STEPPING THROUGH THE STANDARDS - PASS RATES AND THEIR USES: A CASE STUDY OF A NINETEENTH CENTURY WAIKATO SCHOOL

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ABSTRACT With the Education Act of 1877 and its accompanying regulations of 1878, New Zealand schooling was divided into six Standards. Pupils were examined annually by an inspector and either passed or failed their Standard examination based on their performance in required subjects.

The public of New Zealand and indeed the administrators of education were naturally concerned that there should be "value for money" and "efficiency" in the new national education system which was largely paid for out of public funds. As a measure of this efficiency, pass rates for the Standards examinations rapidly came to be used as an indication of how well teachers in particular and schools in general were performing. However, pass rates could be manipulated by members of the concerned public to show that a disliked teacher was not performing as well as another preferred teacher. Often such concern was voiced through letters to the editor of the local newspaper. Pass rates could also be influenced by teachers when some pupils were not presented for examination for a variety of reasons, thus improving the pass rates for a Standard, and apparently the performance of the teacher and the school. Both public manipulation of the statistics of pass rates and withholding pupils from examination are documented for Cambridge School in the Waikato in the 1880s. This school was converted to a district high school for some five years (1883 - 1888) and the pass rates for pupils in the higher Standards were apparently affected by the introduction of the higher, post-primary subjects. This affected the school's overall pass rate.

INTRODUCTION

In New Zealand the Education Act of 1877 drew upon the Newcastle Commission's ideas of dividing schooling into levels or Standards, but unlike the British system, the curriculum for New Zealand schools was much broader than just the three Rs and included English grammar and composition, history and geography, elementary science and drawing, object lessons, vocal music as well as sewing and needlework and the principles of domestic economy for girls and military drill for boys (Ewing 1970 p.1).

The New Zealand regulations, gazetted in 1878 (New Zealand Gazette 1878 p.1309), gave detailed prescriptions for all the six Standards (which were based on similar prescriptions in the English Codes of the mid-1870s) (Ewing 1970 p.5).

Division of schooling into Standards was already in place in a number of provinces in the early 1870s in New Zealand. Thus when a national system of education was instituted with the 1877 Education Act and the following 1878 regulations, there was no great surprise. However, the regulations implied that all schools were expected to cover the whole curriculum and in the same way irrespective of the size of the schools and the number of teachers (Ewing 1970 p.2). The curriculum regulations disregarded wide differences in the teaching ability of the teachers and made no allowances for small schools in remote area with limited resources.

As in England, the pupils either passed or failed a Standard on the result of the annual examination by the inspector. However, unlike the English system, financing for schools was by a national system of an annual per capita allowance to each school. In New Zealand no payments were made based on the pass rate of the pupils in the examinations, but the public firmly believed that examination pass rates were an indication of the "efficiency" and "effectiveness" of the teaching in a school and the competence of the teacher.

In the nineteenth century, as indeed in the late twentieth century, there were concerns about the efficiency of the education system in New Zealand. This efficiency was both in terms of costs (financial) and also in terms of the standard of learning achieved by pupils. The latter was usually judged on the annual Standards examinations conducted by the inspectors. All subjects were tested, either by individual examination or by class examinations as set out in the syllabus published in 1878 (and later amended). If pupils failed to reach an appropriate level they failed the Standards examination and were required to repeat the whole year's work and were re-tested in the following round of Standards examinations. While failure to pass the Standards examinations had a number of causes (for example irregular attendance at school, changes of location, and mental incapacity of the pupil), the public perception was that all pupils should be able to be "got through" their Standards examination at least up to the exemption level of Standard IV (after which Standard pupils could legally leave school). The success rate of pupils in the Standards examinations was considered to depend, rightly or wrongly, very much on the teachers who taught the pupils. There was a view that a "good" or "efficient" teacher would achieve high pass rates for pupils in all Standards. The converse was believed to be true: high pass rates indicated an efficient teacher.

This paper considers how such public opinion about teacher efficiency operated in a school in the Waikato town of Cambridge in the 1880s. Newspaper reports of the time are studied including a lengthy correspondence comparing two local schools using Standards pass rates to make comparisons between the schools and their teachers.

This paper uses Cambridge School in the Waikato as a case study to consider how Standards pass rates were used publicly to compare primary schools and to compare the efficiency of the teachers. Newspaper reports of the time show that pass rates could be manipulated to suit a particular view as to the efficiency of a school compared to another school. The actual Standards pass rates also be manipulated by teachers who determined which pupils were to be presented for examination with a view to producing good pass rates.

It is concluded that, while pass rates could be used by the community to compare schools and to compare teachers, the pass rates could also be subject to manipulation to achieve pass rates advantageous to both teachers and school.

