SUBMISSION BY THE NORTHERN TERRITORY DEPARTMENT OF EDUCATION TO THE HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON EMPLOYMENT, EDUCATION AND WORKPLACE RELATIONS

INQUIRY INTO THE EDUCATION OF BOYS

Summary

It appears that boys as a defined group do consistently less well on most school-based English literacy tests and other aspects of schooling examined in this submission.

Even though gender appears to be an important factor, other factors such as socio-economic status, ethnicity and location interplay with gender in different ways to produce 'success' for some boys and girls and not others. Education outcomes correlate with socio-economic status. Thus the question is not whether boys as a group or girls as a group are more disadvantaged, but *which* boys and *which* girls.

1. Disengagement of some boys with the learning and assessment processes

The current concern about boys' achievement is largely based on their performance in comparison with that of girls in national literacy tests and end of schooling examinations.

In the early years of schooling, the literacy levels between boys and girls are not significantly different as shown below. (Table 1, Figure 1) However, a difference of 5% exists, with the difference widening as students continue with their schooling.

Breakdown of 1999 Year 3 Achievement of Literacy Benchmarks in NT schools

Student category	Number achieved benchmark	Number not achieved benchmark	Number exempt (not achieved benchmark)	Total achieved benchmark, not achieved benchmark and exempted	Number absent	Percentage achieving benchmark
All students	1939	386	357	2682	230	72.3%
Female	967	174	151	1292	103	74.9%
Male	956	209	203	1368	119	69.8%
sex not stated	16	3	3	22	8	72.7%

Table 1 (Extracted from information provided to MCEETYA by Curriculum Services)

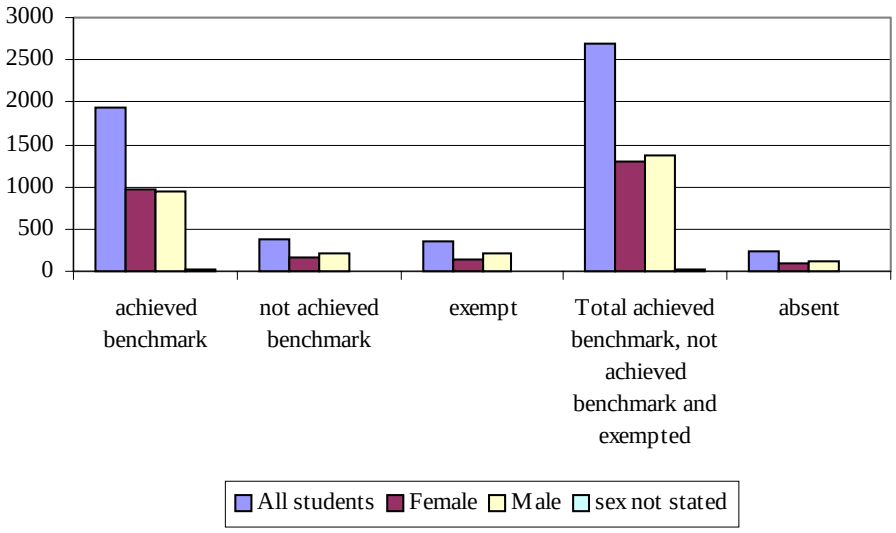

Figure 1: Breakdown of 1999 Year 3 Achievement of Literacy Benchmarks in NT schools

Nowhere is the under-achievement of boys in English literacy more acutely noticeable than during the upper primary and junior secondary years, often referred to as the middle years of schooling. (Table 2, Figure 2) On average about 25 % of boys and 13% of girls have scored below 'C' during the period 1997–99. From a difference of 5% in favour of girls in Year 3, the gap seems to be widening.

