



EXAMINATIONS COUNCIL OF ZAMBIA

2023 JUNIOR SECONDARY SCHOOL LEAVING EXAMINATIONS
PERFORMANCE REPORT

©Copyright Examinations Council of Zambia 2023

All rights reserved. No reproduction, copy or transmission of this publication may be made without prior written permission.

Suggested Citation:

The Examinations Council of Zambia (2023). Junior Secondary School Leaving Examinations Performance Review Report. Lusaka, ECZ.

For further information, please contact:

The Executive Director
Examinations Council of Zambia
P. O. Box 50432
Lusaka

Foreword

The Junior Secondary School Leaving Examination, which marks the end of Junior Secondary Education, serves as a bridge for learners' transition to Senior Secondary School Education. The examination also provides information on system-level learning achievement that is key to evaluating and strengthening teaching and learning at the junior secondary school level in Zambia. To give internal and external education stakeholders feedback on candidates' performance, the Examinations Council of Zambia develops examination performance evaluation reports after each examination cycle. This report presents an analysis of the candidate's performance on the 2023 examination. An overview of the Grade 9 examination for 2023 is provided, along with performance analysis broken down by subject groupings, gender, mean scores, and certificate and grade classification. A qualitative review of the learners' performance is also given, broken down into three categories: high, average, and low achievers.

It is hoped that this report will provide essential information on which policy and instructional decisions could be made to enhance learner performance. It is further hoped that the report will also serve as an essential tool for research and development, cross-national comparisons, and benchmarking.

Dr. Michael Chilala
Executive Director
Examinations Council of Zambia

Acknowledgements

The Examinations Council of Zambia (ECZ) would like to acknowledge and thank the provincial and district education offices, school managers, teachers, and candidates who participated in the 2023 Junior Secondary School Leaving Examination for their continued support and cooperation. The ECZ expresses its sincere gratitude to the under-listed officers for their extensive experience, knowledge, and expertise in producing and publishing this report:

1. Mr Moonga Hakalyamba, Principal Research Officer
2. Mr Angel M. Kaliminwa, Principal Planning Officer
3. Ms Njekwa Simwanza, Principal Examinations Specialist
4. Mr Shakazo Mzyece, Senior Research Officer
5. Mr Simwinda Simwinda, Senior Research Officer
6. Mr Smart Sakala, Senior Research Officer
7. Mr Joseph Kanswe, Senior Research Officer
8. Mr Akakulubelwa Nalishuwa, Senior Research Officer
9. Ms Kiwala Felidah, Senior Subject Specialist - Mathematics
10. Mr Menny Nachibinga, Senior Subject Specialist - Science
11. Mr Mutono Violet, Senior Subject Specialist – Home Economics
12. Mr Sitali Macwani, Senior Subject Specialist – Agricultural Science
13. Mr Edward Songa, Senior Subject Specialist – Physical Education
14. Mr Eric M. Mwale, Senior Subject Specialist – Social Studies
15. Mr Emeldah Malungo, Senior Subject Specialist – Social Studies
16. Mr. Chinkalata Collins, Senior Subject Specialist - Computer Studies
17. Mr Kraus Bbabbi, Senior Subject Specialist – Business Studies
18. Mr Fredrick Simasiku, Senior Subject Specialist – English Languages
19. Ms Bathseba Sakala, Senior Subject Specialist – Zambian Languages
20. Mr Muhali Muhali, Senior Subject Specialist – Zambian Languages
21. Mr Mudululu Siang'andu, Senior Subject Specialist – Foreign Languages
22. Mr Onesimus Kantooma, Senior Subject Specialist – Physical Education