PUBLIC USE OF PASS RATES FOR COMPARISONS

The success or otherwise of a teacher was judged throughout New Zealand usually on the basis of how many pupils he or she managed to "get through" the Standards examinations. Depending on who was calculating the teacher's performance various statistics could be called upon to show how well, or, conversely, how poorly the teacher had done his or her job. The number of pupils who passed each Standard, along with the number who had been presented for examination, was generally well documented both in the inspectors' reports and in the newspapers. What proved to be much more unpredictable, however, was the way in which these figures could be employed in conjunction with various attendance and school roll data to calculate a performance rating profile for individual teachers or headmasters. The pass rate of pupils presented for examination was a reasonably easy calculation to perform, involving the number of pupils who passed some Standard being divided by the number of pupils presented for examination, the result being expressed as a percentage. But determining the pass rate for the whole school proved to be a much more elusive task. What such rates meant in terms of pupil and teacher "efficiency" was also open to much debate. The pass rate could be calculated either on the basis of the number of pupils who passed some Standard being divided by the number of pupils on the school roll, or by using one of the two types of average attendance calculations for pupils (which has been shown to be variable - see Hodder 1996 p. 50-51). As well as these various calculations, pass rates were calculated by grouping together the passes for the lower three or four Standards as suited the writer's needs (see Appendix 1). Individual schools and teachers were compared by using either one calculation or a number of such calculations. At the end of 1883 and the start of 1884, for example, a number of letters to the editor were published in the Waikato Times (Appendix 1) which compared the pass rates for Cambridge East School (Mr Stewart's school) and Cambridge West School (Mr Hyatt's school). Agricola, for example, writing in response to an earlier letter by Justitia (which has not been traced) compared the Cambridge East and West Schools. He (presumably a male correspondent as was usual at the time) noted that the Cambridge West head master, Mr Hyatt, had mostly Standards I, II, and III level pupils who passed their examinations whereas Mr Stewart of Cambridge East had "success ... in admittedly the most difficult standards viz. 4, 5, and 6". The author of the letter then went on to note that:

In November 1881 he [Mr Stewart] passed 89.5 [%] of the children actually examined and 100% in 5 and 6 standards. In August 1882 for nine months work (including two months holiday) 76.5 and 83% in higher standards. In 1883, 81.1 and 89% in higher standards.

Agricola also concluded that "to compare schools whose circumstances are so entirely different in the ages and numbers of children is unfair to both, and is entirely worthless as a test of the capabilities of the respective teachers".

In another letter to the editor, Ignoramus responded to both Agricola and Justitia. He noted that Justitia had written: "For the year 1882, out of 87179 children on the roll in the colony, 35% passed some standard. Those passing some standard in Cambridge East school was 34.24%, being nearly one percent below the average school" (Appendix 1). Ignoramus then proceeded to note, in rather colourful prose, that this statement from Justitia "places the teacher's success before the school committee and the public in its true colours, aims at the very soul of the school, lays bare its nakedness, takes the school from the high pedestal from which it has been unduly placed".

Justitia wrote another letter to the editor (Appendix 1) in which he observed that in his earlier (untraced) letter he had stated that "Mr Stewart's school [Cambridge East] passed 34.24 percent of all children on the roll, whilst Mr Hyatt [Cambridge West] passed 46.03 percent which comparison is highly unsatisfactory for Mr Stewart's school and clearly shows that Mr Hyatt's has made the best results". Justitia, pursuing this line of argument further, wrote that

Mr Stewart's school for 1882 passed of those presented in Standard I 70.37%, Standard II 82.6%, Standard III 71.41%, Standard IV 80%; whilst Mr Hyatt's school for the same year passed of those presented Standard I 87.5%, Standard II 90%, Standard III 71.44% and Standard IV 100%, being about 17 and 20% above Mr Stewart's school in the Ist and IVth Standards, respectively (Appendix 1).

Justitia then went on to extrapolate that "If Mr Hyatt had scholars advanced to the Vth and VIth Standards no doubt the result would be much the same, it being admitted by all teachers that the first IV Standards are the most difficult to teach with success".

From the above extracts it is clear that each of the writers sought to use statistics or pass rates to suit his own ends. The first writer, Agricola, quoted pass rates of pupils examined, and separated out for special mention the pass rates for pupils in the higher standards (V and VI). Ignoramus, in response to Agricola, quoted the pass rates as a percentage of all the children on the school rolls in the whole country and compares this with the pass rate percentage for all the children on the roll of the Cambridge East School, highlighting the difference as being "nearly one percent" when the difference is actually nearer three-quarters of one percent (0.76%). Ignoramus therefore sought to invoke a national comparison rather than a local one. Finally, Justitia, in response, quoted the pass rates of those pupils who were presented for each Standard separately, and compared the rates for Cambridge East and West Schools. The rates were generally higher for the Cambridge West School, and the author of the letter (Justitia) considered this to mean that, if there were pupils in Standards V and VI at Cambridge West, their success rate would naturally be higher than for the pupils at Cambridge East. These extracts show how each writer used a different set of figures, calculated to support his point of view and support his claims. The reader is left wondering just which was the better school and who was the more successful headmaster, or if indeed there was any real difference between the schools and the teachers. In

these letters to the editor it seems clear that the writers were attempting to show which teacher was most "efficient", this efficiency being determined by the number (or percentage) of pupils who passed the Standards examination. The writers assume that these pass rates clearly indicate which school is "better". The issues raised in these letters reflect the concerns of the community about the "standards" of education in the local schools. The matters that arise from this correspondence included a consideration of the level to which pupils were being educated, and how many pupils were successful in passing the Standards examinations.

These figures were taken to indicate how efficient were the headmasters in particular and the teachers in general. The data, in turn, were taken as a measure of how well the staff in the school were performing their duty in educating the children at the schools. From the correspondence in the local press, therefore, it seems that, depending on the writer's point of view, either Mr Stewart's school or Mr Hyatt's school was doing a better job of educating children.

