

SCHOOL CERTIFICATE :

THE HURDLE

the changes would particularly assist in the renewal of the school certificate examination board. Thompson, said there appeared to be no recognition of comparative risk.

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Exam Scaling For Study

NZPA Wellington

Changes may be made in the policy for scaling school certificate to ensure it is fair to candidates in Maori and some practical subjects.

The Education Department is to consult with the school certificate examination board.

It wants to change scaling procedures to ensure a pass rate of at least 50 per cent in all subjects.

The director-general of

education, Mr Bill Renwick, said yesterday that he was concerned to review the scaling policy in light of the criticism that it was unfair to candidates in Maori and some practical subjects.

"I am satisfied that a change in policy should be made in fairness to these candidates," Mr Renwick said.

The 50 per cent pass rate would apply to the group of candidates for whom the examination was primarily intended: candidates in their third year at a secondary school who sat English and at least three other subjects.

Mr Renwick said if the examination board endorsed the department's proposal he would discuss the change with the New Zealand Maori Council and the National Advisory Committee on Maori Education.

If those groups agreed the policy change would be put into effect for this year's school certificate.

● Last week the *New Zealand Herald* published a table showing the pass rate in school certificate subjects. Between 1974 and 1982 the pass rate in the more "classical" subjects increased markedly; that for the more practical subjects dropped.

ISSUES IN EDUCATION - number 8
Programme On Racism
NCC Box 9573 Auckland.

For more than ten years educators and concerned groups have been drawing attention to the social harm that School Certificate is doing to New Zealand society as a whole and to the aspirations and attainments of young Maori people in particular. At first the focus was mainly on culture, language and content, but increasingly study of the statistics began to point to scaling procedures as a major source of racial bias in the results. Recently the Department of Education has agreed that the present scaling policy is unfair. While this is cold comfort to the thousands of candidates who have been unjustly failed in the past, it is important that changes are made immediately.

This paper puts together some of the evidence and arguments about School Certificate. It draws mainly from three papers:

"Maori Examination Failure", Ian Mitchell (Maori Education Development Conference)

"Ethnic Bias in School Certificate", B. Gadd (M.E.D.C.)

"The Examination System: The Cause of Unnecessary Failure", David Hughes, University of Canterbury, in NZ Counselling & Guidance Assn. Journal.

On 31 May 1983 the Hon. Mrs Whetu Tirikatene-Sullivan MP asked the Minister of Education this Parliamentary Question:

"Is he satisfied with the way the New Zealand education system is meeting Maori needs?"

Seven days later, on 7 June 1983, Mrs Tirikatene-Sullivan was favoured with this terse and angry reply from the Minister:

"Yes. Moreover, many Maori people have explained to me how angry they are with criticisms by the Hon. Member that Maori young people do not perform adequately at school".

Nothing could illustrate the dilemma of Maori people better than this: an educated, intelligent and deeply committed Maori politician finds that the Minister of Education

- a) denies that the school system is failing young Maori people - when overwhelming statistical evidence proves that it is;
- b) blames her for trying to get the system's inadequacies recognised;
- c) turns her questioning of the performance of the education system into a criticism of the performance of Maori pupils - the victims of that system.

A very clear example of the overwhelming statistical evidence referred to above is provided by School Certificate, which has been described as 'the gateway to higher education'.

In 1982, 69% of the Maori candidates for School Certificate were failed the examination papers they sat. Only 43% of the Pakeha candidates were failed the papers which they sat. Looking at individual subjects, the picture becomes even bleaker. In Geography 2693 Maori candidates sat the examination: only 689 passed - a failure rate of 74%. The Pakeha failure rate was much less - 45%.

In English, 6197 Maoris sat. 1,700 passed - failure rate, 73%.

In Science, 2753 Maoris sat. 953 passed - failure rate 66%.

In Maths 4380 Maoris sat. 1583 passed - failure rate 64%.

In the supposedly non-academic subjects, the pattern is worse, not better.

