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JOINT MATRICULATION BOARD

AFTER G.C.E.

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*Secretary to the Joint
Matriculation Board*

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OCCASIONAL PUBLICATIONS
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The Board publishes as occasion arises such papers and reports as come before it in the course of its work and appear likely to be of general interest. Papers already issued are:

1. *A General Paper in the General Certificate of Education Examination:* R. A. C. Oliver (July 1954). (*Out of print.*)
2. *Secondary Modern Schools and the General Certificate of Education* (February 1955).
3. *An Experimental Examination in General Studies:* R. A. C. Oliver (December 1955).

Copies of Numbers 2 and 3 may be obtained (free and post free) on application in writing to the Secretary.

Preface

When deciding to issue this report the Joint Matriculation Board, aware that any such compilation must be influenced by the personal opinions and interests of the compiler however objective he may have striven to be, thought it proper that the report should appear not impersonally but under the name of its Secretary. His is the responsibility for any opinion and comment in the paragraphs which follow. Neither the Board nor he should be held responsible for inferences which may be drawn by readers from the facts there set out.

AFTER G.C.E.

I. Introductory

1. The more remote objective which a candidate has in view when he enters for an examination may be illustrated to some extent by the course he follows after he has sat for it, successfully or not so successfully. Information about such more remote objectives can help the examining body to estimate the efficacy of its examination. During the summer term of 1956 the Joint Matriculation Board warned every school and college presenting candidates for the examination which was then imminent that in the autumn a request would come from the Board for information, the nature of which was indicated so that any necessary preparations could be made, about every candidate who had sat for that examination. The questionnaire went out in the early autumn and the response was most generous. From the nature of the case no information could be expected in a number of instances. Many individuals sit as external candidates at examination centres with which their personal ties are tenuous. About internal, that is school, candidates for the 1956 summer examination however the Board now has a great deal of information which it intends to develop over the next few years. What follows is the first of what it is hoped will be a series of reports. Thus it should be possible in due course to report upon how candidates who took Ordinary subjects in the summer of 1956 perform when they enter for Advanced subjects in 1958, and how those who took Advanced subjects in 1956 fare on university courses and what kind of degrees they achieve in 1959 and following years. There was no special reason why 1956 was selected except that an opportunity arose to undertake what had long been contemplated.

2. Following the Ministry of Education's classification the secondary schools which present candidates for the Board's G.C.E. Examination fall mainly into five groups:

1. Maintained schools: (a) secondary grammar,
(b) secondary modern,
(c) secondary technical.
2. Direct-grant (grammar) schools.
3. Independent (grammar) schools.

According to this classification the entry for the Board's 1956 summer examination was constituted as follows:

TABLE 1

	(a) <i>Number of schools</i>	(b) <i>Number of candidates</i>	(c) <i>(b) as percentage of total entry</i>
Maintained { grammar	394	45,934	60.5
secondary { modern	112	1,858	2.4
{ technical	67	3,705	4.9
Direct-grant	71	8,831	11.6
Independent	85	4,043	5.3
Other schools and colleges and individual entries		11,632	15.3

This report covers the two thirds of the total entries which came from maintained schools and the one sixth which came from direct-grant and independent schools. The five groups of schools (1 (a), 1 (b), 1 (c), 2 and 3) are considered separately throughout so far as this has been feasible.

3. The samples of the replies used in compiling the report consist approximately of one in ten of those from secondary grammar schools, two out of five for each of the other four groups. The selection of each sample was partly random, partly controlled so as to ensure that each covered (a) boys' schools, girls' schools and co-educational schools, (b) larger schools in cities and county boroughs and smaller schools in country districts.