TABLE 1. Numbers of pupils passing various Standards at Cambridge East School 1880 - 1887 (sources: Cambridge school register, Waikato Times, inspector's class lists for 1883 and 1885)

Std	Type	1880	1881	1882	1883a	1883b	1884	1885a	1885b	1886	1887	
I	Males	20	12	6	4	16	7	13	15	14	14	
	% *	34.5	16.7	7.8	4.9	18.8	11.7	12.7	13.9	15.1	11. <i>7</i>	
	Females		2	14	19	12	5	19	17	11	13	
	% *	1.7	2.8	18.2	23.5	14.1	8.3	18.6	15.7	11.8	10.8	
	Total	21	14	20	23	28	12	32	32	25	27	
	%#	36.2	19.4	26.0	28.4	32.9	20.0	31.4	29.6	26.7	22.5	
II	Males	18	21	17	9	10	7	9	15	10	11	
	% *	31.0	29.2	22.1	11.1	11.8	11.7	8.8	13.9	10.8	9.2	
	Females		2	3	11	8	15	16	11	12	15	
	% *	0.0	2.8	3.9	13.6	9.4	25.0	15.7	10.2	12.9	12.5	
	Total	18	23	20	20	18	22	25	26	22	26	
	%#	31.0	31.9	26.0	24.7	21.2	36.7	24.5	24.1	23.7	21.7	
III	Males	11	15	10	9	8	8	5	8	6_	9	
	% *	190	20.8	13.0	11.1	9.4	13.3	4.9	7.4	6.5	7.5	
	Females		0	4	3	4	5	10	13	10	15	
	% *	0.0	0.0	5.2	3.7	4.7	8.3	9.8	12.0	10.8	12.7	
	Total	11	15	14	12	12	13	15	21	16	24	
	%#	19.0	20.8	18.2	14.8	14.1	21.7	14.7	19.4	17.2	20.0	
IV	Males	7	11	11	7	4	4	10	7	5	7	
	% *	12.1	15.3	14.3	8.6	4.7	6.7	9.8	6.5	5.4	5.8	
	Females		0	1	4	6	3	3	5	15	11	
	% *	0.0	0.0	1.3	4.9	7.1	5.0	2.9	4.6	16.1	9.2	
	Total	7	11	12	11	10	7	13	12	20	18	
	%#	12.1	15.3	15.6	13.6	11.8	11.7	12.7	11.1	21.5	15.0	
V	Males	1	8	6	7	3	2	5	5	6	5	
	% *	1.7	11.1	7.8	8.6	5.5	3.3	4.9	4.6	6.5	4.2	
	Females		0	1	1	6	2	4	4	0	12	
	%*	0.0	0.0	1.3	1.2	7.1	3.3	3.9	37	0.0	10.0	
	Total	1	8	7	8	9	4	9	9	6	17	
	%#	1.7	11.1	9.1	9.9	10.6	6.7	8.8	8.3	6.5	14.2	
VI	Males	0	1	4	6	4	1	5	2	2	7	
	%*	0.0	1.4	5.2	7.4	4.7	1. 7	4.9	1.9	2.2	5.8	
	Females	s 0	0	0	1	4	1	3	6	2	1	
	% *	0.0	0.0	0.0	1.2	4.7	1.7	2.9	5.6	2.2	0.8	
	Totals	0	1	4	7	8	2	8	8	4	8	
	%#	0.0	1.4	5.2	8.6	9.4	3.3	7.8	7.4	4.3	6.7	
Total	passes											
	Males	57	68	54	42	45	29	47	52	43	53	
	Females		4	23	39	40	31	55	56	50	67	
	Total	58	72	77	81	85	60	102	108	93	120	

^{%* =} proportion of pupils passing this Standard as percentage of total passes for the year %# = proportion of pupils (males + females) passing this Standard as percentage of all passes for 1883a, 1885a - data from Cambridge school register and *Waikato Times* 1883b, 1885b - data from inspector's class lists

Thus, if the success of a school or of a head teacher was to be judged on the pass rate of pupils in the various Standards then it could be concluded that in 1885 Mr Washington Stewart was more successful than his predecessor in 1883 (Mr Ralph Stewart) since the pass rates for all Standards improved or remained at least as high as under the previous head teacher. It is evident from Table 1 that the pupils in the two highest Standards showed no improvement in their pass rate, and it was generally in these Standards that the high school pupils were to be found. The inspector's summary figures for 1885 include a note at the top of the list "These include DHS". Nine pupils were identified by the inspector as being in the district high school: 4 were in Standard VI (2 males, 2 females), 4 were in Standard V (2 males, 2 females), and 1 was in Standard IV (1 female). Of the high school pupils in Standards V and VI, all passed their Standards examination. The high school pupil in Standard IV was listed as a "new comer" by the inspector, and did not pass the examination.

Thus in spite of the comments by Inspector Goodwin claiming that high school pupils "would make only slow progress with their studies" (AJHR 1886 E-1B p.3) it appears that in 1885 at Cambridge this was not the case for the high school pupils sitting the Standards' examinations. They were generally successful.

OFFICIAL STANDARDS EXAMINATIONS

Standards examinations for primary school classes were introduced as a consequence of prescribing a curriculum in the Education Act of 1877. Details of the syllabus to be covered for each Standard for each subject were published in 1878 in the *New Zealand Gazette*. Under the 1877 Education Act the twelve Education Boards had the responsibility of inspecting the schools in their area to ensure that pupils had mastered the prescribed tasks associated with each Standard. To make this possible the Education Boards employed their own inspectors who travelled around the Education Board's district, examining the children presented for examination in all the primary schools. Because of the workload of these Board inspectors the month when the Standards examinations were conducted varied from year to year for each school. Thus, for example, at Cambridge (East) School over a five-year period the Standards examinations were held between July (in 1883) and November (in 1887) (see Table 2).