50 Maoris sat Agriculture. 8 passed - failure rate 84%.

763 Maoris sat Home Economics. 121 passed - failure rate 84%.

515 Maoris sat Engineering Shopwork. 93 passed - failure rate 82%.
306 Maoris sat Clothing. 37 passed - failure rate 88%.

It is unthinkable that the Pakeha majority in this country would tolerate failure rates like these. If Pakeha students got consistent failure rates of 82%, 84% and 88% in national examinations, the examination system itself would be very quickly blamed and either abolished, or adapted to ensure Pakeha success.

Yet Pakeha teachers and educational administrators will not accept that it is the inherent cultural bias of the examination that allows the children of their culture to succeed at the expense of the Maori candidates. Instead they resort to the 'Victim Blaming Syndrome' and either state directly or imply that Maori children fail School Certificate in such unacceptably high numbers because they are lazy, or linguistically disadvantaged, or poor learners - none of which, of course, is the least bit true.

It has also been extremely difficult to get the education establishment to acknowledge the harm being done to New Zealand society as a whole by the continued failure of such a high percentage of Maori young people in national examinations each year. My contention is that the education system and the opportunities for success that it offers are so pakeha-oriented, that the Maori child is thoroughly locked into the failure cycle from an early age, and his/her early "failures" (as defined by the culturally-exclusive Pakeha system) become a self-fulfilling prophecy confirmed by the ethnocentricity of the School Certificate examination.

Certainly the statistics for child crime suggest alienation and demoralisation, although other factors of institutional racism undoubtedly come into play here. For children under 17 years of age the rate of offending for Maori males is nearly six times that for non-Maori males, while the rates for Maori females are eight times greater than for non-Maori females. The unfortunate fact is that by the time they are 17 years old, over 40% of Maori boys come to the attention of the Children's and Young Persons' Court, compared with only 10% of non-Maori boys.

The state education system, geared as it is towards the failure of Maori pupils, must take major responsibility for these alarming figures. Put another way, it means that Maori children are giving up and turning to anti-social behaviour patterns, because the education system does not offer them a fair chance of success - as it does their Pakeha sisters and brothers. For too many Maori children, attending school merely provides them with a continual sequence of failure experiences, culminating in the annual national failure experience of the School Certificate examination.

If we accept that the School Certificate examination and the monocultural view of the world which it implies is responsible for what can only be termed a national crisis in Maori education, what are the alternatives?

There are two main cultural reasons for the failure of Maori students in School Certificate. The first is that the papers are set as if everyone belonged to a conventional Pakeha family, one or more wage-earners, your own house and section, the family celebrating its birthdays, going off on holidays, buying expensive household equipment, reading magazines like the 'Listener', and spending its time chatting about these things and the experiences to do with that way of life.

Hardly any of the exam papers even mention anything to do with Maori or other Polynesian people. If they do, it's just as likely to ask the candidates to do strange things, such as when an English exam asked students to write a story as if it were a radio commentary on a tangi.....

But the underlying reason is institutional racism worked out through ethnic bias in scaling and ranking papers hierarchically.

Ethnic bias in School Certificate is readily demonstrated from official statistics, and is not denied officially.

1. The extent of the ethnic bias against Maoris can most easily be gauged by the percent of subjects passed

All NZ candidates	1972	51.3 %	1982	54.3 %
Maori candidates		<u>26.3 %</u>		<u>31.2 %</u>
gap		25 %		23.1 %

2. The persistence of this attainment gap and its increase in some subjects can be seen from a comparison between 1982 pass rates and those of 1968, the first year when Maori statistics became available.