4. Of the Board's 76,003 candidates for the 1956 summer examination 60,774 offered Ordinary subjects only, 9,252 offered Advanced subjects only, 5,977 offered one or more Ordinary with one or more Advanced subjects, the commonest form of these simultaneous entries at both levels being a combination of three Advanced subjects with one Ordinary (3,370 candidates), the most uncommon an entry for one Advanced with eight Ordinary subjects. For the present purpose candidates have been regarded as falling into two main groups, those who offered Ordinary subjects only in the summer of 1956 and those who offered Advanced subjects whether they did or did not simultaneously offer Ordinary subjects. The two groups are dealt with in sections II and III respectively. The 15,229 candidates offering from one to five Advanced subjects who comprise the second group include 5,834 who attempted the Scholarship paper either in one or in two of their Advanced subjects. Entries for Scholarship papers have not been considered.

5. In the period immediately preceding the Second World War six candidates used to sit for the Board's School Certificate Examination for every one entering for the full Higher School Certificate. The expansion of sixth forms in secondary schools in recent years is illustrated by the fact that by 1956 over the whole entry, including external candidates, the ratio of those offering O subjects only to those offering at least one A subject had fallen to four to one. The samples here analysed indicate that in so far as secondary modern and secondary technical schools concern themselves with the G.C.E. Examination their main interest, at least as yet, is in the Ordinary level (*cf. Secondary Modern Schools and the General Certificate of Education*, Joint Matriculation Board, February 1955). The general ratio of four to one holds good in the samples for girls from maintained grammar and independent schools, but for boys from maintained grammar and independent schools and girls from direct-grant schools the ratio falls to three to one and it is as low as two to one for boys from direct-grant schools. When boys and girls are considered separately under each of the five groups of schools, these facts can be stated as percentages as in Table 2.

TABLE 2

				Percentage of total entries which are entries for	
				O subjects only (Section II)	A subjects (Section III)
Maintained secondary	grammar	boys		76	24
		girls		81	19
	modern	boys		96	4
		girls		96	4
	technical	boys		94	6
		girls		94	6
Direct-grant		boys		64	36
		girls		77	23
Independent		boys		76	24
		girls		81	19

II. Candidates offering O subjects only

6. The percentages given in Table 2 show that among the candidates entering for the examination in no one of the five groups of

schools is the percentage of boys offering O subjects only greater than the percentage of girls and that from direct-grant schools the percentage of girls entering for O subjects only is markedly bigger than the percentage of boys from that group of schools. Some entries for Ordinary subjects only are made by candidates in sixth forms who may require one or more subjects at this level to complete university or professional requirements. But most entries for Ordinary subjects only are by pupils in fifth forms and in the following paragraphs no distinction has been made between sixth and fifth form entries.

7. It is of considerable current interest to know what proportion of those who took O subjects in July returned to school in September, and how many of those who returned were known to be hoping to stay at school for two years, that is presumably with the intention of offering Advanced subjects in July 1958. An answer is suggested by the percentages in Table 3, the percentage in each instance being the percentage of all boys, or all girls, from the group of schools who had attempted O subjects. Differences are self-evident. At secondary modern and secondary technical schools only one quarter of the boys and one third of the girls who had sat in July were back at school in September intending to stay for one year or more; at maintained grammar schools half the boys and half the girls had returned, the boys tending to be more sure that they would stay for two years than were the girls; at independent schools half the girls had returned and almost two thirds of the boys, who again were more inclined towards two years than the girls; at direct-grant schools more than half the girls but almost three quarters of the boys were back at school and more than half of the boys who had come back were intending to stay for at least two years.

TABLE 3

<i>Percentage of those offering O subjects in July who returned to school in September with the declared intention of staying for one term only:</i>		<i>Maintained secondary</i>			<i>Direct-grant Independent</i>	
		<i>grammar</i>	<i>modern</i>	<i>technical</i>		
	boys	3	4	2	2	6
	girls	2	3	2	3	4
<hr/>						
<i>for one year only:</i>	boys	15	14	13	20	28
	girls	19	16	20	21	29
<hr/>						
<i>for at least two years:</i>	boys	34	10	12	54	33
	girls	28	16	13	38	24