TABLE 2. Dates when Standards examinations were held at Cambridge East School; NK= not known (sources: Cambridge school register, *Waikato Times*, AJHR)

Year	Date	e of examination	Inspector for Waikato schools
1880	15	November	Mr Peacocke
1881	3	November	NK
1882	2	August	NK
1883	24	July	? Mr Goodwin
1884	4	August	Mr Fidler
1885	17	September	Mr Goodwin
1886	13	October	Mr Fidler
1887	7	November	Mr O'Sullivan
1888	?	October	Mr Goodwin
1889	?	November	NK
1890	?	November	NK

This paper considers the Standards examinations and the pass rates for Cambridge School during the years 1880 to 1888 during which time it became a district high school. Records of pass rates vary considerably according to the source used with, in this case, the school records being the least reliable. Pass rates were known by the local community, often being published in great detail in the local newspapers, and these rates were used (sometimes creatively) to compare schools and the "success" of teachers and head masters.

ACTUAL STANDARDS EXAMINATIONS PASS RATES

According to the regulations, at the time of the Standards examinations all pupils in Standards I to VI were required to be presented for examination unless their attendance in the previous three quarters was less than one half of the available half days (Cumming & Cumming 1978 p.107). To pass a Standard a pupil was required to be present during the examination in the class subjects for his or her Standard and to satisfy the inspector in all the pass subjects for the same Standard. In reality, however, not all pupils were presented for examination at each opportunity. The proportions of the pupils at the Cambridge School who were presented for examination in all of the Standards and those who passed in the years 1880 to 1885 are given in Table 3. In 1885 compared to 1884, for example, there was a marked increase in the proportion of pupils presented for examination who passed, although the actual number of pupils who passed was quite low. It is also noteworthy that the proportion of the Cambridge School presented for the Standards examinations declined from 1880 to 1882. Perhaps it was a policy of the headmaster at the time, Mr R.D. Stewart, to ensure good pass rates for the school that he would enter only those pupils whom he predicted would perform well in the various Standards examinations.

In 1884 the proportion of the school presented for examination was higher than in the previous year, maybe as a result of the change of head master that had taken place between February 1884 (when Mr R.D. Stewart left) and before the arrival of Mr W. Stewart in September 1884, a month after the 1884 Standards examination (Table 2). The rise in the proportion of the school roll presented for examination at this time was unlikely to have been the result of a change in the policy of the Education Board which required more pupils to be presented for examination. A change in the Board's rules on presenting pupils for examination had come into effect in January 1883, which required that all pupils over the age of eight years and who had attended school for 250 or more half-days in the year must be presented for examination in the Standard above the last one they had passed (AJHR 1883 E-1B p.1). It would be expected that the application of this rule should serve to increase the proportion of the school presented for examination, and would certainly have decreased the proportion of those presented for examination who passed, as noted by Inspector O'Sullivan at the time (AJHR 1883 E-1B p.1) (presumably because the pupils would not have been well prepared for the examination). Caution is required in interpreting the data for 1883 in Table 3, however, since it is clear that the data for the proportion of the school roll being presented for examination is incorrect. The percentage of the school presented for examination, for example, is lower than the proportion of the school stated as having passed some Standard. This inaccuracy could have resulted from incorrect calculations made by Mr Hosking, a member of the Cambridge School Committee who was commissioned by the Committee to write a report on the pass rates at Cambridge School. His report was reproduced in full in the *Waikato Times* of 18 October 1884 (see Appendix 2). Alternatively, the newspaper may have misprinted the figures for the percentage of the school presented for examination. It is impossible to determine definitively which of these possibilities resulted in the obvious error, although it is more likely that the newspaper misprinted the figure rather than it being a mis-calculation by Mr Hosking, who was employed as an engineer for the Cambridge Town Board and thus was used to working with figures.

As noted above, for 1884, there is a marked difference in the proportion of the school presented for examination and the proportion of the school passing some Standard, the pass rate of those presented being only 60% (Table 3). This rather poor performance may have been partly a result of the new Board rule, taking effect from the beginning of 1883, that required pupils to be presented for examination who perhaps were unlikely to pass and who in previous years would not have been presented. Another factor that may have affected the pass rate in 1884 was the operation of the district high school.

In 1883 the Cambridge (East) School was converted by the Auckland Education Board into a district high school (Hodder 1996). The pupils in the district high school department were generally working towards the Standard V or VI examination as well as studying extra high school subjects, as judged from the school register (see Hodder 1996 Chapter 9). The Inspector in 1883 and 1885 in the Waikato, Mr J.S. Goodwin, noted that such pupils could be expected to make only slow progress in their studies (presumably both the Standards work and the higher subjects) (AJHR 1886 E-1B p.3). In 1884, for example, the number of pupils passing both Standard V and Standard VI was small compared to the number presented (Table 3), which suggests that the high school pupils were less successful in passing these Standards' examinations than if they had not been in the high school department. This low pass rate indicates that the retention rate of pupils into the two highest Standards was low in the 1880s, in the first case, and that the Inspector might have examined the work of the senior Standards more rigorously, because they were specified as being the more advanced Standards.

By 1885, however, there was a marked increase in the pass rate for those pupils who were presented for examination. This improvement may be evidence of the positive influence of the new headmaster, Mr W. Stewart, who arrived at Cambridge School in September 1884 just after the Standards examinations were undertaken for that year. Although in 1885 the proportion of the school presented for examination was lower than for 1884 (42.7% for 1885 and 53.6% for 1884) the success rate in 1885 was almost perfect (95% compared with 60% in 1884). This suggests that there may have been some selection of pupils to be presented for examination to ensure good pass rates.

