an independent research and public policy think tank, based in Auckland. We are a registered charitable trust, funded by donations.

#### **SUMMARY OF POSITION: STANDARDS FOR ASSESSMENT AND PERFORMANCE**

2. The major principle which underpins this submission is that parents, teachers, schools and the Ministry of Education and the ERO should have access to better information about pupils' educational progress. This is important so that we know how our children are doing at school and to assist teachers and schools to develop and improve their instruction.
3. The draft National Standards ("Standards") in literacy and numeracy are a welcome first step towards better reporting of pupils' educational progress because they will set a benchmark for expected pupil achievement at each school Year Level; provide a valuable tool for identifying which children are not meeting the Standards or falling behind expected rates of progress; and give more information to parents and teachers about how children are doing at school.
4. We agree with the way the Standards have been designed with reference to the New Zealand Curriculum Levels and the National Literacy Progressions based on the Curriculum, since they establish a uniform basis for understanding and measuring pupils' educational progress and they fit well with what is already being taught in schools.
5. Firstly, we are concerned with the way that schools will be allowed to use any standardised assessment when reporting pupils' progress towards the Standards. While schools should be permitted to use a variety of high quality diagnostic and formative assessments we believe that this should be an optional addition to the mandatory use of asTTle (Assessment Tools for Teaching and Learning) because it is designed to assess pupils' progress against standards derived from the New Zealand Curriculum.
6. Secondly, we believe that the Standards should have a broader purpose than just being used for measuring pupils' educational progress. The Standards allow the opportunity to produce better information for parents about their children's schooling as well as providing teachers and schools with better information to help with their professional development. This opportunity should be harnessed.

7. Thirdly, we believe that school boards' reporting requirements in the National Administration Guidelines should be clarified so that schools will provide enough appropriate information to the Ministry of Education. This will help to target resources at the schools which need them.
8. Finally, we are concerned about the pace at which the Standards are being designed and implemented. Schools are expected to use Standards from 2010 even though a high proportion of schools are still not gathering and using assessment information to a high standard. This is also at a time when schools are already under pressure to implement the revised National Curriculum. For these reasons, we believe the Ministry of Education and the Education Review Office (ERO) should monitor and evaluate how well schools implement and use the Standards.
9. The submission will discuss our position in response to our concerns about the design and implementation of the Standards. In relation to the specific feedback sought by the Ministry of Education during the public consultation, the discussion in our submission comments on:<sup>1</sup>
  - a. the information we consider would best inform parents, family or whanau and the school community on pupils' progress against the standards; and
  - b. what we consider are the best ways for schools to report achievement information against the Standards to the Ministry of Education.

### **THE DESIGN OF NATIONAL STANDARDS**

10. The purpose of the Standards is to make explicit the expectations for pupils' achievement at specific points in their schooling. This helps teachers and parents to judge whether pupils are competent in their learning and are making the expected rate of progress.<sup>2</sup> This means the Standards will provide more and better information about pupils' progress at the individual level, the school level and across the education system.
11. We are encouraged in several ways by how the Standards' design contributes to the goal of providing better and clearer information about pupils' progress. However, we are concerned that more could be done to provide even better information to parents, teachers, schools, the Ministry of Education and the ERO.
12. Firstly, we are pleased that the draft Standards have been designed with reference to the New Zealand Curriculum Levels as this makes meaningful and consistent reporting possible across every child's schooling. The eight New Zealand Curriculum Levels are helpful for tracking pupils' educational progress since they describe the processes and competencies which pupils should master at different stages of their education. By implication the Curriculum Levels establish clear expectations for pupils' educational progress.<sup>3</sup> The draft Standards refine the expectations for progress between the beginning and the end of a school year.
13. A shared understanding of expected progress is also necessary if the Standards are to be taught and assessed consistently throughout schools.<sup>4</sup> As schools have already invested considerable resources into implementing the New Zealand Curriculum, it is wise to use it as the basis for this shared understanding. Using the Curriculum as the basis for the Standards will also make it possible for schools to use existing standardised assessments that are designed to assess pupils against the learning objectives of the Curriculum rather than having to develop new ones.
14. We are also pleased that within this proposed structure there is a strong focus on growth in achievement, measuring the improvement pupils make towards reaching a Standard. This is better than merely measuring whether or not pupils achieve a Standard because it should not lead to pupils being simplistically labelled as successful or unsuccessful. What matters more is to measure how much a pupil's knowledge and skills grow between the beginning of the year and when they were assessed to see whether they are making the required amount of progress towards meeting the Standard.
15. However, we suggest that the Standards could be broken down into multiple levels at each Year Level to help give pupils and teachers more incentives to make progress across the school year. This is important since it could help to show pupils who advance at different rates that they can

succeed at making progress. Using a single achievement level for each Year Level makes it more difficult to communicate different rates of progress.<sup>5</sup>

16. We also suggest that reporting to parents should take into account that children's abilities are different when they enter school. At the moment, the draft Standards seem to assume all pupils start at the same level of ability or understanding. This means that progress towards the Standards is likely to be slower for certain pupils, even if they are still making progress. Reporting to parents should reflect these differences among pupils.
17. In the case of Reading and Writing, it is also pleasing that the draft Standards follow the structure of the *Literacy Learning Progressions* which the Ministry of Education is currently developing. This is because the Progressions further describe the knowledge and skills that pupils are expected to have developed by certain points in their schooling if they are to engage with Curriculum texts and tasks and make the expected progress. They are another tool for helping teachers to identify what their pupils need to know or do and where they may be falling behind.
18. Finally, we are pleased that the draft Standards are "rich," broad descriptive indicators of what pupils at each Level can be reasonably expected to achieve.<sup>6</sup> We believe this is valuable because it means teaching and learning against the Standards will not become an exercise at ticking-off the Curriculum objectives. This would be to the detriment of more flexible teaching and learning which can respond to the needs of different pupils.