		Maori	Non Maori	NM-M Gap
English	1968	25.4 %	54.6 %	-29.2
	1982	27.43%	53.39%	-25.96
Maths	1968	28.8 %	47.3 %	-18.5
	1982	36.14%	59.75%	-23.61
Geography	1968	27.4 %	52 %	-24.6
	1982	25.58%	55.12%	-29.54
Maori	1968	50 %	16.7 %	+33.3
	1982	41.17%	44.34%	- 3.17

3. Statistics for Polynesians sitting School Certificate are not available. The present Minister has refused every request to provide for securing such data. However, figures for the South Pacific Options, designed specifically for the Islands, make interesting comparisons with Maori pass rates in the New Zealand School Certificate examinations:

1982 Pass Rates in the Four Major Subjects

English	all NZ candidates	50.64%	N	54,842
	Maori candidates	27.43%	N	6,197
	SPO English	28.27%	N	9,749
Maths	all NZ candidates	57.53%	N	46,620
	Maori candidates	36.14%	N	4,380
	SPO Maths	51.82%	N	9,393
Science	all NZ candidates	59.06%	N	31,017
	Maori candidates	33.89%	N	2,753
	SPO Science	32.75%	N	1,151
Geography	all NZ candidates	52.13%	N	26,612
	Maori candidates	25.58%	N	2,693
	SPO Geography	30.51%	N	4,658

4. It is not merely the overall pass rates which show ethnic bias. The distribution of grades within subjects also show ethnic imbalance. All of these examples relate to the 1982 examinations and show percentage of candidates gaining A and B grades in the three most popular subjects:

		A grade	B grade
English	all NZ candidates	3.9 %	16.5 %
	Maori candidates	.79%	5.8 %
	SPO candidates	.78%	5.5 %
Maths	all NZ	4.7 %	17.2 %
	Maori	1.03%	6.8 %
	SPO	1.31%	9.73%
Science	all NZ	5.2 %	19.6 %
	Maori	.87%	7.4 %
	SPO	.7 %	5 %

The reasons for ethnic bias in School Certificate relate to the purpose of the exam and to the type of evaluation system. The examinations have, since 1945, been devised to produce a high failure rate - 47% if all candidates failed to achieve a School Certificate (English plus three best subject marks) in 1945.

School Certificate marks are statistically manipulated into a normal curve of distribution or near enough. This implies that all candidates can be regarded as being uniform. Since every single School Certificate exam is primarily a reading test of being able to interpret instructions and layout, the examiners know before they set each year's paper that equity has already been breached. New Zealanders are not ethnically uniform and therefore are not linguistically uniform. The PAT tests given in Form 3 predict what will happen in School Certificate. For instance, the PAT tests in one multi-ethnic school in 1976 revealed the following:

PAT Test	Maoris			Polynesian			Pakeha			results
	n	mean	SD	n	mean	SD	n	mean	SD	
vocabulary	137	19.06	16.5	78	18.69	16.93	86	30.22	24.07	
comprehension	139	23.09	19.25	80	20.37	18.54	83	29.72	22.55	

In this predominantly Maori-Polynesian and working class school, only about a quarter of the candidates passed in English, for instance, two years later. In short, School Certificate reflects a school system which is mono-ethnic. Where youngsters are both working class and ethnically different, they are slated to fail School Certificate in appallingly high numbers.

Information on the scaling of School Certificate is given in newsletters published by the School Certificate Examination Board, the ad hoc body which controls the School Certificate system. In 1968, when single subject passes were introduced to replace the aggregate pass in English and three other subjects, the pass rates for the subjects offered were relatively close together. Since 1968 the pass rates in the various subjects have been undergoing a gradual change resulting in a hierarchy of subjects. Subjects at the top of the hierarchy currently enjoy pass rates close to 90%; those at the bottom have pass rates below 40% (Department of Education, 1980b). Up to and including 1974 an informal hierarchy of subjects had developed. That is, while the range of pass rates gradually increased between 1968 and 1974 there was no official scaling policy. In 1974 the pass rates ranged from about 45% to about 65%. However, beginning in 1975, a deliberate scaling procedure has been gradually implemented at the behest of the Board to extend the range of pass rates to what we have today.

The intention is to ensure that the pass rate obtained by candidates in a given subject clearly reflects their performance in their other subjects. The Board points out that 'bright' pupils should not be penalised through their choice of subjects. The term 'bright' presumably means scholastically able, good academically, intelligent, or some such term. Clearly it is intended that 'bright' students should pass School Certificate irrespective of the subjects taken. Equally, it is clearly the Board's intention that students who are not bright should fail their School Certificate no matter which subjects they elect to take.