TABLE 3. Variable data for pass rates for Standards examinations at Cambridge East School (sources: various - see Hodder 1996 p.58 Table 5.3 for full details of sources)

		Year							
Std	Type of data	1880	1881	1882	1883	1884	1885	1887	
I	No. presented No. passed	21	22 14	20	32 23 28	37 26 12	32 32	35 28	
	% pass		95.5	0.37	20	70.3	100.0		
II	No. presented No. passed	18	23 23	20	20 20 18	39 22 23	25 25	31 27	
	% pass		78.3	82.6		59.0	100.0		
Ш	No. presented No. passed	11	17 15	14	22 12	26 13 16	24 15 21	30 27	
	% pass		88.2	71.41		61.5	87.5		
IV	No. presented No. passed	7	11 11	15 12	12 11 10	10 7	12 13 1	19 18	
	% pass		100	80.0	83.3	70.0	100.0		
V	No. presented No. passed	1	8 8	9 7	9/10 8 9	10 4	10 9	21, 22 21	
	% pass		100	76.5	81.1 90.0	40.0	90.0		
VI	No. presented No. passed	0	1	4	9 7 8	11 2 4	9 8	13 13	
	% pass		100	83.0	89.0 88.8	36.4 36.3	88.9		
Total n	o. presented	100 91	96	97	110 105	133	112	124 151	
Total no. passed 115			80	86	75	85	80	109	
(all sources)								107	
% total school presented			<i>7</i> 7.5	44.7	44.4 45.7	32.6	53.6	42.7	
% total school passing a std.		62.0		34.24	35.8 36.9 45.0	32.3 32.2	41.6		
% thos	e presented who passed	80.0 86.0	89.6 89.5	77	77.2 80.9 81.0	60.2 60.1	95.0	89	

PASS RATES AND THE DISTRICT HIGH SCHOOL

Overall, it is difficult to determine the real effect on the examination pass rates of the opening of the high school department at the Cambridge School in June 1883 because of the timing of the Standards examinations. In 1883 the Standards examinations were held just after the high school department was opened, and thus the pupils had not been taught the Standards' work in the high school. In Hamilton, where a district high school was also opened in June 1883, the chairman of the Hamilton East School telegraphed the Inspector, Mr O'Sullivan, about the children moving to the high school who were still able to sit the Standards examinations for which they had been preparing at the primary school. The Inspector replied that pupils could move to the high school "without running the risk of losing their proper status in the district schools" (Waikato Times 30 June 1883 p2c4). The situation at Cambridge appears to have been a little different. In the recorded list of pupils not presented for examination in 1883 were six high school pupils, along with one additional high school pupil who was not identified as a high school pupil but who had already passed Standard VI (Class list for 1883). Of the six pupils not presented for examination three girls were in an unknown class, not having passed any Standards previously; two girls and one boy who were not presented were in Standard V. Sixteen of the high school pupils, however, were presented for examination in various Standards and of these only two failed to pass their Standard. It appears that the high school pupils who were unlikely to pass the Standards examinations were not presented, ensuring that the pass rates for those presented were high.

In 1884 the Standards examinations at the Cambridge School were held just before the arrival of the new headmaster, Mr W. Stewart, and followed a period of staff upheaval at the school (Hodder 1996 p.83-84). From the data in Table 3 and the comments of the Inspector, Mr Fidler, who is reported as saying that the poor results could have been "expected from the troubles and changes which have taken place during the year and which must tell prejudicially on any school" (Waikato Times 6 Sept 1884 p2c7), it seems likely that the opening of the high school department affected the pass rates for the Cambridge School adversely.

PROPORTION OF PUPILS PRESENTED FOR EXAMINATION

As noted earlier, in 1885 there was a marked increase in the proportion of those pupils who were presented for examination who passed. This increase can be seen for all Standards, but it must be noted that the actual number of pupils presented for each Standard was quite low. In the period 1880 to 1884 the number of pupils presented for examination and the number of those who passed did not vary greatly, but in 1885 there was an increase in the proportion of those who were presented for examination who passed (perhaps indicating the influence of a new headmaster and other staff changes - see Hodder 1996 p. 86), accompanied by a decrease in the actual number of pupils presented for examination. There was an increase in the proportion of the total school roll who passed some Standard, which indicates that the total school roll must have been lower in 1885 than in the previous year since the actual number presented for examination in 1885 was less than in 1884. In order to gain an increase in the proportion of the school roll

passing some Standard the total number of pupils on the roll must necessarily have been less. It should be noted that inaccurate or incomplete information was often recorded in the school register (Table 4).²

TABLE 4. Comparison of Cambridge school register recorded Standards passes and data from inspector's records for the two years 1883 and 1885.