### **REPORTING TO PARENTS**

19. Besides the Standards' design with reference to the Curriculum, we are pleased by how plain language has been used throughout the draft parent reports. In particular, we are pleased by how the draft parent reports communicate that they are a report against expected progress rates, not a report on whether or not a pupil has met a Standard.
20. We are also pleased by the variety of the proposed reports that communicate pupils' progress to parents. We agree that schools should communicate a learning plan to parents, setting out the goals which pupils are expected to meet throughout the year, and when written and face-to-face reporting will occur. This will help parents to understand what their children are being taught and are expected to achieve over time. We also agree with the proposed format for communicating pupils' progress in Mathematics, Reading and Writing as it would clearly set out where pupils are making good progress or falling behind.
21. We agree with how the parents' report includes the "next steps" that teachers would take to help pupils in the areas where they are not meeting the Standards. This is vital, since it is not only identifying weaknesses in pupils' learning which matters for lifting achievement but also showing how those weaknesses can be remedied with good feedback.<sup>7</sup> It is also pleasing that the next steps suggest some ways that parents can help too, since the more parents are involved in their children's education the better their educational achievement can be.<sup>8</sup>
22. We are pleased with the design of the reading, writing and mathematics reports, preferring how the data is presented in both the "sample 1" impressions included in the sample draft reports. These indicators show most clearly where pupils are in relation to the expected standard.
23. However, we suggest that the graphic design of the reports could be made more accessible. For example, the colour coding of the graphs and progress indicators could be coded using the same colours as a traffic light. Green would indicate that a pupil is making or exceeding the expected progress towards the Standard; orange would indicate that a pupil is not quite making the expected progress rate; and red would indicate that a pupil is falling behind the expected progress rate.
24. We also suggest that schools should have explanatory information available about how the National Standards have been set which they can supply to parents upon request. For example, schools should be able describe to parents how their child's attainment has been judged by their teacher's interpretation of how well they have met the Standard, and which assessments teachers used to make their judgement. This would help parents to understand whether their

child's progress towards the Standards is based on one or two of the assessments or their overall "best fit" performance against a wide range of different assessments.<sup>9</sup>

### **IMPLEMENTATION CONCERNS**

25. While we are generally pleased by about the Standards' design, we have several concerns about how schools will be required to assess pupils against the Standards and report the results to parents and the Ministry of Education. This is because we believe that the Standards should be used not only to assess pupils' performance, but to assess teachers' and schools' performance as well.
26. To provide this sort of data we believe an indicator of the value-added by a teacher or a school should be developed and reported. Collecting and making available this kind of information would have three main benefits: providing reliable information for parents so that they can make informed decisions about their children's schooling; guiding teachers with their own professional development; and providing schools with good information about the difference which their teaching makes to pupils' achievement. This would allow schools to more effectively support their teachers in professional development.

### **Permitting schools to choose assessments**

27. Our first major concern relates to how the Standards should be assessed by schools. The Education (Standards) Amendment Act 2008 does not require schools to use a particular assessment to assess pupils against the Standards.
28. This is because the Government policy stated prior to the election was that schools would be required "to use assessment programmes that compare the progress of their students with other students across the country. Schools will choose from a range of tests, but there won't be national exams."<sup>10</sup> This means schools will be able to select an assessment from any of the nationally validated assessment tools which are already used to assess pupils against the Standards. While this provides for flexibility it means the assessments have to be benchmarked to the Standards for the proposal to work.
29. Major assessments which have to be benchmarked to the Standards include the Progressive Achievement Tests (PAT), updated in 2008, which assess reading, listening and mathematics, the Supplementary Test of Achievement in Reading (STAR) as well as some work to prepare the aTTle (Assessment Tools for Teaching and Learning) for reading, writing and mathematics to use with the new Standards.<sup>11</sup> Besides these, the National Education Monitoring Project (NEMP) regularly assesses a sample of pupils in Year 4 and 8 about how well they are meeting the expectations of the New Zealand Curriculum by rotating through the different learning areas, like Mathematics, Science or the Arts.<sup>12</sup> A range of smaller scale diagnostic assessments exist for teachers to use in reading and mathematics.<sup>13</sup>
30. We agree that these assessments are all high quality assessments. They are helpful for teachers to use formatively with their pupils to provide good feedback on their progress.<sup>14</sup> This is important because teachers make the biggest difference to pupils' achievement outcomes than any other factor apart from pupils' own background.<sup>15</sup> Teachers should be able to use these tools as part of on-going classroom assessment and to assist their training. However, we are doubtful that all of these tests can be benchmarked to the Standards derived from the Curriculum.
31. This is because even though they are standardised all of these assessments are designed with quite specific assessment purposes in mind. Further, not all of them have been designed to assess pupils' educational progress across time against the New Zealand Curriculum.
32. For example, a widely-used assessment like the PAT Reading Comprehension assessment is designed "to help classroom teachers determine achievement levels of their students in reading comprehension and reading vocabulary."<sup>16</sup> Teachers convert the scores from the PAT Reading tests to locations on a specially designed PAT Reading Comprehension scale. Descriptors of the kinds of knowledge and skills pupils are developing as they progress along the scale, accompany

the assessment. This allows schools to monitor pupils' progress, but only from Year 4 to Year 10, leaving a gap at the beginning school years.<sup>17</sup>

33. The STAR Reading test is another assessment designed with clear diagnostic purposes in mind. It is "designed to help teachers make better judgments about the quality of several aspects of their pupils' close reading ability."<sup>18</sup> It contains several sub-tests which principally look at how well pupils can recognise words, read for meaning by comprehending sentences, comprehend paragraphs and understand a range of vocabulary. It is most useful for teachers to "identify those needing extra help; group children by ability and needs; diagnose areas of difficulty; and evaluate programmes."<sup>19</sup> It is not strictly designed to assess pupils' ability against standards derived from the Curriculum.
34. Moving to a system of Standards derived from the New Zealand Curriculum means schools should use an assessment which can produce valid and reliable reports of pupils' progress towards those Standards. We believe the most suitable assessment available which can do this is asTTle, and so every school should use it to assess their pupils' progress towards the Standards, with the other assessments permitted as optional for diagnostic and formative assessment.
35. The asTTle assessment was designed to work with benchmarks derived from the New Zealand Curriculum. This means it provides the best natural platform for developing a national report of pupils' educational progress. This feature of asTTle gives it a major advantage over other New Zealand standardised tests which, as discussed, are limited to more straight-forward diagnostic functions in relation to a set of standards different to the New Zealand Curriculum. We describe why we believe asTTle should be adopted as a national report of pupils' educational progress next.

#### **Adopting asTTle as a national report of pupils' educational progress**

36. We believe that all primary schools should be required to use asTTle so that a comprehensive, consistent national report of pupils' educational progress can be constructed. Designed as a formative assessment to help classroom teachers to see whether their pupils are making progress towards achieving the New Zealand Curriculum objectives, asTTle has the most potential out of any assessment currently available to be developed further as a national report of pupils' educational progress.
37. We do not believe making asTTle mandatory rules out schools from using other additional diagnostic tests for formative purposes if they choose. In fact we encourage schools to use whatever quality assessments they think will help teachers to lift pupils' achievement.

#### ***asTTle's background and development***

38. asTTle was developed as a literacy reporting engine by Auckland University to help teachers track the achievement of individual pupils and groups of pupils in reading, writing and mathematics against the standards for each New Zealand Curriculum Level.
39. Currently, asTTle tests pupils from Years 4 to 12, although it is used most widely in primary schools.<sup>20</sup> Versions of asTTle are in over 80 percent of schools, meaning that it would be relatively easy to expand its mandatory use. The introduction of a new version from 2008, called e-asTTle, will also make it possible to test pupils against standards right from Year 1.