Shadreck Nkoya

Director – Research, Planning & Information

Examination Council of Zambia

Contents

Foreword.....	iii
Acknowledgements.....	iv
Introduction.....	1
Overview of the 2023 Junior Secondary School Leaving (Grade 9 Internal) Examination	1
General Candidature	1
Candidature by Subject.....	2
Absenteeism.....	3
Absenteeism by Subject.....	5
General Performance	6
Certificate Awards	6
Certificate Awards by Province.....	7
Performance Analysis Using Mean Score	8
Comparison of the 2022 and 2021 School-Based Assessment (SBA) Results.....	9
Performance Analysis of Grades Distributions.....	10
Performance According to Grade Distributions across Subject Groupings.....	11
Literature and Languages.....	11
Natural Sciences.....	13
Social Sciences.....	14
Business Studies.....	15
Vocational & Technology Pathway Subjects	16
Section Two - Subject-Specific Level Performance Analysis	18
English Language.....	18
Zambian Languages	20
French Language.....	23
Chinese Language	25
Mathematics	26
Integrated Science	30
Agricultural Science.....	33

Social Studies.....	36
Religious Education	41
Business Studies.....	42
Computer Studies.....	44
Art and Design	46
Design and Technology	49
Musical Arts Education.....	52
Home Economics	54
Physical Education.....	57
2023 JSSLE Special Education Needs Examinations Review	59

Introduction

This report focuses on the outcomes of the 2023 Grade 9 Internal Junior Secondary School Leaving Examinations (JSSLE). The first section of the report gives an overview of the examination results, while the second provides an in-depth analysis of subject areas and performance. The report provides information on several performance-related factors, including candidature, absenteeism, certificate division, gender, age, and school type. It also contains statistical information on candidates with Special Educational Needs (SEN). The review of candidates' performance in each subject was broken down according to strengths and weaknesses exhibited. Further, the subjects were grouped into the following clusters to streamline the analysis: Languages, Natural Sciences, Social Sciences, Business Studies and Practical Subjects.

Overview of the 2023 Junior Secondary School Leaving (Grade 9 Internal) Examination

The report's first section provides a summary of the outcomes of the 2023 Junior Secondary School Leaving (Grade 9 Internal) Examination regarding performance, absenteeism, and candidature from a statistical point of view. The second section of the report offers a thorough qualitative analysis of the performance broken down by subject area. The examination was conducted from Thursday, 22nd November to 30th December 2023. Guidelines were provided to candidates and invigilators on Tuesday, 21st November 2023. The answer scripts were marked from 7th to 13th December 2023. It's worth mentioning that during the 2023 Examination, Chinese Language was examined for the fourth time. This means that two foreign languages, French and Chinese, are now being examined at this level. Similarly, St. Jeff College of South Africa presented candidates for the fourth time during the 2023 Grade 9 Junior Secondary School Leaving Examination.

General Candidature

Three hundred thirteen thousand seven hundred and ninety-one (313,791) candidates entered the 2023 Grade 9 Examination. Of these, one hundred forty-eight thousand and forty-two (148,042), representing 47.18 percent, were boys, while one hundred sixty-five thousand seven hundred and forty-nine (165,749), representing 52.82 percent, were girls.