(sources: Cambridge school register, inspector's class lists)

	Ma	ales	Fer	nales	Total		
Std	School	Inspector	School	Inspector	School	Inspector	
1883							
I	4	16	19	12	23	28	
II	9	10	11	8	20	18	
III	9	8	3	4	12	12	
IV	7	4	4	6	11	10	
V	7	3	1	6	8	9	
VI	6	4	1	4	7	8	
Totals	42	4 5	39	4 0	81	85	
1885							
I	13	15	19	17	32	32	
II	9	15	16	11	25	26	
III	5	8	10	13	15	21	
IV	10	7	3	5	13	12	
V	5	5	4	4	9	9	
VI	5	2	3	6	8	8	
Totals	47	52	55	56	102	108	

It appears that of those pupils presented for examination at Cambridge School usually about 70-80% (occasionally higher) passed their examination. But there were exceptions - the lower pass rates for 1884, particularly for Standards V and VI, for example. As noted earlier, this may have been a consequence of some high school pupils doing the work of Standards V and VI as well as studying additional or high school subjects. There is no information available on whether all Standard V and VI pupils were enrolled in the high school, but it would seem that this was not the case since high school pupils were required to pay a fee (all district high school pupils were charged fees for studying higher subjects - Hodder 1997). Not all parents would have been prepared or able to pay for their children to study the primary school curriculum in a post-primary department, when they were entitled to receive tuition free of charge under the 1877 Education Act. At the Hamilton East District High School three pupils were listed as having passed Standard VI in the high school, and three other pupils were listed as passing the same standard in the primary school. Similarly, five pupils passed Standard V in the high school and seven other pupils passed the same standard in the primary school. In addition, two pupils were listed as having passed Standard IV in the high school while six pupils passed Standard IV in the primary school (Waikato Times 30 Aug 1884 p3c1). It is expected that a similar situation occurred at Cambridge, and it is reasonable to assume that, like Hamilton East School, the pupils in the higher standards at the Cambridge School were not all enrolled in the high school department.

The reason for the drop in 1884 in the proportion of pupils who passed their Standards examinations is not clear (except as noted earlier for Standards V and

VI), but the proportion of the school who passed some Standard may have been affected adversely by the absence of the stabilising influence of a permanent headmaster. Mr James Collier was acting headmaster for about 3 months from March 1884, and Mr Washington Stewart took up his duties as the new permanent headmaster in September 1884. In 1884 a larger number of pupils and a greater proportion of the total school were presented for examination, perhaps because of changes to the staff which meant that the teachers were unfamiliar with the actual capabilities of the pupils. In 1884 the number of pupils presented for examination who were successful candidates was similar to that of previous years, but because more pupils were presented for examination, the proportion who passed was lower.

A further consideration is the number of pupils on the Cambridge school roll. The number of pupils on the roll increased each year from 1880 to 1888 (Hodder 1996, p. 52, Table 5.1), but there was a slightly larger increase for 1884. The attendance appears to have increased in the fourth quarter of 1884 compared to that of the third quarter, and the working average attendance³ for the whole year also shows an increase in 1884. An increased attendance in the fourth quarter may have been related to the re-opening of the high school which was closed for about six months at the beginning of 1884, after the removal of the head master, Mr R.D. Stewart, and the assistant master, Mr J.K. Wright. But by the end of the year there were about 12 high school pupils in attendance (see Hodder 1996, p.116, Table 8.1).

Thus, the following points can be noted. First, the effect of the opening of the District High School on the pass rates of pupils was negative: the pass rates for Standards V and VI in 1884 were much lower than for the previous two years. The number of pupils presented for examination did not differ much for Standard V between 1883 and 1884, but increased for Standard VI in 1884 compared with 1883. The pupils presented for examination in Standards V and VI in August 1884 would have passed the earlier Standard (IV or V) in July 1883 or earlier; that is, before the high school became operational.

Second, the low pass rates for Standards V and VI in 1884 (Table 3) were affected in a negative way; the proportion of those pupils presented for examination who passed some Standard and also affected the proportion of the total school who passed a given Standard. This could be seen as resulting from the high school pupils' failure to pass Standards V and VI because they were also studying high school subjects, and therefore they could devote less time to the normal Standards work.

A third consideration is that in 1885 there was a marked improvement in the proportion of pupils presented for examination who passed, particularly for those presented for examination in Standards V and VI. This may have been because of the change in the teaching staff and the staff re-organisation at the Cambridge School, with the headmaster in 1885 becoming responsible for the high school pupils. It could also be because by 1885 the pupils in the high school had already passed Standard VI, and thus were not dividing their efforts between the primary and the district high school departments. Furthermore, there were few high school pupils in attendance at this time (see Hodder 1996, p. 116 Table 8.1).

Apart from reporting on the success or otherwise of individual pupils in their subjects, the inspector in some cases noted his views about certain pupils, generally those in the lower Standards. Common remarks made by the inspector on the examination lists in 1885 are given in Appendix 3 which also includes a list of reasons given by the teacher for not presenting certain pupils for examination.

It appears that it was not only the teacher who withheld pupils from the Standards' examinations but there was also parental intervention. In 1886 Rev. J.S. Rishworth, a parent and a member of the school committee in that year, withheld his two sons Stanley and Henry (also known as Harry) from school at the time of the Standards examinations, and wrote an explanatory note to the head teacher as follows4:

Mr Stewart

St Paul's Parsonage 13.10.86

Dear Sir,

The reason of my boys absence (Stanley & Harry) from school this [day?] is that they would not be profitably occupied during the progress of standards exams. [I send?] you their std. certificates to show you that they have long ago passed the sixth and I am decidedly opposed to their being examined for Standard work again.

> Yours sincerely, J.S. Rishworth

At this time Stanley Rishworth was aged 15 years 8 months and his brother Harry was aged 14 years 7 months and both boys were listed as having passed Standard VII on the inspector's list of pupils for that year. It is clear from this letter that Rev. Rishworth wanted his sons to study higher or post-primary subjects rather than spending time repeating Standards work that they had already passed.