#### ***Advantages of using asTTle as a national report***

40. We believe that asTTle should be developed further into a national report of pupils' progress because it can generate reports which accurately compare the achievement of different groups of pupils. This is because asTTle reports are constructed against a database of about 100,000 pupils' test results from throughout New Zealand.<sup>21</sup> This allows teachers to see how individual pupils and groups of pupils in their class are doing relative to other pupils or groups of pupils at the same Year Level nationally.

41. The information provided by asTTle can tell teachers and school leaders where they need to target their teaching to lift pupils' achievement. asTTle is therefore a powerful assessment because it can add value to classroom teaching by providing teachers with a number of different reports about pupils' progress at the individual, class, school and national levels.
42. These reporting features would be helpful for teachers, school leaders and school boards to have a good idea about the learning needs in their schools. The Ministry of Education would also benefit from information which asTTle reports could supply about which groups of pupils in particular schools or areas would be achieving progress towards the Standards. If expanded to be a national report, asTTle would add much more information about what is happening with pupil achievement nationally, helping to improve both the transparency and performance of the school sector.
43. Another advantage of using asTTle is that it can be used by teachers when they like since it is designed to fit into regular class assessment time. Teachers can also choose the questions which pupils sit. Since every question is referenced to the national norms contained in the asTTle database it means that teachers can trust the questions they designate will test the same Curriculum objectives every time.
44. Using asTTle this way would also trust teachers with assessing their pupils at the time and with the questions which suit their progress best, while still allowing parents, educators and others to see how the school system is performing.<sup>22</sup> This reflects a sound principle of assessment design—that assessment against Standards should utilise, support and enhance teachers' professional expertise.<sup>23</sup> It should not lead to "teaching to the test" and an over-emphasis on comparing schools according to their ranking in league tables, based on their performance in numeracy and literacy tests.<sup>24</sup>
45. With the development of e-asTTle and the right IT investment, schools should find it easy to administer asTTle tests and to produce and communicate results to parents and the Ministry of Education through schools' computer networks and the internet.
46. We also believe that asTTle could be used to expand assessment against Standards beyond Year 8, where the Standards currently stop. Since asTTle can assess pupils right up to Year 12, it could be used to bridge the gap between Year 8 and Year 11, when most pupils begin the NCEA and are required to meet the literacy and numeracy requirements of Level 1.
47. We think this is important so that assessment against the Standards continues between primary and secondary school and so that increasingly primary and secondary school teachers develop a shared understanding of the progress rate required by National Standards. Research also shows that we should be focusing more efforts on pupils in the middle years of school where literacy achievement tends to plateau.<sup>25</sup> For example, a 2009 Ministry of Education literature review of middle schools, "Teaching and Learning in Middle Schooling," found that:<sup>26</sup>

The early secondary years mark the point where some students who were already underachieving in literacy (and numeracy) in the primary years fall further behind their peers. Because so much of schooling is literacy based (including mathematics), those students inadequately equipped with literacy skills can stall and even decline in the early to mid-secondary years.

And:<sup>27</sup>

Like literacy, numeracy can also be problematic in the early secondary years where, again, some students plateau or even decline in achievement. Once more, the quality of teaching and teachers' professional learning have been found to be vital factors in facilitating student achievement in numeracy.

48. This suggests to us it is vital that assessment and reporting against the Standards happen through to the end of primary school and into secondary school to help reduce the chances of underachieving children falling behind.
49. Finally, we believe that asTTle should be adopted as a national report of pupils' educational progress because it will supply better information to parents and the school community. It would

provide data about pupils' achievement clearly referenced to the objectives of the Curriculum. asTTle results would also be easy to communicate to parents because of the way asTTle reports are constructed with numerical indicators and dashboard-like indicators.

### **Schools' use of assessment information**

50. While introducing Standards will give schools the opportunity to collect more and better data about pupils' educational progress, we are concerned that a number of schools will not be prepared well for assessing pupils against the Standards.
51. Our concerns stem from data collected and analysed by the ERO, published in 2007. ERO stated in its report, "The Collection and Use of Assessment Information: Good Practice in Primary Schools," that:<sup>28</sup>

... schools' effectiveness in the collection and use of assessment varied considerably, with about half the schools demonstrating effective practice across the whole curriculum. Without worthwhile information teachers cannot be certain their students have learned what they set out to teach, or that the teaching is relevant to the students' learning needs and interests.
52. Further, the ERO stated the following in an earlier report from 2007, "The Collection and Use of Assessment Information in Schools":<sup>29</sup>
  - a. While "over 80 percent of primary schools had developed effective assessment processes and tools for literacy and numeracy," only "58 percent of schools had developed and implemented an effective, integrated school-wide approach to assessment processes and information."
  - b. Further, in 57 percent of schools "the achievement information ... demonstrated students' achievement and progress, while the interaction of assessment with teaching and learning was effective in 54 percent of schools."
  - c. 43 percent of schools were establishing and using school-wide information to improve student achievement, while in 42 percent of schools, students used information about their achievement for further learning.
  - d. Finally, only 51 percent of schools were effective in reporting information about students' achievements to the community.
53. We believe the ERO's comments warrant concern about how ready some schools will be to use assessment tools for collecting data and monitoring pupils' progress. This concern is even more pressing given the short timeframe for developing the Standards in 2009, implementing them in schools in 2010 and generating the first reports to parents and the Ministry of Education in 2011.
54. We believe extra resources should be targeted at the schools which the ERO has identified as having gaps or deficiencies in how they use assessment information. This resourcing could come out of the extra \$36 million promised in the 2009 Budget to "support improvements in numeracy and literacy standards."<sup>30</sup> We believe that this money might be spent best on professional development programmes that could help train school leaders and teachers at how to use assessment tools to improve pupils' learning and to integrate them into classroom teaching.
55. We also think that money promised in the Budget to make schools broadband internet ready and to "modernise existing schools"<sup>31</sup> should be spent on ensuring that e-asTTle can be used in all schools. For example, the money should be spent on making sure that schools have the right computer and internet hardware so that e-asTTle could be easily administered and the results collected and reported with a minimum of paperwork.
56. If not planned already, we believe more emphasis should be placed on initiatives like these so that schools are better prepared to meet the increased assessment and reporting requirements. A majority of schools are already doing well at this while a number of others are not. It will be important to support these schools if Standards are to contribute not only to better monitoring of every pupils' educational progress but also for helping teachers and schools to understand their

performance better. This would assist them to continually improve the standard of education they provide.

## **TEACHER AND SCHOOL PERFORMANCE**

57. We think that it is important for the Standards to contribute not only to better educational outcomes for children, but also improving information available about teacher and school performance. Currently there is little way for parents to tell the difference between schools except by reputation, school decile or, in the case of secondary schools, raw exam results. These measures do not relate to teachers' performance at educating pupils, or if they do they are not indicators which can be used to fairly compare the difference which schools make to pupils' achievement.
58. We believe that these sorts of indicators could be constructed, using data provided by asTTle tests. This is important for providing parents, families and the school community with better information about their children's educational progress compared to other schools and for helping parents to choose the best school for their children.