Just how successful the scaling has been can be seen by following the changing pass rates in various subjects during the period 1974 (the year before scaling was officially introduced) to 1980 (the last year for which figures were available at the time of writing).

Table 1, over the page, shows the pass rates for each of these subject groupings for each year from 1974 to 1980. The subjects have been arranged according to their position in the hierarchy in 1980. Thus, we begin with Latin with a pass rate of 87% in 1980 and end with Maori with a 1980 pass rate of 39.1%. The rapid increase in the pass rates for the subjects at the top of the hierarchy is easily seen. While not quite as spectacular, the drop in the pass rate for the subjects near the bottom of the hierarchy is nevertheless quite marked.

These scaling procedures effectively convert the School Certificate examinations

into a very costly measure of general intelligence. This has drastic consequences for less able children who are excluded from any chance of success within the system. Such children cannot elect to take less academic subjects such as, say, woodwork or typewriting to improve their chance of success. They have no more chance of passing these subjects than they have of passing Latin or Chemistry. Such a system is as destructive as it is unnecessary.

Table 1
School Certificate Pass Rates by Subject Grouping 1974-1980

Subject	Year						
	1974	1975	1976	1977	1978	1979	1980
Latin	64.6	70.2	73.8	81.4	84.0	87.1	87.0
French	56.4	64.0	66.9	75.9	75.8	77.4	77.6
Other Foreign Languages	58.4	62.3	68.5	77.0	77.2	74.5	75.7
Physical Science	57.2	61.0	66.6	68.8	72.8	70.4	75.7
Music	55.1	62.3	66.0	63.3	65.9	65.9	66.9
Shorthand/Typing	50.9	49.9	53.6	61.8	61.1	65.9	64.9
Bookkeeping	48.4	48.8	50.2	60.4	59.4	60.5	62.2
History	55.6	56.3	56.3	57.4	57.5	58.3	57.2
Mathematics	52.5	54.3	55.7	55.3	54.8	53.4	52.5
Science	51.5	47.2	51.1	52.4	53.4	53.0	51.4
English	55.2	55.8	52.0	51.2	50.8	51.0	51.1
Geography	53.3	53.8	55.8	50.8	49.9	50.3	50.2
Technical Drawing	47.6	48.2	48.1	49.5	48.9	49.3	49.7
Art	53.5	57.1	53.4	55.9	53.6	54.6	49.5
Economics	46.0	46.4	46.8	49.2	49.2	48.9	49.2
Clothing and Textiles	47.7	50.3	49.3	52.2	52.3	51.5	48.9
Agriculture	46.3	46.4	45.2	48.5	42.8	43.3	47.9
Biological Science	48.6	52.1	50.5	48.7	45.8	47.0	45.6
Typewriting	44.9	43.8	44.2	44.9	45.7	44.6	43.7
Engineering	47.1	45.5	46.4	46.8	45.5	46.4	42.7
Woodwork	47.9	47.6	47.1	47.9	45.4	44.1	41.1
Home Economics	45.8	46.4	43.5	45.1	46.8	44.3	39.7
Maori	49.4	47.0	43.6	44.5	43.4	43.9	39.1
Total Pass Rate	52.3	52.8	53.1	52.9	52.6	52.3	51.7

Sources: 1974 Department of Education, 1975
 1975 Department of Education, 1976b
 1976 Department of Education, 1977
 1977 Department of Education, 1978
 1978 Department of Education, 1979
 1979 Department of Education, 1980a
 1980 Department of Education, 1980b

Maori pupils are particularly affected in two ways. Firstly because they tend to be streamed or encouraged into subject options which are low in the hierarchy. Secondly because Maori is placed at the bottom of the hierarchy. Thus even when they might excel in their own language and might reasonably expect a good mark in that one subject, they are doomed to disappointment, and a totally false feedback about their ability and achievement.