CONCLUSIONS

Over the years the percentage pass rates for the various Standards examinations at Cambridge fluctuated markedly and perhaps excessively, which may reflect the inaccurate record-keeping within the school register. Another explanation may rest with the variable nature of the Standards examinations, which seemed to depend on the particular inspector who undertook the examining (Table 2). This point was raised by the Hon. Sir Robert Stout, Minister of Education, who noted the "great variation amongst the various education districts in passes in the standards", and lamented that this was due to "the fact that in the district the mode of inspection varies" (Stout 1886 p.18). The success and perceived efficiency of teachers rested on such considerations or judgements of performance, and a teacher could have been at a great disadvantage because of the vagaries of the inspector at the time of examination. The variable length of time between examinations also meant that in some cases a teacher taught the syllabus for a given Standard over a nine month period only, with a break in the middle for the summer holidays, whereas in other years thirteen months elapsed between the examinations (Table 2). On at least one occasion one inspector, Mr Fidler, noted that the Auckland Education Board had decreed that the Standards examination in the Bay of Islands should be brought forward by as much as four months "to prevent the examination taking place during the winter" (AJHR 1886 E-1B p.5).

The pass rates for the Standards examinations at Cambridge School (Table 3) show a decline in 1884, the first full year for the operation of the District High School, i.e. there was a drop in the proportion of the pupils presented for examination who passed. In the years before 1884 there was generally little change in these pass rates. In 1885 there was a marked increase in these pass rates, although there was a decline in the proportion of the school population who were presented for examination.

It is not surprising, therefore, that in a small community such as Cambridge (with a population of about 1000), considerable public discussion would take place about the perceived inefficiency of the instruction given at the local primary school. The performance of teachers was under close and critical scrutiny, a situation that was clearly not assisted by frequent changes in staffing and serious doubts being expressed about the operation of the school's district high school department (Hodder 1996, p. 91-92).

Pass rates in the Standards examinations were related to the number of pupils presented for examination. This number could be manipulated to help achieve favourable pass results. This manipulation could be done by teaching staff to give the school and particularly the teachers good results.

Standards pass rates were commonly used to compare schools and were used by communities to judge the efficiency of teachers. Comparisons between schools were used to rank both the schools and the individual teachers. There seems to be a similarity with the present use of School Certificate and Bursary passes achieved by pupils to rank secondary schools. It seems that some things have changed little over the past one hundred years - communities and education authorities still find it useful or necessary to compare institutions and find appropriate measures to enable them to do so.

END NOTES

- 1. Class lists were in fact the examination lists filled in by the inspector when he examined each pupil in each Standard. In some cases a summary sheet listed the passes in each Standard and also gave the number of pupils examined in each Standard. These original sheets are held at National Archives in Auckland.
- 2. Considering the data in the school register and the data from the inspector at the time of examination, there are wide discrepancies (Table 4). The school register recorded 23 pupils passing Standard I while the inspector recorded that he passed 28 pupils. This may have been due to incomplete recording of passes in the school register. However, there were also discrepancies between the passes recorded in the school register and the passes reported in the newspaper at the time. Two such examples relate to the differences between the number of pupils listed as having passed Standard I in 1884 (26 [from Waikato Times 6 Sept 1884 p2c7] versus 12 from the school register) and for Standard III in 1885 (21 from the Waikato Times [6 Sept 1884 p2c7] and 15 from the school register). Such inaccurate record-keeping has made it difficult to ascertain the precise number of pupils who passed various examinations unless the inspector's report was available which may give the most accurate number of pupils who passed various Standards examinations.

3. The working average attendance is calculated as:

where: a = number of morning attendances

number of afternoon attendances

b = number of times the school was open in the morning where number attending was less than half number on the roll

c = number of times the school was open in the afternoon where number attending was less than half number on the roll

d = number of times the school was open during the morning during the period under consideration

e = number of times the school was open during the afternoon during the period under consideration

This differs from the strict average attendance which is calculated as:

a + pf + n

where: a = number of morning attendances

p = number of afternoon attendances

f = number of times the school was open in the morning during theperiod under consideration

n = number of times the school was open in the afternoon during the period under consideration

The original of this letter is filed with the class lists for Cambridge School 4. held at National Archives, Auckland.

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APPENDICES

Appendix 1 - Extracts from letters to the editor of the *Waikato Times* from members of the public. For the full text of these letters see Hodder 1996, p.210-213, Appendix 5.5.

Waikato Times 18 December 1883 p2 c8 - Letter to the Editor by Agricola under the heading "The Cambridge School"

... endeavours to show that the Cambridge East School has not come up to the standard of an average good school of the colony... It must be obvious that it is most unfair and misleading to compare a large school with a small one. Were Justitia to compare Cambridge East School with the Auckland City schools, the comparison would be much in favour of the Cambridge School, and for a similar reason Justitia tries to score a point by showing that the proportion of passes to the roll number is greater in the Cambridge West School than in the Cambridge East School, but this statement must be taken in connection with the following facts. All the children attending the Cambridge West School come from a considerable distance - thus the attendance of very young children. Whilst, the Cambridge East School, being situated in the centre of Cambridge East, and close to the bulk of the population in Cambridge West, is attended by a very large number of young children, many of whom are under the age of 8 years. Now, as 8 is the age fixed by the board when a child must be presented for Standard I, it consequently follows that a large proportion of the children attending Cambridge East School cannot be sent forward for examination. Then Mr Stewart is said to have had another advantage in having extra staff. It is true that he has had a larger staff than allowed by the board, but it has consisted entirely of young teachers, sent here to be trained ... let me ask "Justitia" in what standards did Mr Hyatt make his progress? On enquiry he will find almost entirely in 1, 2 and 3, whilst Mr Stewart's success was in admittedly the most difficult standards, viz, 4, 5 and 6... let me state the results obtained by Mr Stewart. In November 1881 he passed 89.5[%] of the children actually examined and 100% in 5 and 6 standards. In August 1882 for nine months work (including 2 months holiday) 76.5 and 83% in higher standards. In 1883, 81.1 and 89% in higher standards. Let us look at actual figures for 1883. 4th standard 12 presented, 10 passed, 5th and 6th standards, 19 presented, 17 passed. Then what has Cambridge West done in preparing candidates for district scholarships? I contend that to compare schools whose circumstances are so entirely different in the ages and numbers of children is unfair to both, and is entirely worthless as a test of the capabilities of the respective teachers.