### **Value-added indicators for teachers and schools**

59. Once the Standards have been introduced, we urge the Government and the Ministry of Education to develop and implement a form of value-added assessment using asTTle. The term value-added comes from economics, and refers to measures of teacher and school effectiveness based on more sophisticated statistical analyses than comparing raw test scores. In practice, value-added measures can be used "to estimate the unique contributions" of a school or teacher on pupils' educational progress "over the course of a year rather than the cumulative effects of education or student background factors."<sup>32</sup>
60. Many researchers and commentators are convinced that value-added indicators can provide reasonably accurate and fair information for comparing the performance of different schools.<sup>33</sup> Value-added measures have been developed in the United Kingdom and Australia, among other places, and are now an accepted part of the education systems there.<sup>34</sup> They help parents, communities and government to more fairly scrutinise schools' performance, by controlling for the factors like pupils' family background and material circumstances, which affect the difference in test score results among schools.<sup>35</sup>
61. We believe the Government should take an interest in developing value-added measures because they can be used to separate out the effects of teachers and schools on pupils' educational performance from the effects of non-educational factors like family background. Isolating the effects of educational and non-educational factors is critical for accurately evaluating the difference which schools and teachers make to pupils' learning, and thereby allowing schools to target professional development where it is needed.

### **Value-added indicators for teachers**

62. We believe that it is important to measure the value added by teachers to pupils' learning because they make a big difference to pupils' achievement outcomes.<sup>36</sup> American educational researcher William L. Sanders has commented on the difference good teachers make: "If anyone is serious about improving the academic achievement levels for all students, then this improvement will be obtained only by reducing the likelihood that students will be assigned to relatively ineffective teachers."<sup>37</sup>
63. Value-added measures can also contribute to a demonstrable improvement in teacher quality. Again, Sanders comments:<sup>38</sup>

We have observed that once a measurement process is in place that offers feedback on the outcomes of instruction at the classroom level, many teachers begin to develop their own strategies for improving areas in which they are deficient. However, this process can be accelerated when the leadership within districts and schools provides the opportunity for individuals to learn to use and interpret the results of value-added assessment in positive diagnostic ways.

64. Sanders' comments indicate how the better data provided by value-added measures can help to point out what makes a difference to pupils' learning. If value-added measures can help more children to have access to better teachers then this could help to raise more pupils' achievement.
65. In 2004, Maxim Institute also carried out polling of 1,000 parents of school children which showed that 89% of parents who responded agreed that, "assuming it was possible, they would like more information on the quality of the teachers who would be teaching their child."<sup>39</sup>
66. The difference teachers make could also be communicated by schools to families and the school community. Among other things, we believe that providing this information might help parents to decide which school is the best one for their child.
67. We believe that the value-added by a teacher could be measured with asTTle results. Since asTTle measures pupils' progress from one point in time to another, it can also be used to determine the value a teacher adds to pupils' learning between one point in time and another, in terms of a gain score. Further, asTTle might be used to illustrate the impact of a teacher by comparing groups, like Maori and Pasifika pupils, against national norms and thus assess how much difference a teacher is making to such a group.<sup>40</sup>
68. Besides the benefits for parents and schools of reporting value-added indicators, we believe that the value-added data produced by asTTle could help teachers to see how much difference they are making to their pupils' learning. The data might also indicate where teachers should make changes to their teaching, or areas where they might benefit from more professional development in the teaching profession recognises and rewards good work.
69. Further, introducing a value-added indicator could help teachers in the long run by establishing a fair, objective measure of the difference which teachers make in the classroom. Schools might be able to use this information to reward high quality teachers better. Linking remuneration to performance could also help to retain and attract more high quality teachers because it would show that teaching rewards according to quality.<sup>41</sup>
70. Introducing value-added indicators of teacher performance would therefore be positive for teachers' training and development and the professional culture of teaching on the whole because they would bring better clarity to the difference teachers make and allow them to be rewarded for the good work they do with children's learning.

#### ***Value-added indicators for schools***

71. We also believe that asTTle data should be used to calculate the difference a school makes to its pupils' educational progress. At the moment, asTTle reports provide a sound indicator of growth in pupils' achievement over time. asTTle can also be used to compare groups of pupils at particular schools to, for example, national norms or similar schools. However, we think that more information needs to be associated with individual pupils' asTTle results and, by extension, groups of pupils so that the difference a school makes to pupils' learning could be determined. In short, we would like to see the development of a contextual value-added indicator for schools.
72. Constructing a value-added indicator for schools would require schools and the Ministry of Education to collect information about pupils' background circumstances and link this information to pupils' National Student Numbers which follow them throughout their schooling. Prior attainment at asTTle assessments would also need to be linked to pupils' records as they move through the school system. This information would need to be stored in a central database.
73. We believe school value-added indicators could help parents and educators to make fairer comparisons between different schools. For example, it is not fair to compare schools which have large concentrations of pupils from disadvantaged backgrounds with others that do not. The ones with fewer disadvantaged pupils are likely to have more high achieving pupils.<sup>42</sup> As with measuring pupils' individual educational progress, what matters is measuring the difference which a school contributes to its pupils' progress as these gains may be substantial, even if they are not reflected in test scores or in high proportions of pupils meeting a standard.

74. This information would also show which schools are performing well or not. For example, the New York City school system is using data about pupil achievement and progress rates to show which schools are making a difference at lifting pupil achievement. The City introduced a school ratings programme about two years ago in which every school is given a report card by the Department of Education. It contains information about schools, including attendance, safety, graduation rates, test scores and improvement made on prior performance. Schools are compared with all City schools and schools with similar demographic characteristics.<sup>43</sup>
75. Schools are awarded a letter grade ranging from A for top performance, to D or F for low performance. The letter grade is determined by a product of three separate weighted scores, including the school environment (15%), pupil performance at tests (25%) and pupil progress (60%).<sup>44</sup> Schools which are graded A may receive a financial reward in return for helping less successful schools to improve their performance. Schools which are graded D or F face improvement measures or at worst closure if they do not improve.
76. An early study of the programme indicated that schools which received a D or an F rating at the beginning of the first year significantly increased pupil achievement in mathematics by the end of the year. Schools which received an F grade increased pupil achievement in English.<sup>45</sup> Another indicated that while improvements in school performance were moderate there was no evidence of negative effects. This study also found that schools which received a D or an F rating made larger improvements in mathematics than higher-rated schools in the following year. However, this was not the case in English.<sup>46</sup>
77. While the New York City school report cards are relatively new, we believe they show some early promising results for improving pupil achievement at under-performing schools. These schools, it appears, have more incentive to lift their performance when indicators are published and they face sanctions for underperformance. Some caution is needed because these effects could be the product of teaching to a new test, which might fade with time.<sup>47</sup> However, the weight placed on measuring progress in the New York City ratings might mitigate this effect.
78. In principle, we believe a similar system could and should be used in New Zealand using contextualised data provided by asTTle reports. As in New York City, it might also be triangulated with other data about school quality so that comparing schools is not based solely on assessment data but takes into account qualitative aspects of school performance too.
79. Another possible way value-added data could be reported is to produce reports comparing schools which have pupils who share similar demographic characteristics. This could reveal, for example, whether some schools are more successful than others at working with different kinds of pupils. We think this could be helpful for identifying the schools which are doing what works to raise achievement for particular groups of pupils. We also think that this could provide the opportunity for other schools to learn about strategies which could help pupils who are in similar circumstances.<sup>48</sup>
80. Such reports would also give the Ministry of Education and the ERO another way of knowing which schools are making a difference and should be modelled, or which ones might need assistance. This would help to make sure more schools are educating their pupils well. It would also introduce more transparency about the difference which schools make to their pupils' achievement in different subject areas. We believe that parents should have access to this information as they might find it helpful when deciding which school to send their child to.
81. It will also be possible for schools' performance data to be obtained under the Official Information Act, so it is highly likely that the data collected by schools and reported to the Ministry of Education could be made public. We believe this is a good reason to develop and have available good, contextual value-added data about school performance so that when demands are made by media or other interested parties for information about the difference which schools make to pupils' educational progress, accurate and fair indicators are available.