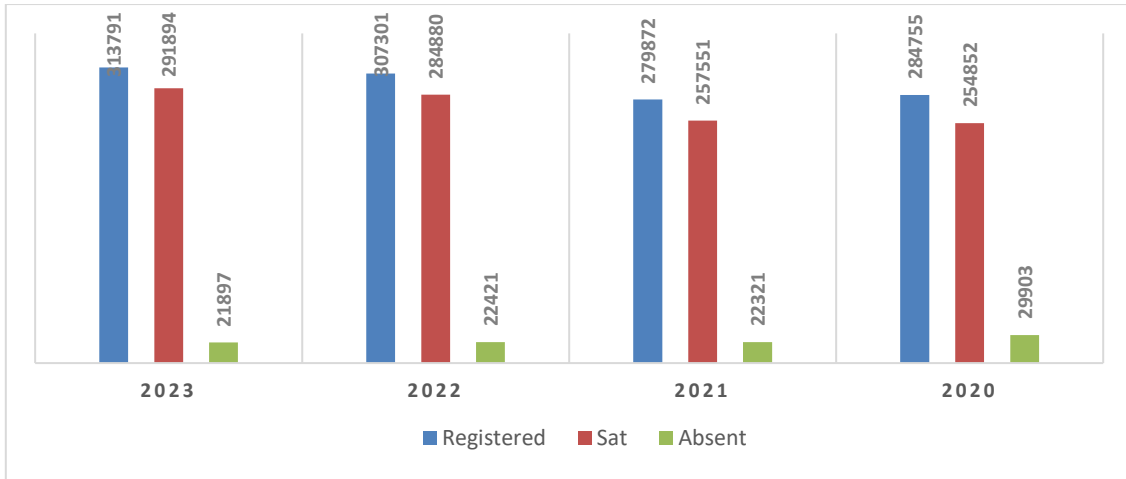


Figure 1: Candidature

The total number of learners registering for the Junior Secondary School Leaving (Grade 9 Internal) Examination increased by 2.1 percent as opposed to the previous year, 2022, where the candidature increased by 9.8 percent. It is also worth noting that in 2023, the percentage increase in candidature for girls was higher than that of boys by 3.05 percentage points. Further, out of the three hundred and thirteen thousand seven hundred ninety-one (313,791) candidates who entered, two hundred ninety-one thousand eight hundred ninety-four (291,894) sat the 2023 Examination. This represented an increase of 2.40 percent in the number of candidates who sat the 2023 examination from 2022. This was the case in 2020, 2021, and 2022.

Candidature by Subject

With over 300,000 candidates, the core subjects—English language, Mathematics, Integrated Science, Social Studies, and Business Studies—had the most entries. Computer Studies and Religious Education recorded nearly 240,000 candidates. Less than 6,000 entries were recorded in the languages of Chinese, French, Lunda, and Luvale. With only 125 candidates, the Chinese language had the least entries across the 22 subjects (see Table 1).

Table 1: Candidature by Subjects

Subject	Entered			Sat			Sat Proportion (%)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Agric. Science	21714	21480	43194	19258	19089	38347	88.69	88.87	88.78
Art & Design	13905	13355	27260	12876	12321	25197	92.60	92.26	92.43
Business Studies	143029	160269	303298	131999	148657	280656	92.29	92.75	92.53
Chinese Language	65	60	125	63	60	123	92.31	95.24	98.00
Chitonga	17868	20080	37948	16008	18097	34105	89.59	90.12	89.87
Cinyanja	19753	22152	41905	17838	20034	37872	90.31	90.44	90.38
Computer Studies	117235	132545	249780	108858	123472	232330	92.85	93.15	93.01
Design & Technology	6652	3376	10028	6411	3231	9642	96.38	95.70	96.15
English Language	148032	165758	313790	136370	153543	289913	92.12	92.63	92.39
French Language	2432	3410	5842	2342	3326	5668	96.30	97.54	97.02
Home Economics	26701	39747	66448	24381	37159	61540	91.31	93.49	92.61
Icibemba	41686	43147	84833	37214	39063	76277	89.27	90.53	89.91
Int. Science	148011	165744	313755	136536	153678	290214	92.25	92.72	92.50
Kiikaonde	4627	4994	9621	3992	4402	8394	86.28	88.15	87.25
Lunda	2213	2177	4390	1951	1940	3891	88.16	89.11	88.63
Luvale	1922	2019	3941	1699	1858	3557	88.40	92.03	90.26
Mathematics	148021	165733	313754	136365	153447	289812	92.13	92.59	92.37
Musical Arts Education	3397	3822	7219	3158	3600	6758	92.96	94.19	93.61
Physical Education	23152	25957	49109	20945	23663	44608	90.47	91.16	90.83
Religious Education	137628	155657	293285	126904	144466	271370	92.21	92.81	92.53
Silozi	9470	10960	20430	8256	9879	18135	87.18	90.14	88.77
Social Studies	147937	165622	313559	136610	153697	290307	92.34	92.80	92.58

The candidature of girls was generally higher than that of boys in most subjects except Design & Technology, Art & Design, Agricultural Science, Lunda, and Chinese Language. There was a notable difference in the enrolment of boys and girls in Design & Technology. The number of boys who chose this subject was almost double the number of girls. This trend was also observed in previous years.