8. To what extent is success in Ordinary subjects in July reflected in the return of boys and girls to school in September? To answer this question however cursorily some definition of "success in O subjects" must be invented. A recent suggestion that a grammar school pupil who can not pass in five O subjects has not justified his being at a grammar school was somewhat divorced from reality; in the last year of the S.C. Examination 72.3 per cent of the Board's candidates were awarded the certificate but only 53 per cent of the successful candidates, that is 38.5 per cent of all candidates entered, obtained five or more "credits", the approximate equivalent of five or more O level passes. In the G.C.E. Examination few candidates offer only four subjects all of which are closely related in the sense that in S.C. days they all appeared in one and the same "Group". Again though "by-passing" the O level is not widely practised, its implications cannot be entirely ignored. Of all the Board's O level candidates in 1956 two thirds (67.9 per cent) offered four O subjects or more and just over one third (37.4 per cent) passed in four or more O subjects, that is 55.2 per cent of those offering at least four subjects. To pass in at least four O subjects at one and the same sitting places the candidate in the top third of the O level entry and can therefore be taken as a rough-and-ready measure of a reasonably satisfactory performance in depth with probably some width. Table 4 shows for each of the five groups of schools, boys and girls separately, what percentage of those who left in July after sitting for O subjects had passed in four of them. The boys and girls who left

TABLE 4

	<i>Maintained secondary</i>			<i>Direct-</i>	<i>Independent</i>
	<i>grammar</i>	<i>modern</i>	<i>technical</i>	<i>grant</i>	
Boys:	39	26	28	37	28
Girls:	37	18	22	34	28

maintained grammar schools and direct-grant schools tended to have more O passes to carry forward to the next stage of their careers, whatever that might be, than pupils of the other three groups of schools; girls leaving secondary modern and technical schools had in general passed in fewer O subjects than the boys leaving those same schools. Table 5 gives similar information about those who returned to school in September for at least one year, that is what percentage of the candidates who returned had passed in the summer in at least four O subjects. Of those who returned the pupils of maintained grammar, direct-grant and independent schools had more O

TABLE 5

	<i>Maintained secondary</i>			<i>Direct-</i>	<i>Independent</i>
	<i>grammar</i>	<i>modern</i>	<i>technical</i>	<i>grant</i>	
Boys:	57	33	36	55	43
Girls:	55	23	28	62	57

passes than the pupils returning to the other two groups of schools and, if the issue did raise parental doubt, perhaps examination results had a greater influence in settling the issue of return to direct-grant and independent schools in the case of girls than in the case of boys. When only those pupils are considered who returned to school with the declared intention of staying for two years, the respective percentages which had passed in four O subjects in July are as in Table 6. There appear to be grounds for thinking that, if examination

TABLE 6

	<i>Maintained secondary</i>			<i>Direct-</i>	<i>Independent</i>
	<i>grammar</i>	<i>modern</i>	<i>technical</i>	<i>grant</i>	
Boys:	78	55	61	72	66
Girls:	75	30	47	82	81

results at O level do weigh with parents when considering whether to commit their children to two further years at school in the sixth, they may weigh somewhat less heavily with the parents of boys at independent and direct-grant schools than with the parents of boys at maintained grammar schools, more heavily with the parents of girls than with the parents of boys at direct-grant and independent schools. Other factors will affect the decision so far as concerns secondary modern and secondary technical schools: Is there for instance at the school a fully developed two-year sixth form course? Furthermore the actual numbers in question are as yet very small.

9. What had happened by September 1956 to those who left school after taking O subjects only in July? Table 7 gives a summary view in the form of percentages of the total number of the summer's O level candidates leaving each school group, boys and girls separately. A tick indicates that the career on the left was represented by less than 1 per cent of the boys or girls leaving after sitting for O subjects, a dash that it was unrepresented. The missing fractions are accounted for by individualists such as became golf professionals, automation advisers, ballet dancers, orchestral players, riding instructresses, mannequins or emigrants.