Junior Secondary Studies Certificate English Scores by Sex (1997–99)

Year	1997		1998		1999	
Grade	Male %	Female %	Male %	Female %	Male %	Female %
A	3.83	11.15	3.77	14.74	4.65	15.13
B	29.46	45.76	32.25	47.09	32.56	47.66
C	40.00	28.57	43.56	28.46	37.21	24.13
D	12.69	6.85	11.70	5.14	17.26	7.80
E	14.01	7.67	8.71	4.57	8.32	5.28

Table 2 (Generated from JSSC scores at Curriculum Services Branch, 29/03/2000)

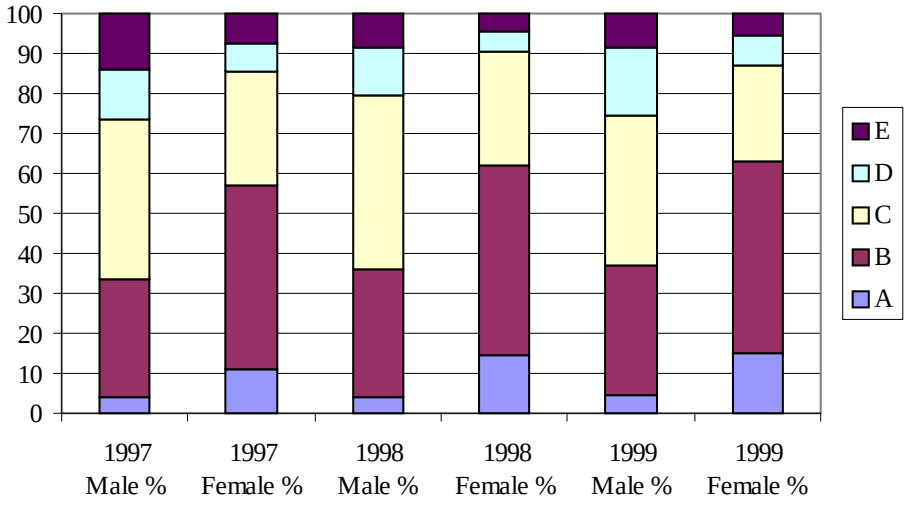

Figure 2: Junior Secondary Studies Certificate English Scores by Sex (1997, 1998 & 1999)

In comparison, the mean scores for female and male students for mathematics tell a different story when the two elements (Moderated Subject Score – MSS and Examination – CIA) that make up the score (JSSC) are considered separately for 1997 and 1998. (Table 3, Figures 3, 4, and 5) The moderated subject score is based on continuous assessment over the school year whereas the CIA score is the score gained at the end of year examination.

Mean scores for female and male students for Year 10 mathematics

Course	Assessment	Mean Scores (1997)		Mean Scores (1998)	
		Female	Male	Female	Male
Level 1 Mathematics	MSS(%)	*67.4*	64.8	*66.6*	62.8
	CIA(%)	51.3	*56.9*	49.8	*51.5*
	JSSC(%)	61.5	61.5	*61.7*	59.5
Level 2 Mathematics	MSS(%)	*61.1*	56.2	*56.9*	51.8
	CIA(%)	45.9	*47.5*	*49.2*	48.5
	JSSC(%)	*56.0*	53.0	*54.6*	50.8
Level 3 Mathematics	MSS(%)	*55.5*	52.8	*59.9*	52.1
	CIA(%)	50.6	*57.7*	45.6	*49.3*
	JSSC(%)	52.5	*53.0*	*55.6*	51.3

Table 3 (Extracted from *NT Assessment Program, Results of the Year 10 Assessment Program, 1998,* NT Board of Studies, p.24)