Waikato Times 22 December 1883 p2 c7 - Letter to the editor by Ignoramus under the heading "Remodelling the teaching staff Cambridge High School"

... by adhering to the figures of "Justitia" it is shown the school does not come up to the average school of the colony. "Justitia" writes "For the year 1882, out of 87, 179 children on the roll in the colony, 35% passed some standard. Those passing some standard in Cambridge East School was 34.24%, being nearly one percent. below the average school"...

Waikato Times 1 January 1884 p2 c8 - Letter to the editor by Justitia under the heading "Remodelling the teaching staff Cambridge High School"

... If the city schools' standard of attainment is so far below Cambridge East School (Mr Stewart's) as that school is below Cambridge West (Mr Hyatt's) school, it is high time a remodelling motion was adopted in Auckland. In a published letter, I stated Mr Stewart's school passed 34.24 percent. of all children on the roll, whilst Mr Hyatt's school passed 46.03 percent., which comparison is highly unsatisfactory for Mr Stewart's school and clearly shows that Mr Hyatt's has made the best results ... Take Agricola's version " eight is the age fixed by the board when a child must be presented for Standard I". He omits to say, however, that a child may be presented when 6 or 7, if qualified. This point is most damaging to the Cambridge East School ... Results speak for themselves. Mr Stewart's school for 1882 passed of those presented in Standard I 70.37%, Standard II 82.6%, Standard III 71.41%, Standard IV 80%: whilst Mr Hyatt's school for the same year passed of those presented Standard I 87.5%, Standard II 90%, Standard III 71.44%, and Standard IV 100%; being about 17 and 20% above Mr Stewart's school in the Ist and IVth standards, respectively. If Mr Hyatt had scholars advanced to the Vth and VIth standards no doubt the result would be much the same, it being admitted by all teachers that the first IV standards are the most difficult to teach with success ... "Agricola" like many other despairing men, quotes as his last effort that Mr Stewart

passed 89.5 percent of the children actually examined in 1881. He could not have known that the conditions have absolutely changed since 1881 ... In that year teachers were allowed to present those children for examination only who were supposed to be certain to pass, and it would be very instructive to the public to know what percent of the whole school passed some standard in that year. Again, "Agricola" is wrong in his figures. He says for 1882, 76.5 and 83%, and in 1883, 81.1 and 89% passed in higher standards ...

Appendix 2 - Extracts from the report of Mr G.F. Hosking (member of the Cambridge District High School Committee) submitted to the Cambridge School Committee 1884 (source: Waikato Times 18 Oct 1884 p2c8; for full text of this report see Hodder 1996 p.215, Appendix 5.3)

... On the face of the inspector's report, it is shown by the percentage of passes in the standard of those presented, that the school has not maintained its previous efficiency in any standards except III, which is above last year's result. The school is weakest in VI and V Standards, which passed this year respectively 36.3% and 40% of those examined, against 88.8% and 90% of passes of those examined in these standards last year. This may in some way be accounted for, when the committee considers we have had 3 headmasters and 7 pupil teachers and probationers appointed or left during the period of tuition, of which the above is the result ... the passes this year of those examined was only 60.1%, against 80.9% of last year. Truth it may be, but it is mainly due to there having been presented 53.6% of the whole school for examination being 8.9% of the whole school in excess of the presentations in 1882, and 21% in excess of those presented in 1883. Reducing these to the same per percentage of presentations as in 1882 and the result of the passes will be 72.7% ... in 1882 the roll number at the time of examination was 219, out of which 34.2% passed some standard. In 1883 the roll number at the time of examination was 230, out of which 36.9% passed some standard, and in 1884 the roll number at the time of examination was 248, out of which 32.2% passed in some standard. The actual number passed in the first three standards in 1882 was 53, in 1883 was 58, and in 1884 65 passed, showing marked progress in the three years in these standards. Of the whole school in all standards in 1882 75 passed, in 1883 85 passed and in 1884 80 passed, being 5 passed less than that of 1883, and 5 passed more than that of 1882. As the weakness, as shown, is in the higher standards ...

Appendix 3 - Comments by the inspectors about pupils and teachers' reasons for not presenting pupils for examination 1885 (source: class lists)

Inspector's comments:

Weak and sickly

Dull and neglected

Idle and stupid

Very irregular

Bad health

New comer

Utterly idle, careless and bad

Dull and no time allowance at home for preparation

Dull and slow

Very dull

Wooden

Very wooden

Teachers' reasons (29 pupils were not presented for examination in 1885):

Dullness, irregularity

Dullness

Mental incapacity

Very dull

Early neglect

Deficient intellect

Irregular attendance

New comer