Absenteeism

The significant financial implications of absenteeism on both government and families who have invested substantial resources in preparing candidates has been widely recognised. The 2023 Grade 9 Internal examination recorded a decrease of 0.32 percentage points in absenteeism from the 2022 rate of 7.30 percent.

The analysis of absenteeism over seven years indicated a drop of 5.06 percentage points, from 12.04 percent in 2017 to 6.98 percent in 2023.

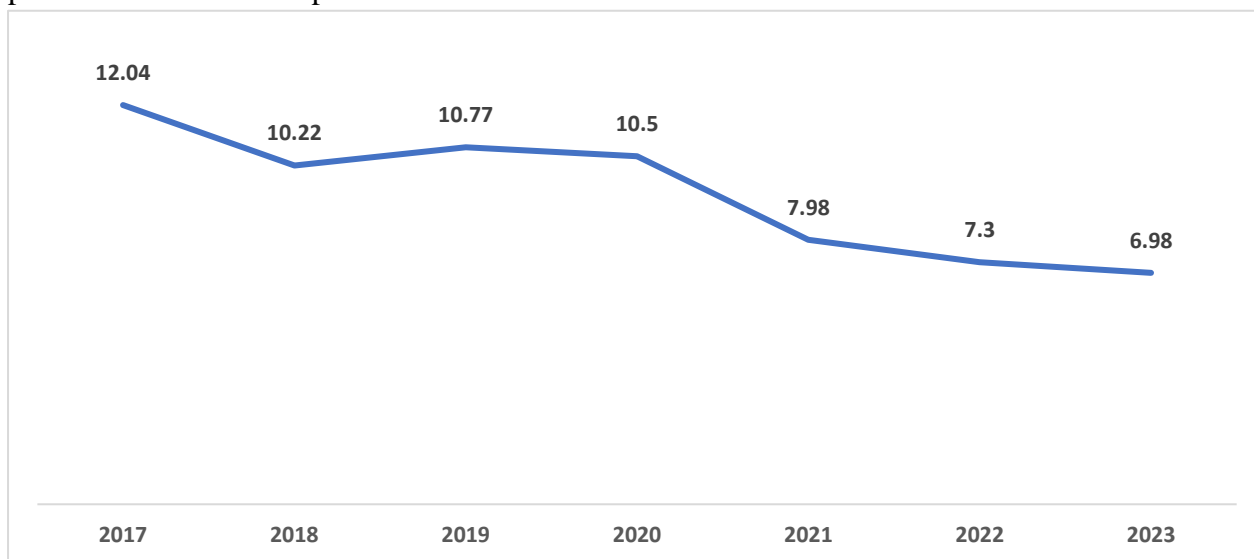


Figure 2: Absenteeism Rate from 2017 to 2023

Province-wise, absenteeism rates decreased in five provinces except for Western, North-Western, Southern, Luapula, and Northern. The highest reduction was recorded in Muchinga province, followed by Eastern province while Central province recorded the lowest (See Figure 3). Across all provinces, boys had higher absenteeism rates than girls, except in Lusaka, Eastern, and Southern provinces (refer to Figure 4).