### **Limitations of value-added indicators**

82. While value-added measures can help “to determine the effects of inputs into education,” like teachers and schools, over time “by controlling for the prior achievement level of students,”<sup>49</sup> they are not perfect indicators. Value-added measures can be “susceptible to a number of sources of bias, depending on decisions about how the modeling is executed and on the quality of the data on which models are based” (for example, choice of statistical modelling, missing variables, confounding factors and more).<sup>50</sup>
83. This means if teachers’ or schools’ are going to be assessed against their pupils’ performance, based even partially on the results of value-added measures, the uncertainties around these measurements must be clearly understood and broader strategies developed for measuring the impact of teachers and schools on pupils’ performance (like community involvement and peer review).<sup>51</sup>

### **Conclusion: value-added indicators**

84. Both these proposals for constructing and communicating value-added indicators for teachers and schools would require, at a minimum, the mandatory use of asTTle throughout primary schools from the time children enter school. It would also require the Ministry of Education to collect comprehensive information about pupils’ background so that data could be aggregated to the school level. This is essential if Standards are to contribute towards not only better assessment data but also better monitoring of teacher and school quality. However, more monitoring also creates some issues for schools’ reporting requirements.

### **REPORTING REQUIREMENTS**

85. The collection of assessment data against National Standards by schools creates both opportunities and problems for the fair reporting and use of that data. We believe that schools and the Ministry of Education should be transparent with the data collected, and that this calls for several kinds of reports for the purposes of monitoring pupil achievement and system performance.

#### **Schools’ reporting requirements**

86. Schools will be required to report data which is produced from monitoring pupils’ progress towards Standards to the Ministry of Education. The information will be used by the Ministry to help target resources to the schools which need them. We believe that the National Administration Guidelines (NAG) should be clarified to describe the information which the Ministry of Education requires schools to report to pupils, parents and the school community, as well as the Ministry itself.
87. At the moment, legislation provides schools with some flexibility about how they report to their community.<sup>52</sup> Reporting to the Ministry of Education should not compromise this. We believe it will be important that the flexibility schools have to report to their Boards and local communities is not overridden by national reporting requirements. Reporting of schools’ progress towards meeting National Standards to the Ministry of Education should complement existing reporting requirements.

#### **Report types**

88. We believe that the best format for reporting to parents, local communities and the Ministry is to have reports at three different levels, the **individual pupil** level, the **school** level and the **national** level. We also believe that if possible the data reported should allow fair comparisons to be made between schools. In this context, we reiterate our earlier recommendation to develop sound statistical measures of the unique value added by teachers and schools to pupils’ learning.

### ***Individual pupil level reports***

- a. Reporting at the individual pupil level would be carried out according to the Ministry's proposals to report to parents the progress pupils make towards the Standards; where deficiencies might be occurring and what steps will be taken next to attend to an individual pupil's learning.

### ***School level reports***

- b. A school level report should be developed by individual schools from the aggregate data produced by the assessments teachers will use. It might be used to report to a school's Board, the local school community and the Ministry if any particular classes or groups of pupils are falling behind expected rates of progress.
- c. We also believe that a school level report could be developed by the Ministry of Education, taking a similar form to the one described earlier in New York City. It could include several indicators of school quality, including the value added by teachers at the school; the overall contextual value added by the school; school environment; the proportion of pupils meeting the Standards at each Year Level; and the average rates of progress made by pupils at the school at each Year Level. This information might be accessible through an internet portal, like the edCentre website or the NCEA school statistics website.<sup>53</sup>
- d. The value of developing a school level report that includes various performance indicators was supported in the United Kingdom's "Report of the Expert Group on Assessment," released in February 2009. The Expert Group's purpose was to investigate the ways assessment could be optimised to report on pupils' learning progress and to hold schools accountable for their performance.
- e. It stated that:<sup>54</sup>

Although externally marked tests should continue to play an essential role in the primary school accountability system, they should not be the only accountability measure. DCSF (the Department of Children, Schools and Families) should therefore develop the School Report Card urgently, so that it recognises the broader range of outcomes to which schools contribute, as well as giving due credit to schools for focusing on the progress of all their children, not only for those children who achieve the threshold level of performance. DCSF should then actively promote the School Report Card as an alternative to Achievement and Attainment Tables as the focus of public accountability for schools.

- f. Producing a comprehensive school level report might avoid some of the problems of league tables. League tables, often constructed by the media, can mean schools are ranked and compared on the basis of their exam scores, rather than explaining why there are differences between schools' performance.
- g. We do not believe that league tables should be produced from assessment data unless they include information which can help parents to fairly compare schools. This means we do not believe A to F ratings should be applied, since this might over-simplify or mislead people about how well a school is performing across a variety of different indicators.

### ***National reports***

- h. A national report might be published by the Ministry of Education to show national pupil achievement at each Year Level, and in time examine the average growth made by pupils in various cohort years as they move through the school system. It might also indicate the areas of the country or the groups of pupils who need help to lift their rate of progress towards Standards.
- i. We consider these latter elements essential for a national report of pupils' progress to be comprehensive and useful for identifying the 15 to 20 percent of pupils who are underachieving at literacy and numeracy.<sup>55</sup>

## **Conclusion: reporting requirements**

89. In summary, we believe it is important for schools and the Ministry to work at producing school level reports and a national report so that access to information about school performance is free and transparent. Information about school quality should not be kept secret to protect under-performing schools, which is the case now. Parents should have access to as much fair and reliable information as possible to choose the right school for their child.