TABLE 7

	Maintained secondary			Direct-grant Boys Girls	Independent Boys Girls
	grammar Boys Girls	modern Boys Girls	technical Boys Girls		
Services, police ..	7 ✓	8 —	4 ✓	5 ✓	10 —
Training College, Domestic Science or Art college ..	2 7	— 6	— 5	4 10	5 14
Uncertificated teaching	— 1	1 ✓	— —	✓ 1	✓ 2
Technical college	1 10	2 4	2 3	4 3	5 12
Engineering and industry	30 2	47 —	56 1	24 3	21 ✓
Laboratory assis- tants	10 5	11 2	6 5	1 4	7 2
Banking, account- ancy, law ..	7 7	2 4	3 4	12 7	11 5
Architecture, sur- veying	2 —	3 —	3 —	3 —	3 —
Civil service, local government ..	5 6	3 6	5 8	3 8	2 4
Clerking, com- merce, secretarial	15 37	14 55	10 54	17 37	16 30
Nursing, physio- therapy etc. ..	✓ 9	✓ 17	— 9	— 12	— 17
Agriculture, forestry	2 1	3 1	2 1	6 1	7 1
Printing, jour- nalism	1 ✓	1 ✓	1 —	2 ✓	1 ✓
Hairdressing ..	— 1	— ✓	— 1	— ✓	— 1
Not known ..	16 13	4 4	7 8	18 13	10 11

III. Candidates offering A subjects

10. Over the whole entry in 1956 the numbers of boys and girls offering O subjects only were approximately equal (31,471 boys; 29,303 girls); but there were three boys for every two girls offering A subjects (9,173 boys; 6,056 girls) and of the 15,229 twice as many boys as girls combined A with O subjects (4,002 boys; 1,975 girls).

11. Frequently candidates make more than one attempt at A subjects. Of the candidates for A subjects in 1956 from maintained grammar schools 35 per cent of the boys and 14 per cent of the girls returned to school in September, presumably intending to sit again in 1957, as compared with 46 and 16 per cent respectively of the boys and girls at direct-grant schools; though the numbers from independent schools are small, the percentages of boys (40) and girls (11) who returned to school are not dissimilar. For the two smallest

groups a percentage reckoning would be misleading; half of the boys entered for A subjects in 1956 from secondary modern schools returned to school in September, presumably for a second entry in 1957, but in effect none of the girls; of the candidates from secondary technical schools one in four of the boys and one in six of the girls returned. Of the boys and girls who returned to maintained grammar schools after taking A subjects in 1956 half had passed in three or more A subjects; a few had not been successful in any. Two thirds of the boys and a half of the girls returning to direct-grant schools had passed in three or more of the subjects they had offered in July and the proportion of those returning after a completely unsuccessful attempt in July was also larger than at maintained grammar schools. It will be for another report to give some account of these repeated entries.

12. One of the functions of the Advanced level of the examination for the G.C.E. is to relate leaving a secondary school to entering a University. From the replies of the schools which have been analyzed it appears that two thirds of the boys who took A subjects in 1956 and then left school were bound upon a course leading to a university degree but only about one third of the girls so circumstanced had such a course before them. The numbers of those who left secondary technical schools and secondary modern schools to enter on a university course are statistically negligible but the subsequent careers of these few students will be watched with particular interest. For the other three groups of schools details are given in Table 8 in the form of percentages of each of the respective six groups of pupils leaving school after taking A subjects. Here "University later" may mean

TABLE 8

		<i>Boys</i>	<i>Girls</i>
Maintained grammar:	entered a University 1956 ..	62	29
	national service, University later	5	nil
Direct-grant:	entered a University 1956 ..	58	41
	national service, University later	8	nil
Independent:	entered a University 1956 ..	55	42
	national service, University later	4	nil

not merely that the pupils hoped to enter some University on the completion of their service but that they had been promised acceptance by a specific University.

13. What had befallen by October 1956 the one third of the boys and the two thirds of the girls not accounted for in the preceding

paragraph? Many of the girls and some few of the boys were in training colleges, the following being the six percentages:

	<i>Boys</i>	<i>Girls</i>
Maintained grammar schools:	4	54
Direct-grant schools:	5	38
Independent schools:	9	18

Thus of those who left school after sitting for A subjects in July 1956 Universities and training colleges together took approximately 70 per cent of the boys who left each of the three groups of schools, approximately 80 per cent of the girls who left maintained grammar and direct-grant schools and 60 per cent of the small group of girls who left independent schools.