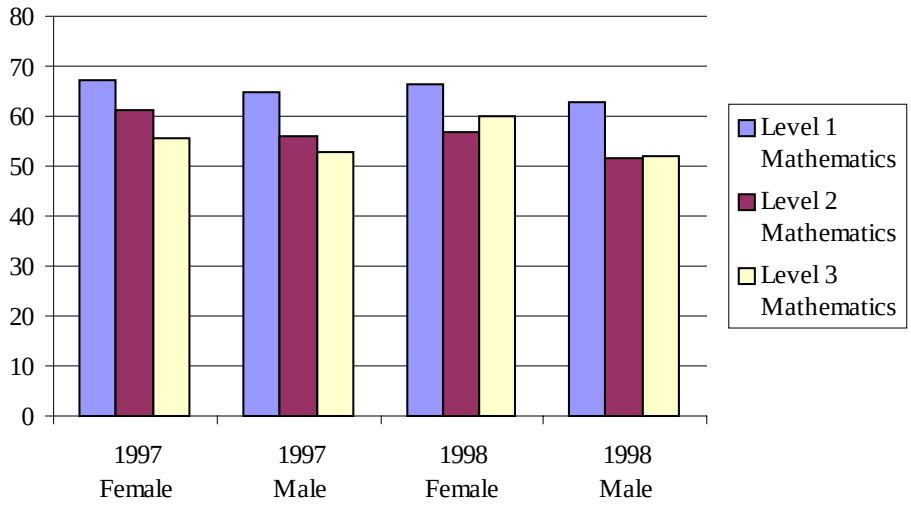

Figure 3: MSS% for females and males for 1997 and 1998

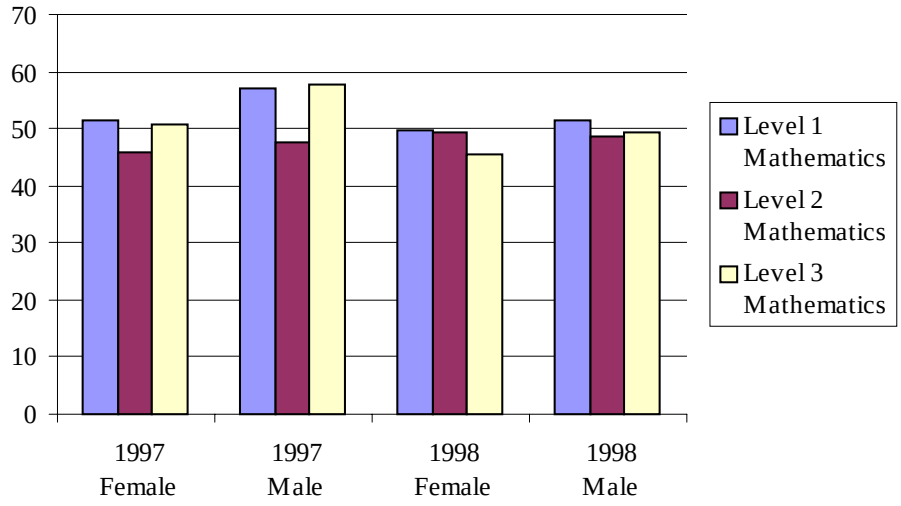

Figure 4: CIA% for females and males for 1997 and 1998

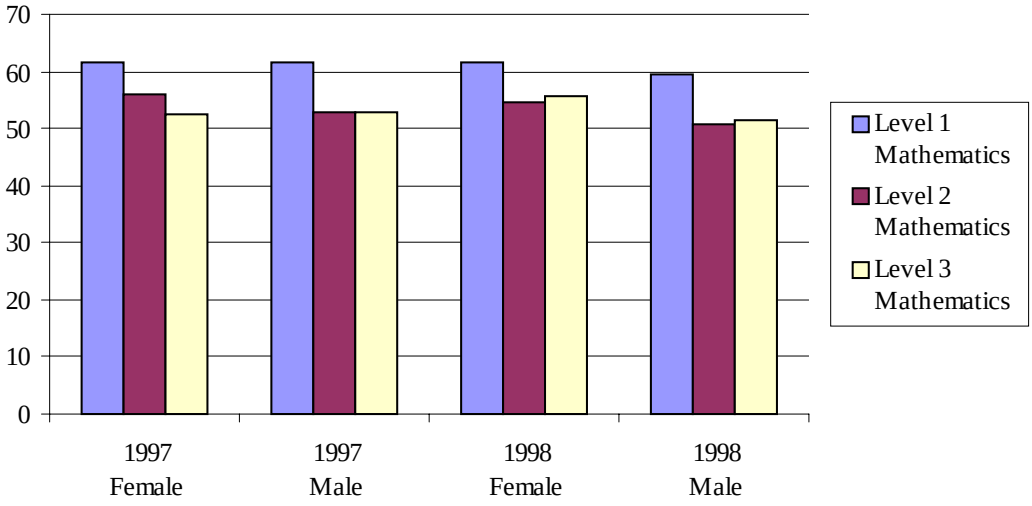

Figure 5: JSSC% for females and males for 1997 and 1998

In Table 3, Level 1 mathematics is the most rigorous and Level 3 mathematics the least rigorous; the higher mean scores are in italics.