## **PACE OF IMPLEMENTATION AND EVALUATION**

90. One final concern we wish to discuss is the pace of the Standards' development and implementation. The timeframe for developing the draft Standards has been compact, with a short period of time between when the legislation was passed in December 2008 and when the Standards are expected to be ready for use in schools at the beginning of the 2010 school year.
91. This has given the education sector and parents precious little time to consider the Standards and to amend them if necessary before they are introduced. We are also worried that the timeframe allows little if any time to trial assessment and reporting against the Standards so that any problems can be identified before they are used throughout the school system.
92. However, we recognise this was the consequence of a political decision and could not be avoided by the Ministry of Education. As the Standards are grounded in the substantial work carried out in developing the New Zealand Curriculum and the Literacy Learning Progression we believe this offsets to a degree the risk created by the hurried development of the Standards.
93. Because of the short timeframe allowed for developing and implementing the Standards we believe that the Ministry of Education and the ERO should evaluate the Standards after one year. This way, we hope that any shortcomings or problems with how the Standards are working can be identified before they become too great. We recall how the NCEA was introduced into schools too quickly,<sup>56</sup> and wish to make sure that the National Standards do not succumb to a similar problem.

## **CONCLUSION**

94. We believe that introducing National Standards offers a valuable opportunity to provide better information about the progress which our children are making at literacy and numeracy. In particular, we believe that Standards will help us to find out which children in our education system need the most help and may assist teachers to lift their own professional standard. This may be a valuable strategy for lifting the performance of the tail end of underachievers currently present in the school system.
95. We also welcome the Standards because we believe they can help improve the transparency and performance of the school system. However, this can only be achieved if changes are made to the way the Standards are assessed and reported. In particular, we urge the mandatory use of the asTTle assessment throughout schools from the time children enter school in order to provide a consistent national report of pupils' progress from Year 1.
96. We also strongly recommend that other measures are adopted in the near future that would improve the performance of teachers and schools for the quality of the education they provide. We would like to see schools report to parents and the Ministry of Education about the difference which they make to their pupils' achievement. This would require constructing contextual value-added measures of pupils' performance, drawing on asTTle data, but would help parents to make fairer comparisons between schools.
97. We believe adopting such measures is vital if the Standards are to be an effective tool for monitoring and improving the achievement of every school pupil and for improving the quality of schooling in New Zealand.
98. Please do not hesitate to contact us with any questions relating to this submission.

Yours faithfully,  
**MAXIM INSTITUTE**

**Steve Thomas**  
Researcher

Phone: (09) 627 3261  
Fax: (09) 627 3264  
Email: [steve.thomas@maxim.org.nz](mailto:steve.thomas@maxim.org.nz)

## ENDNOTES

<sup>1</sup> Ministry of Education, "Education Sector Feedback Form. National standards consultation 2009" (Wellington: 2009), questions 7 and 8.

<sup>2</sup> Ministry of Education, "Draft Reading and Writing Standards," *Material for Teachers Professional Elaboration* (Wellington: 2009), 1; Ministry of Education, "Draft Mathematics Standards," *Material for Teachers Professional Elaboration* (Wellington: 2009), 1.

<sup>3</sup> Ministry of Education, "Draft Reading and Writing Standards," 1; Ministry of Education, "Draft Mathematics Standards," 1.

<sup>4</sup> J. Hattie, "What is the Nature of Evidence that Makes a Difference to Learning?" Presentation to the ACER "Using Data to Support Learning Research Conference" (Camberwell, Victoria: Australian Council for Educational Research (ACER), 2005).

<sup>5</sup> New Zealand Assessment Academy, "Towards Defining, Assessing and Reporting Against National Standards for Literacy and Numeracy in New Zealand" (Christchurch: College of Education, University of Canterbury, 2009), 5.

<sup>6</sup> New Zealand Assessment Academy, "Towards Defining, Assessing and Reporting Against National Standards for Literacy and Numeracy in New Zealand," 5.

<sup>7</sup> Providing better information about pupils' educational progress is important for teachers. This is so that they can identify how well pupils in their class are achieving at acquiring different skills and knowledge throughout the year. When teachers have a better idea of how children are doing, they can provide them with more accurate feedback about where they need to improve. Research also shows that good quality feedback from teachers is important for helping pupils to make achievement gains. The information about progress can also help teachers to reflect on their teaching quality, and how they might either need to improve or modify their teaching for the needs of particular pupils. P. Black and D. Wiliam, "Inside the Black Box. Raising standards through classroom assessment" (King's College London School of Education, 2001); J. Hattie, "What is the Nature of Evidence that Makes a Difference to Learning?" Presentation to the ACER "Using Data to Support Learning Research Conference"; Education Review Office, "The Collection and Use of Assessment Information: Good practice in primary schools" (Wellington: 2007); M. Absolum et al., "Directions for Assessment in New Zealand. Developing students' assessment capabilities" (Wellington: Te Kete Ipurangi; Ministry of Education, New Zealand, 2009). John Hattie discusses the importance of defining the next steps that should be taken with children's learning once problems are uncovered by formative assessment. J. Hattie, "Large-scale Assessment of Student Competencies," Paper presented as part of the Symposium: "Working in Today's World of Testing and Measurement: Required knowledge and skills" (Joint ITC/CPTA Symposium) 26th International Congress of Applied Psychology. 16 to 21 July, Athens, Greece, (2006).

<sup>8</sup> A large body of literature supports the argument that greater parental involvement in their children's education improves the quality of their education. The following studies offer some brief examples: F. Biddulph, J. Biddulph and C. Biddulph, "The Complexity of Community and Family Influences on Children's Achievement in New Zealand" (Wellington: Ministry of Education, New Zealand, 2003), 65-67; A.T. Henderson, "Parent Participation-Student Achievement: The evidence grows" (Columbia: National Committee for Citizens in Education, 1981); A.T. Henderson, "The Evidence Continues to Grow: Parent involvement improves student achievement" (Columbia: National Committee for Citizens in Education, 1987); E.H. Berger, *Parents as Partners in Education: Families and schools working together* (Englewood Cliffs, New Jersey: Prentice Hall, 1995); P. Teske and M. Schneider, "What Research Can Tell Policymakers About School Choice," *Journal of Policy Analysis and Management* 20, no. 4 (2001): 609-631. Harvard University economist Caroline Hoxby has also shown in a study of the statistical determinants of achievement among a sample of over 16,000 twelfth grade pupils that family variables accounted for more than 93 percent of the variance in mathematics scores. C.M. Hoxby, "If Families Matter Most, Where Do Schools Come In?" in *A Primer on America's Schools*, ed. T.M. Moe (Stanford, California: Hoover Institution Press, 2001), 96-97. Some specific examples of family influences include parental interest and support of their children's education. American scholars have shown that pupils earn higher grades and test scores when parents are involved in their education. A.T. Henderson, "Parents are a School's Best Friends," *Phi Delta Kappan* 70, no. 2 (1988): 148-153; D. Peterson, "Parent Involvement in the Educational Process," *ERIC Digest*, Series Number EA43 (Washington D.C.: ERIC, 1989); E. Eagle, "Socioeconomic Status, Family Structure, and Parental Involvement: The correlates of achievement" (San Francisco: American Educational Research Association, 1989). Pupils also attend school more regularly, complete more homework and demonstrate positive behaviour. Schools with programmes that involve parents have also been shown to out-perform schools that do little to engage parents. Cf. J.L. Epstein, "Theory to Practice: School and family partnerships lead to school improvement and student success," in *School, Family and Community Interaction: A view from the firing lines*, ed. C.L. Fagano and B.Z. Werber (Boulder, Colorado: Westview, 1994), 39-52; J.L. Epstein, "Perspectives and Previews on Research and Policy for School, Family and Community Partnerships," in *Family School Links: How do they affect educational outcomes?*, ed. A. Booth and J.F. Dunn (New Jersey: Erlbaum, 1996), 209-246. Lastly, when parents are involved in their children's school, the relationship between schools and communities improves, and they often develop positive attitudes towards their children's teachers. D. Rich, "Teachers and Parents: An adult-to-adult approach" (Washington D.C.: National Education Association, 1987); J. Bempechat, "The Role of Parent Involvement in Children's Academic Achievement," *The School Community Journal* 2, no. 2 (1992): 31-41.