14. What the remainder of the summer's A candidates did on leaving school does not seem to bear any direct relationship to the kind of secondary school they had attended. The less common occupations followed by October 1956 included membership of a religious order, study abroad and marriage. Of the boys 7 per cent of those who left school after taking Advanced subjects were doing national service without it being known by the school what they would do later, 1 per cent had joined the regular forces or the police, 1 per cent were at technical colleges, 7 per cent in engineering and industry, 3 per cent working as laboratory assistants, 2 per cent in agriculture, 2 per cent in banking, accountancy and insurance, 1 per cent in the civil service, 1 per cent in commerce, and nothing was known about 2 per cent of them. Of the girls 4 per cent were working as laboratory assistants, 4 per cent were training as nurses and 3 per cent as physiotherapists, radiographers etc., 2 per cent were at technical colleges, 2 per cent were in secretarial work or training for it, 1 per cent were uncertificated teachers and nothing was known of about 2 per cent.

15. So far as boys are concerned it appears from §12 that Advanced subjects are predominantly a preparation for university entry and §14 suggests that a number of those who do not go direct to a University may, soon or late, find success in Advanced subjects while still at school of relevance to their further technical or professional training. The predominance of university entry is not so marked where girls are concerned but here again success in Advanced subjects might well be of relevance later to other kinds of subsequent training. How far therefore were candidates not aiming at a university course successful in passing the Advanced subjects they had attempted? Failure in an examination may not rob of all value the course of preparation for it but some degree of success gives tangible proof that what had been attempted was within the candidate's capacity. (The Board as yet knows little of those who enter upon a sixth form course but do not get so far as sitting for Advanced

subjects.) Of all the candidates entering for Advanced subjects the percentage who fail in all subjects attempted has of late been rising each year—11·7 in 1953, in 1956 it was 14·2 (boys 12·8, girls 16·4). A number of these completely unsuccessful candidates are external or “unattached” students and there is perhaps no cause for serious concern in the fact that of those boys who leave a secondary school after attempting Advanced subjects 6 to 7 per cent have failed in all the Advanced subjects they attempted and twice as many have passed in one only. It may be however a matter for reflection that of the girls who leave about one in eight has failed in all the Advanced subjects she entered for and approximately one in four has passed only in one; and that of the girls who enter training colleges after attempting Advanced subjects one in five has failed in all the Advanced subjects she attempted and one in three has passed only in one. If something other than Advanced level subjects had been open to them, would these boys and girls have had a more rewarding sixth-form course?

16. The other side of the reckoning is suggested by the candidates, few comparatively though they are, who pass in three Advanced subjects and then join the regular services or work in laboratories or enter the civil service or industry or nursing or agriculture. And, since individuals insist on thrusting themselves up through statistics of the mass, success in one or in two Advanced subjects has been the prelude to immediate marriage, while ability to pass in two Advanced subjects seems to be no bar to entry upon a mannequin's career.

Conclusion

17. Preliminary products of what is seen as a long-term enquiry do not call for conclusions but one observation may be permissible even if self-evident. Many of the Board's candidates may have “finished with school” after sitting for the G.C.E. whether at O or at A level; but should they wish to progress in their chosen career, few of those who then left school have yet finished with schooling—and being examined by one or other of the scores upon scores of professional bodies which conduct professional examinations and award professional certificates and diplomas. If comparisons are to be made between English university and North American college numbers, in England one leaves school to become a hairdresser—beauticulture attracts girls from our independent schools—or a journalist or a nurse; in the U.S.A. boys and girls can “go to college” for a diploma or a degree in trichology, in journalism, in nursing, in morticianship, and in a host of other callings not as yet directly provided for by English Universities, or simply to win social status, gain social experience and acquire social contacts leading to marriage and advancement in business or profession. The several virtues and failings of the two systems, educational, political, social and economic, can be debated; the differences are essential.

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