In all cases the mean scores for females are higher for MSS; in one case the JSSC score is higher for the males and in one case the JSSC scores are the same for males and females; and in all but one case the mean scores for males are higher in CIA (Examination). In arriving at the JSSC scores MSS had a weighting of 70% and CIA a weighting of 30%. The differences seen here might be explained in terms of not only the differences in weighting but also in terms of how males and females respond to the different assessment components. *Challenging the Boys* (Northern Territory Department of Education, 1999) suggests that boys are quite competitive when it comes to summative kinds of assessment. Girls on the other hand are found to be quite steady in their outputs throughout the year (ie continuous assessment tasks). This trend continues into senior secondary studies (Tables 4 and 5).

Number of students completing all requirements of the SACE, 1995–99

	1995	1996	1997	1998	1999
South Australia					
Female	5365 (55%)	5194 (56%)	5526 (56%)	5836 (57%)	6015 (57%)
Male	4331 (45%)	4149 (44%)	4282 (44%)	4400 (43%)	4544 (43%)
Total	9696 (100%)	9343 (100%)	9808 (100%)	10236 (100%)	10559 (100%)
Northern Territory					
Female	76 (54%)	386 (56%)	426 (63%)	408 (57%)	457 (59%)
Male	324 (46%)	307 (44%)	251 (37%)	309 (43%)	313 (41%)
Total	700 (100%)	693 (100%)	677 (100%)	717 (100%)	770 (100%)
South-East Asia					
Female	509 (56%)	575 (62%)	572 (60%)	448 (60%)	483 (58%)
Male	393 (44%)	358 (38%)	388 (40%)	303 (40%)	345 (42%)
Total	902 (100%)	933 (100%)	960 (100%)	751 (100%)	828 (100%)
Grand total	11298	10969	11445	11704	12157

Table 4 (Extracted from *SSABSA Annual Report*, 2000, p.107)

At the end of Year 12, in general terms, South Australian, Northern Territory and South-East Asian students show similar trends with regard to completing the requirements of the South Australian Certificate of Education (SACE) or the Northern Territory Certificate of Education (NTCE). (Table 4) More girls than boys met the requirements for the award of SACE/NTCE.

Over the period 1995 to 1999, on average, 56% of students completing the requirements of the certificate have been females as against 44% males in South Australia, 58% females as against 42% males in the Northern Territory and 59% females as against 41% males in South East Asia.

More specifically, in particular subjects which are seen to be masculine or feminine by both girls and boys the participant rates are quite predictable. (Table 5, Figure 6) However, the achievement scores based on continuous assessment and external assessment components as in Publicly Examined and Publicly Assessed subjects, and moderated school assessed components as in School Assessed subjects again raise questions about the responses of boys and girls to particular types of assessment modes.

SSABSA Publicly Examined (PES), Publicly Assessed (PAS) and School Assessed (SAS) English/ESL – Grade Distribution, 1999 (for SA, NT and South East Asia)

Subject	A 20-17		B 16-14		C 13-11		D 10-8		E 7-0		Partial assess-ments		Total		Grand total
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	
ESL (PES)	223 26%	122 16%	321 38%	277 37%	235 28%	234 31%	59	91	12	20	2	5	852	749	1601
English Studies (PES)	543 22%	178 15%	1158 48%	533 44%	587 24%	360 30%	104	99	23	28	7	8	2422	1206	3628
English (PAS)	1039 33%	328 15%	1414 64%	934 42%	528 17%	654 29%	117	174	78	128	-	-	3176	2218	5394
ESL (SAS)	10 11%	7 6%	30 34%	31 27%	31 35%	36 32%	10	23	8	17	-	-	89	114	203
Mathematics 1 (Double)	332 54%	521 41%	192 31%	449 34%	62 10%	185 14%	13	68	12	56	0	6	611	1285	1896
Mathematics (Single)	427 21%	204 12%	633 32%	413 25%	479 24%	450 27%	262	305	193	254	12	25	2006	1651	3657
Mathematics 2	237 38%	367 28%	191 31%	390 30%	134 21%	310 24%	48	144	12	83	3	13	625	1307	1932
Physics	379 31%	512 24%	457 38%	713 33%	295 24%	586 27%	74	236	18	77	6	22	1229	2146	3375
Chemistry	352 23%	341 21%	505 33%	523 33%	432 29%	422 25%	168	225	48	75	8	15	1513	1601	3114

Table 5 (Extracted from Tables 25, 26 and 27 of SSABSA Annual Report, 2000)