<sup>9</sup> M. Absolum et al., "Directions for Assessment in New Zealand. Developing students' assessment capabilities," 7-8.

<sup>10</sup> National Party, "National Standards," *Policy 2008*, (2008), 1.

<sup>11</sup> For a list of widely used New Zealand assessment tools and diagnostic tests, see Te Kete Ipurangi, *Assessment Tools: Classroom and school level* (Ministry of Education, New Zealand, 2009), [http://www.tki.org.nz/r/assessment/two/assess\\_tools2\\_e.php](http://www.tki.org.nz/r/assessment/two/assess_tools2_e.php).

<sup>12</sup> National Education Monitoring Project, *About NEMP: An overview* (2009), [http://nemp.otago.ac.nz/\\_about.htm](http://nemp.otago.ac.nz/_about.htm).

<sup>13</sup> Te Kete Ipurangi, *Assessment Tools: Classroom and school level*.

<sup>14</sup> M. Absolum et al., "Directions for Assessment in New Zealand. Developing students' assessment capabilities," 7.

<sup>15</sup> J. Hattie, "What is the Nature of Evidence that Makes a Difference to Learning?" Presentation to the ACER "Using Data to Support Learning Research Conference."

<sup>16</sup> New Zealand Council for Educational Research, *PAT: Reading: Comprehension and Vocabulary (Revised 2008)* (2008), [http://www.nzcer.org.nz/default.php?products\\_id=1933](http://www.nzcer.org.nz/default.php?products_id=1933).

<sup>17</sup> New Zealand Council for Educational Research, "PAT Reading Test Flyer. Revised 2008" (Wellington: 2008), 6.

- <sup>18</sup> Te Kete Ipurangi, *Assessment tools. Star supplementary test of achievement in reading* (Ministry of Education, New Zealand, 2009), [http://www.tki.org.nz/r/assessment/two/star\\_e.php](http://www.tki.org.nz/r/assessment/two/star_e.php).
- <sup>19</sup> Te Kete Ipurangi, *Assessment tools. Star supplementary test of achievement in reading*.
- <sup>20</sup> J.A.C. Hattie et al., "Assessment Tools for Teaching and Learning (asTTle) Version 4, 2005: Manual" (Wellington: University of Auckland; Ministry of Education & Learning Media, 2005).
- <sup>21</sup> How different pupil sub-groups are expected to perform at asTTle questions is determined by the performance data from the asTTle database for the desired pupil population. The performance data is the benchmark for any teacher wishing to compare their own pupils' performance with others. Teachers can compare the average performance of a group of pupils compared to how pupils are performing nationally. This comparison can help teachers to decide whether the strongest or weakest performing pupils are actually performing above or below where the standard for where they should. Further, if asTTle results show wide variance from the norm among the performance of a particular group of pupils they can help point out if teachers need to change how they are teaching. J.A.C. Hattie et al., "Assessment Tools for Teaching and Learning (asTTle) Version 4, 2005: Manual"; J. Hattie, "Large-scale Assessment of Student Competencies."
- <sup>22</sup> This principle is discussed with reference to the English education system in "Report of the Expert Group on Assessment" (London: Department for Children Schools and Family (DCSF), 2009), 23ff: "The school system as a whole places a high level of trust in schools and teachers, but this is not the case in the area of assessment. The assessment system in England could be described as 'weak trust, strong accountability'. We should be aiming, rather, to secure a 'strong trust, strong accountability' system, in which teachers' judgements are seen as reliable, within the framework of strong accountability which we believe is vital to any high-performing school system."
- <sup>23</sup> New Zealand Assessment Academy, "Towards Defining, Assessing and Reporting Against National Standards for Literacy and Numeracy in New Zealand," 3.
- <sup>24</sup> This is unlike the United Kingdom and the United States' education systems which use annual high-stakes curriculum tests to examine literacy and numeracy. The advantages and disadvantages of national testing have received wide attention and spirited debate in educational literature. Some examples of the discussion of national testing may be found in: K.J. Rowe, "Assessment, League Tables and School Effectiveness: Consider the issues and 'let's get real!'" *Journal of Educational Enquiry* 1, no. 1 (2000): 73-98; H. Goldstein and S. Thomas, "Using Examination Results as Indicators of School and College Performance," *Journal of the Royal Statistical Society, A* 159 (1996): 149-163; H. Goldstein, "Methods in School Effectiveness Research," *School Effectiveness and School Improvement* 8 (1997): 369-95; H. Goldstein et al., *The Use of Value-added Information in Judging School Performance* (London: Institute of Education, 2000); G.N. Masters and M. Forster, "The Assessments We Need" (Melbourne: Australian Council for Educational Research (ACER), 2000); J. Hattie, "Large-scale Assessment of Student Competencies"; J. Hattie, "Assessment for Success in Primary Schools. A response to the New Zealand Green Paper on Assessment," (Auckland: 1998).
- <sup>25</sup> J.A.C. Hattie, "Narrow the Gap, Fix the Tail, or Close the Curves: The power of words," in *Correlates of Academic Performance in New Zealand Schools: The asTTle database*, (2008); S. Dinham and K. Rowe, "Teaching and Learning in Middle Schooling: A review of the literature" (Wellington: Ministry of Education, New Zealand, 2008), 12.
- <sup>26</sup> S. Dinham and K. Rowe, "Teaching and Learning in Middle Schooling: A review of the literature," 11-12.
- <sup>27</sup> S. Dinham and K. Rowe, "Teaching and Learning in Middle Schooling: A review of the literature," 11-12.
- <sup>28</sup> Education Review Office, "The Collection and Use of Assessment Information: Good practice in primary schools," 3.
- <sup>29</sup> Education Review Office, "The Collection and Use of Assessment Information in Schools" (Wellington: Education Review Office (ERO), 2007). Data quoted cited in ,Education Review Office, "The Collection and Use of Assessment Information: Good practice in primary schools," 2.
- <sup>30</sup> "Budget 2009. Minister's executive summary" (Wellington: The Treasury, New Zealand, 2009), 8.
- <sup>31</sup> "Budget 2009. Minister's executive summary," 8.
- <sup>32</sup> Rand Corporation, "The Promise and Peril of Using Value-added Modelling to Measure Teacher Effectiveness," *Rand Education Research Brief* (Santa Monica, California: 2004), 1.
- <sup>33</sup> I. Schagen and D. Hutchison, "Adding Value in Educational Research: The marriage of data and analytical power," *British Educational Research Journal* 29, no. 5 (2003): 750.
- <sup>34</sup> Value-added assessments were developed in England after 1992 and have been steadily revised and made more sophisticated to take into account more variables which might influence pupil achievement outcomes. A. Ray, "School Value Added Measures in England" (London: Department for Education and Skills (DfES), 2006). In Australia, the National Assessment Program – Literacy and Numeracy (NAPLAN) began for the first time in 2008, with all students in Years 3, 5, 7 and 9 being assessed using national tests in Reading, Writing, Language Conventions (Spelling, Grammar and Punctuation) and Numeracy. The programme continues in 2009, giving schools and state education systems the ability to compare their pupils' achievements against national standards, with pupil achievement in other states and territories, and to monitor pupils' progress over time. Ministerial Council on Education, *NAPLAN. Background* (2009), [http://www.naplan.edu.au/about/national\\_assessment\\_program-literacy\\_and\\_numeracy.html](http://www.naplan.edu.au/about/national_assessment_program-literacy_and_numeracy.html). Also see J. Buckingham, "Making the Grade: School report cards and league tables," *Issue Analysis* 103 (St Leonards: Centre for Independent Studies (CIS), 2008).
- <sup>35</sup> J. Buckingham, *Schools in the Spotlight: School performance reporting and public accountability* (St. Leonards: Centre for Independent Studies, 2003), 40.
- <sup>36</sup> J. Hattie, "Teachers Make a Difference: What is the research evidence? Paper presented at the Australian Council for Educational Research (ACER) annual conference on 'Building Teacher Quality'" (2003).
- <sup>37</sup> W.L. Sanders, "Value-Added Assessment from Student Achievement Data: Opportunities and hurdles," *Journal of Personnel Evaluation in Education* 14, no. 4 (2000): 335.
- <sup>38</sup> W.L. Sanders, "Value-Added Assessment from Student Achievement Data: Opportunities and hurdles," 335.
- <sup>39</sup> S. Thomas, "Information for Parents," *The Parent Factor*, 3 (Auckland: Maxim Institute, 2005), 6.
- <sup>40</sup> J.A.C. Hattie et al., "Assessment Tools for Teaching and Learning (asTTle) Version 4, 2005: Manual," chapter 2, 16.