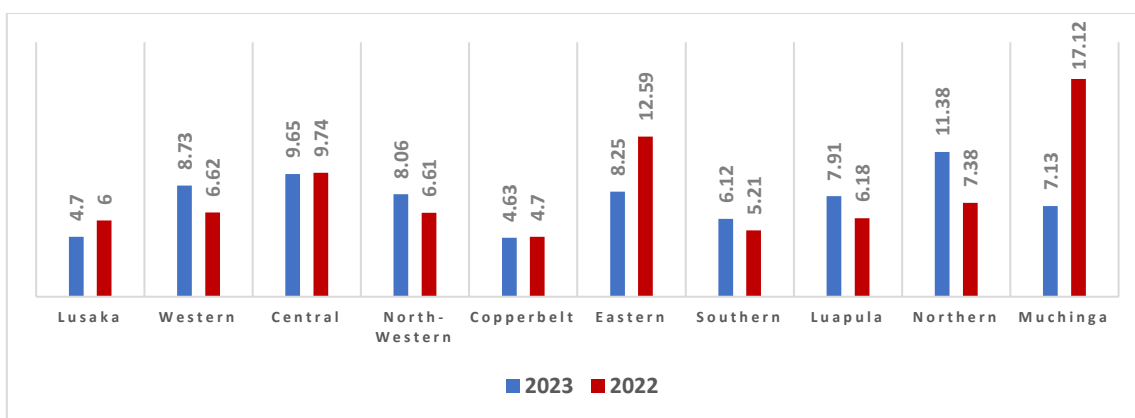


Figure 3: Absenteeism Rates by Province

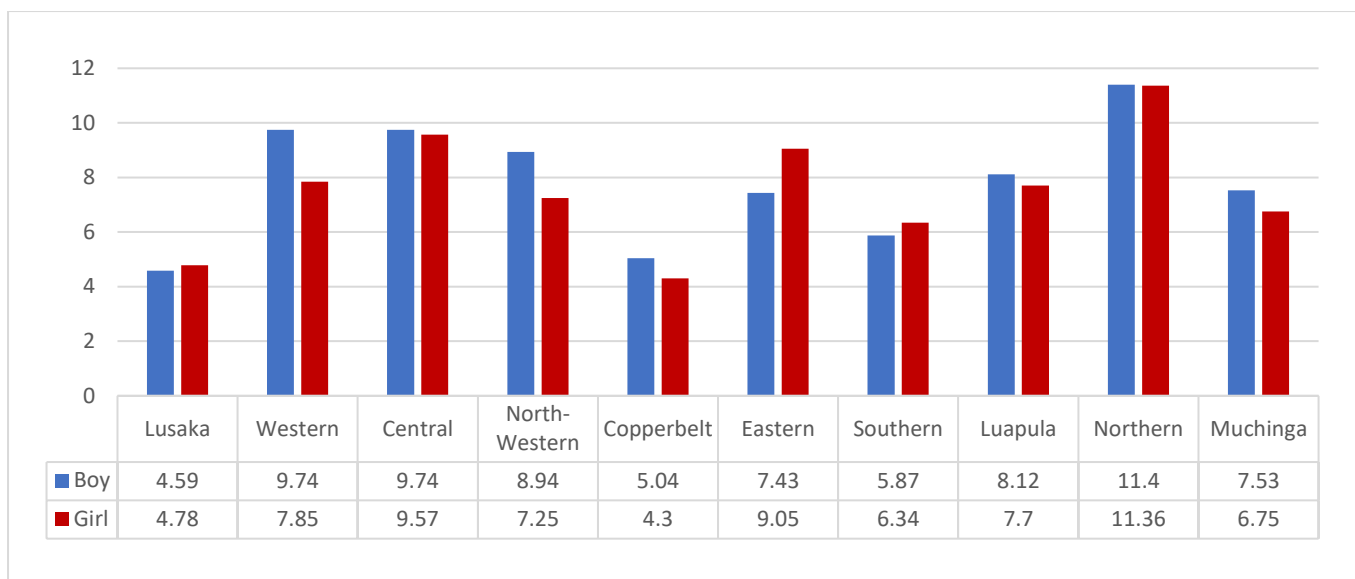


Figure 4: 2023 Grade 9 Absenteeism by Province and Sex

Absenteeism by Subject

Kiikaonde recorded the highest absenteeism percentage at 12.8 percent. Lunda (11.4%), Silozi (11.2%), and Agriculture Science (11.2%) followed. French (2.98%) and Design and Technology (3.85%) recorded the lowest absenteeism rates. The proportion of boys who were absent in Chitonga, Icibemba, Silozi, Luvale, Kiikaonde and Home Economics was significantly higher than that of girls. This may indicate a negative perception of Zambian Languages and Home Economics by boy (see Table 2).

Table 2: Absenteeism by Subject

Subject	entered			Absent			Proportion (%) of Absenteeism		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Agric. Science	21714	21480	43194	2456	2391	4847	11.31	11.13	11.22
Art and Design	13905	13355	27260	1029	1034	2063	7.40	7.74	7.57
Business Studies	143029	160269	303298	11030	11612	22642	7.71	7.25	7.47
Chinese Language	65	60	125	2	0	2	11.76	0.00	10.00
Chitonga	17868	20080	37948	1860	1983	3843	10.41	9.88	10.13
Cinyanja	19753	22152	41905	1915	2118	4033	9.69	9.56	9.62
Computer Studies	117235	132545	249780	8377	9073	17450	7.15	6.85	6.99
Design & Technology	6652	3376	10028	241	145	386	3.62	4.30	3.85
English Language	148032	165758	313790	11662	12215	23877	7.88	7.37	7.61
French Language	2432	3410	5842	90	84	174	3.70	2.46	2.98
Home Economics	26701	39747	66448	2320	2588	4908	8.69	6.51	7.39
Icibemba	41686	43147	84833	4472	4084	8556	10.73	9.47	10.09
Int. Science	148011	165744	313755	11475	12066	23541	7.75	7.28	7.50
Kiikaonde	4627	4994	9621	635	592	1227	13.72	11.85	12.75
Lunda	2213	2177	4390	262	237	499	11.84	10.89	11.37
Luvale	1922	2019	3941	223	161	384	11.60	7.97	9.74
Mathematics	148021	165733	313754	11656	12286	23942	7.87	7.41	7.63