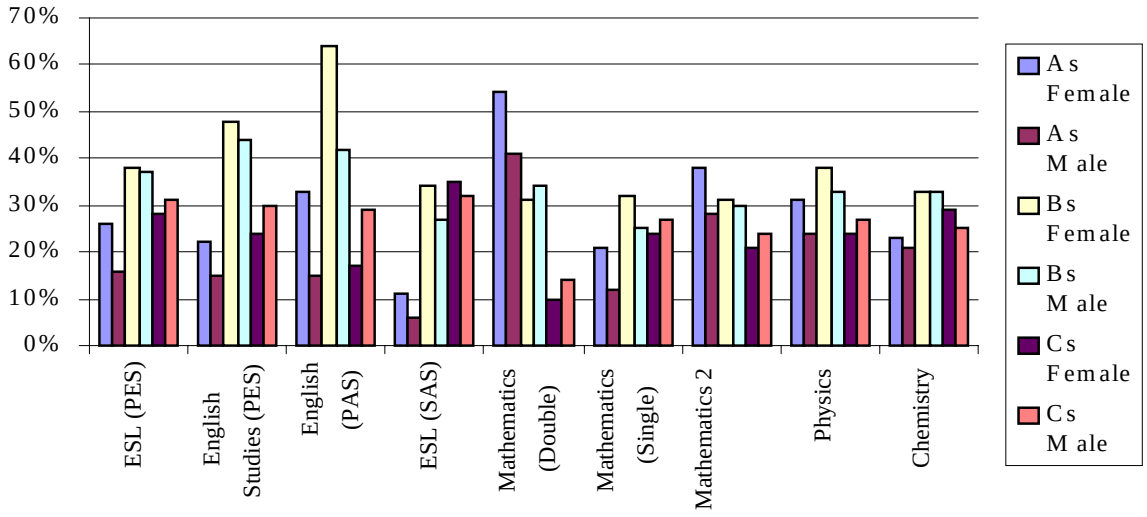

Figure 6: Grade distribution in selected subjects, 1999, SACE/NTCE (only A, B and C grades have been graphed)

Table 5 above suggests that in the major categories of English and Mathematics (Single) there has been greater participation by girls and proportionately more girls have performed/scored better than boys. On the other hand, in the higher levels of Mathematics and Physics there has been greater participation by boys, however,

proportionately more girls have done better than boys here too. Chemistry seems to be one of a small number of subjects in the whole range of subjects provided by SSABSA in which there is almost equal participation and equal success, at least in the higher grades, for both boys and girls!

Similar trends to those in English are evident in most language rich subjects (Arts/ Humanities/Social and Cultural Studies) and as in mathematics and the sciences in most quantitative/experimental (Science/Mathematics/Technology) subjects (pp. 101–107, SSABSA Annual Report, 2000). However, the differences are less pronounced in the quantitative/experimental subjects.

While these trends can be partially explained in terms of how male and female students perceive these subjects to be compatible with them being male or female, caution needs to be applied in any interpretation of the results. The fact that some boys underachieve does not mean that girls always outperform boys given even terms. Girls who participate in higher level mathematics and physics are the more determined and capable of the girls in the same cohort, while some boys consider they ought to do these subjects by virtue of their gender and/or career aspirations. It may also be that boys feel more social pressure to make mathematics/science choices and consequently harder options. Girls do not experience pressure to the same degree and consequently may choose more appropriately.

Studies elsewhere indicate that social and economic resources available to children through their homes and communities also impact significantly on their achievement, and so do location and ethnicity. As educational performance correlates with socio-economic status gender gap widens. Thus the real question is not whether girls as a group are more disadvantaged or boys as a group, but *which* boys and *which* girls.

Boys and girls do not use secondary schooling to the same extent or in the same ways. The full-time labour market for young people seems to favour boys, who therefore rely less on completing school. Girls tend to rely more on school because their non-school work and training options are more limited. Staying on in school is not a good indicator of relative gender outcomes. The kind of subjects boys and girls take up, post school and their life choices are more meaningful tests of gender relativities.

The basic tenet of working to improve education for boys should be that both girls' and boys' interests are promoted. Rather than developing programs that are 'good for boys' or 'good for girls', it is perhaps profitable to focus on school literacy practices and the assumptions upon which they rely. This approach by itself is not a panacea for boys' under-achievement in school-based literacy. However, when adopted with other understandings of socialisation processes and schooling, it can provide strategies that offer boys and young men ways forward.