

Senior Students Education: How are they faring?

Analysis of Annual Examination Results, February 1999

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It might well be said that our future is in their hands. It could well be argued that the Gozo Upper Lyceum is the cocoon where the future generation of Gozitan leaders are being fostered. The workings of such an institution should therefore be of interest to all of us who live and work in Gozo.

I have asked myself the question: "What motivates these students to undertake the studies they are doing? How are they faring, and how do they compare with the world at large? In particular, how are female students doing compared to the male colleagues?"

I have analyzed the results obtained from the Annual Examination of the Upper Lyceum, Gozo, February, 1999. In this analysis, only Advanced Level subjects are considered. The 'Overall Grade' refers to the mark obtained overall (i.e. including subjects taken at both Advanced as well as Intermediate levels.

It is to be emphasized that these data refer to the result of a single year, and therefore ignore the annual variations that are bound to occur over a period of years.

1. Female/Male distribution:

There were 135 students overall in this category, of

whom 67 were female and 68 male. A more equitable distribution of sexes could not be envisaged.

2. Science subjects

A total of 42 students (31.1%) had at least one science subject (Maths, Physics, Chemistry, Biology). Of these 23 were females and 19 males.

Table 1: Number of students taking science subjects:

	Male	Female	Total
Chemistry	10	9	19
Physics	10	1	11
Maths	9	9	18
Biology	7	14	21
Total	19	23	42

About equal numbers of male and female students take science subjects - with the exception of Physics which is most unpopular with female students.

3. Combination of Science subjects

When considering the choice of a career, the

combination of subjects chosen is of relevance. Table 2 shows that Chemistry and Biology are the most popular combination, equally popular with both males and females. On the other hand Physics and Mathematics combination is fairly common in males but rare in female students. It is also evident that when females take a science subject (usually mathematics) it is just as likely to be a stand-alone subject, combined with a non-science subject.

Table 2: Combination of science subjects

Subject Combination	Male	Female	Total
Chem-Biol	8	8	16
Physics-Maths	7	1	8
Isolated subject	2	8	20

4. How Well do Students do in Science Subjects?

Table 3 shows a considerable variation between average marks obtained in the various science

Table 3: Average marks obtained by science students

Subject	Male	Female	Overall
Chemistry	62.3	54.4	58.6
Physics	45.6	-	46.5
Mathematics	60.4	78.9	69.1
Biology	81.4	67.9	73.1

subjects, with best marks obtained in Biology, and worst in Physics. It is also worth noting that females do significantly better than males in Mathematics, and males do better in Biology.

5. Non-science subjects

The number of students taking non-science subjects

at Advanced Level is shown in Table 4 (see overleaf). It confirms the overall popularity of English and Maltese and to a lesser extent, Italian among students, with no marked gender preferential.

There seems to be a noticeable propensity for female students to take up Sociology (70% female) and Accounts (79% female).

6. Overall Grade obtained

The overall grade obtained is a weighted average of all subjects taken (at Advanced and Intermediate levels). The following is a break-down of the various grades:

Table 5: Number of students who obtained overall grades

Grade	Male	Female	Total
A	8	11	19
B	25	40	65
C	28	12	40
F	6	3	9

To be noted from this table that considerably more females obtained a grade "B" than males, and more males obtained a Grade "C". An "A" or a "B" grade was obtained by 76% of female students but by only 49% of males. These figures are bound to relate to the chances of obtaining a university place. They confirm the current trend that in Gozo, over 67% of students successful at Matriculation examination are females. While it is pleasing to see that females are doing well educationally, any significant variation from the expected 50% should be considered as worthy of investigation.

Table 4: Number of students taking other (Non-science) subjects at Advanced Level

	Male	Female	Total	% Female
Art	2	2	4	50.0
English	12	19	31	61.3
Maltese	22	16	38	42.1
Italian	9	5	14	35.7
German	1	0	1	-
French				
Spanish	0	2	2	-
Accounts	7	16	23	69.6
Economics	8	4	12	33.3
Marketing	9	6	15	40.0
Computing	4	2	6	33.3
Sociology	4	15	19	78.9
Religion	7	2	9	22.2
Geography	-	2	2	-
Home Econ	-	6	6	-
Engineering Drawing	5	1	6	16.7

7. Overall Grade and Science subjects at Advanced Level

There were 19 students (11 female and 8 males) who obtained an overall grade "A". Of these, 12 (63%) had a science subject at A-Level. Considering that only 42 students (or 31% of all students) had a science subject, it would appear that those science students taking a science subject at Advanced level were twice as likely to obtain an overall grade "A" as other students.

Moreover, of the 8 male students obtaining an overall grade A, 6 had a science subject (and 5 had the combination of Chemistry-Biology). In females 5 of the 11 students had a science subject. To a large extent the Chemistry-Biology combination is taken by students aiming at entering the medical course at University.

8. Geographic Locality and Gozo students

The address of students at the Upper Lyceum is shown in Table 6. The "Expected Number of Students" was calculated from the locality total population (data obtained from the 1995 Census).

From above table it can be seen that Victoria contributes a larger share of the student population than would be expected from the size of the population: 41% of all students come from Victoria. This has been the case ever since statistics have been held at the Gozo Lyceum. By comparison, most other villages contribute less than would be expected from the size of their population. In particular discrepancies are most noticeable for Xewkija, Zebbug, and Gharb. While it is possible that these are only annual variations, it is important to keep an eye on these developments.

Table 6: Place of Residence of Upper Lyceum Students

Locality	Male	Female	Total	Actual %	Expected %
Gharb	0	1	1	0.7	5.1
Ghasri	-	-	-	-	1.9
Gh'Sielem	4	3	7	5.2	10.9
Fontana	2	2	4	3.0	4.3
Kercem	0	3	3	2.2	7.4
Munxar	1	1	2	1.5	4.2
Nadur	15	10	25	18.7	19.1
Qala	6	6	12	9.0	7.2
Sannat	2	3	5	3.7	7.8
St. Lawrence	2	1	3	2.2	2.7
Xaghra	8	8	16	12.0	17.7
Xewkija	1	4	5	3.7	14.9
Victoria	23	22	55	41.0	29.0
Zebbug	1	2	3	2.2	7.7

Summary of findings

- About equal number of male and female students attend the Upper Lyceum, Gozo.
- The total number of students taking a science subject at Advanced Level (42 students) is comparable to the number of students taking Maltese (38 students), or English (31 students).
- There is no major difference in the overall number of females taking science subjects compared to males. Physics is the exception, with only 1 female student. Biology is the most popular subject with female students.
- *Combination of subjects.* The most common combination of science subjects is that of Chemistry with Biology, and secondly (with male students) Physics with Mathematics. With female students however, a science subject is most likely to stand alone (in combination with a non-science subject). This could be a drawback in choice of future career.
- *Performance:* females obtain better average marks in Mathematics, while males obtain perform better in Biology.
- *Overall Mark:* 14 % of students obtained a grade

"A" overall. It appears that those having a science subject at Advanced level had twice the probability of obtaining an "A" grade overall. The proportion having A or B overall grade was 76% for females and 49% males. If this reflects on Matsec results, we can expect the current female preponderance in University intake to continue.

- *Non-science subjects:* There appears to be a marked tendency for female students to take Accounts (79% of all students) and Sociology (70%).
- *Geographic locality.* Students from Victoria make up 41 % of all students, which is far in excess of the expected number based on total population size (29.0%) students). Most of the villages are under-represented at the Upper Lyceum.