Musical Arts Ed	3397	3822	7219	239	222	461	7.04	5.81	6.39

Physical Education	23152	25957	49109	2207	2294	4501	9.53	8.84	9.17
RE	137628	155657	293285	10724	11191	21915	7.79	7.19	7.47
Silozi	9470	10960	20430	1214	1081	2295	12.82	9.86	11.23
Social Studies	147937	165622	313559	11327	11925	23252	7.66	7.20	7.42

General Performance

Certificate and Grade Classification- Overview

The scores for different paper components of the subjects are aggregated to create a subject score for each subject area. The certificate awards classification for the Grade 9 Examinations are in three categories: namely, Certificate, Statement, and Fail.

- **Certificate:** A candidate awarded the Junior Secondary School Leaving Examination (JSSLE) Certificate must score at least 40 percent in at least 6 subjects.
- **Statement:** A candidate who obtains a statement must score a minimum of 40 percent in less than 6 subjects.
- **Fail:** A candidate is considered to have failed if he/she has scored less than 40 percent in all the subjects.

For Selection and Certification purposes, a candidate's best six subject scores are aggregated. The Grade boundaries used at the Junior Secondary School Examination level are as follows:

Table 3: Grade Boundaries Junior Secondary School level

Range	Grade	Grade Description
75% to 100%	Grade 1	Distinction
60% to 74%	Grade 2	Merits
50% to 59%	Grade 3	Credits
40% to 49%	Grade 4	Pass
39% to 0%		Fail

Certificate Awards

Of the 291,894 who took the 2023 Junior Secondary School Leaving Examination (JSSLE), 156,315 Candidates (53.55%) were awarded certificates. Comparing the 2023 certificate award proportion to 54.16 percent in 2022, there has been a marginal decline of 0.61 percentage points. By sex, more boys (54.18%) obtained certificates than girls (52.99%). This represents an increase of 0.21 percentage points for boys and a decrease of 1.36 percentage points for girls, from 2022.