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- <sup>41</sup> For more discussion of why teacher retention and recruitment is important and how this could be improved in New Zealand see P. Henderson and S. Thomas, "National Standards for Teachers, Students and the NCEA," *Policy Paper* (Auckland: Maxim Institute, 2008).
- <sup>42</sup> J. Buckingham, "Making the Grade: School report cards and league tables," 7.
- <sup>43</sup> Jennifer Buckingham summarises the New York City ratings programme in J. Buckingham, "Making the Grade: School report cards and league tables," 3.
- <sup>44</sup> J. Buckingham, "Making the Grade: School report cards and league tables," 3.
- <sup>45</sup> J.E. Rockoff and L.J. Turner, "Short-run Impacts of Accountability on School Quality" (Columbia University Faculty of Education, 2008).
- <sup>46</sup> M.A. Winters, "Grading New York: An evaluation of New York City's Progress Report programme," *Civic Report*, 55 (New York: Manhattan Institute, 2001).
- <sup>47</sup> M. Thrupp, "Cautious Approach Needed to National Standards," *The Education Weekly*, 2009, 4.
- <sup>48</sup> J. Buckingham, "Making the Grade: School report cards and league tables," 7.
- <sup>49</sup> Rand Corporation, "The Promise and Peril of Using Value-added Modelling to Measure Teacher Effectiveness," 1-2.
- <sup>50</sup> Rand Corporation, "The Promise and Peril of Using Value-added Modelling to Measure Teacher Effectiveness," 1.
- <sup>51</sup> For a model of an approach to triangulating indicators for assessing teacher performance see P. Henderson and S. Thomas, "National Standards for Teachers, Students and the NCEA," 12-13.
- <sup>52</sup> Currently NAG 1 requires schools to develop teaching and learning programmes and targets that meet the needs of pupils in their schools best, while delivering the national curriculum and helping pupils to make progress with literacy and numeracy. Ministry of Education, *The National Administration Guidelines (NAGs)* (2009), <http://www.minedu.govt.nz/educationSectors/Schools/PolicyAndStrategy/PlanningReportingRelevantLegislationNEGSAndNAGS/TheNationalAdministrationGuidelinesNAGs.aspx>. Planning and reporting legislation also requires schools to report to their Board and the Ministry of Education in their school charters about how well they are achieving their educational targets. Section 61 of the Education Act 1989 establishes that the school charter's purpose is to establish the mission, aims, objectives, directions, and targets of the Board that will give effect to the Government's National Education Guidelines and the Board's priorities. It also provides a base against which the Board's actual performance can later be assessed. NAG 2 (iii) also requires schools to "report to students and their parents on the achievement of individual students, and to the school's community on the achievement of students as a whole and of groups ... including the achievement of Maori students ... ." Ministry of Education, *The National Administration Guidelines (NAGs)*.
- <sup>53</sup> See Ministry of Education, *edCentre* (2009), <http://www.edcentre.govt.nz/education/sector.portal>; New Zealand Qualifications Authority, "www.edCentre.govt.nz - A New Gateway to Education Information," *QA News*, no. 50 (2005); New Zealand Qualifications Authority, *Secondary School Statistics* (2009), <http://www.nzqa.govt.nz/qualifications/ssq/statistics/statsreports.do>.
- <sup>54</sup> "Report of the Expert Group on Assessment," 6.
- <sup>55</sup> Education and Science Committee, "Inquiry into Making the Schooling System Work for Every Child" (Wellington: New Zealand House of Representatives, 2008), 6.
- <sup>56</sup> D. Martin, "Report on the Performance of the New Zealand Qualifications Authority in the Delivery of Secondary School Qualifications" (Wellington: State Services Commission, 2005).