Further, 109,803 candidates, representing 37.62 percent, obtained statements. The percentage of candidates that obtained statements in 2023 increased to 36.5 percent in 2023 representing an increase of 1.1 percent. A total of 25,776 candidates representing 8.83 percent failed the examination. This,

however, represents a decrease of 0.5 percent from 2022. BY sex, more boys (9.42%) failed the examination than girls (8.31%). This has been the trend since the 2019 (See Table 4).

Table 4: Certificate Awards

Award	Description	2023			2022		
		Boys	Girls	Total	Boys	Girls	Total
Certificates	Number	74447	81868	156315	73714	80590	154304
	Proportion (%)	54.18	52.99	53.55	53.97	54.35	54.16
Statements	Number	59789	59789	109803	49288	54722	104010
	Proportion (%)	36.40	38.70	37.62	36.09	36.90	36.51
Fail	Number	12941	12835	25776	13585	12981	26566
	Proportion (%)	9.42	8.31	8.83	9.95	8.75	9.33

Certificate Awards by Province

The provincial analysis was based on the proportion of candidates obtaining certificates. Similar to the 2022 and 2021 performances, only four provinces recorded proportions of candidates that obtained certificates higher than the National average. These were Eastern (61.3), Copperbelt (61.1), Lusaka (61.1) and Muchinga (56.8). In comparison to 2022, only three provinces; namely Copperbelt, Luapula and Northern recorded improvement in terms of pass rates. Northern province recorded the largest improvement from 47.5 percent in 2022 to 53.4 percent in 2023.

Table 5: Trends in Performance Across Regions

Years	2023		2022		2021		2020	
	% Certificates	Rank	% Certificates	Rank	% Certificates	Rank	% Certificates	Rank
Copperbelt	62.38	1	61.14	2	56.98	3	55.68	2
Lusaka	59.44	2	61.05	3	52.55	6	54.31	4
Eastern	58.6	3	61.3	1	48.19	10	48.6	9
Muchinga	55.35	4	56.81	4	50.1	8	49.21	7
National	53.53		54.14		54.43		53.09	
Northern	53.38	5	47.54	7	56.26	4	52.24	5
Central	50.04	6	50.81	6	52.59	5	48.78	8
Southern	49.15	7	52.75	5	48.55	9	50.98	6
Luapula	47.11	8	44.96	8	50.71	7	48.59	10
North-western	42.7	9	43.12	9	62.24	2	55	3
Western	39.51	10	41.52	10	70.87	1	65.77	1

In terms of failure rates, the highest rate was recorded in Western (13.97%) and North-western (13.51%) provinces. Similar to 2022, the lowest failure rate in 2023 was recorded in Eastern Province (5.58%).

Performance Analysis Using Mean Score

Candidates' performance was also analysed through mean scores, focusing on six core subjects namely Mathematics, Integrated Science, Social Studies, Business Studies, English Language, and Computer Studies.

The 2023 Examination mean scores for the six core subjects ranged from 27.4 (Social Studies) to 43.2 (Business Studies). In the 2022 Examination, the mean scores varied from 24.5 percent in computer studies to 42.9 percent in mathematics. The 2023 mean scores for Business Studies, Computer Studies and Integrated Science recorded mean percentage scores above the pass mark (40%) (see Figure 5). In terms of performance improvement, Computer Studies, English and Mathematics were the only subjects amongst the six core subjects that recorded improvements in performance from 2022. Computer Studies, English Language and Mathematics improved by 1.59, 1.09 and 3.17 percentage points respectively.

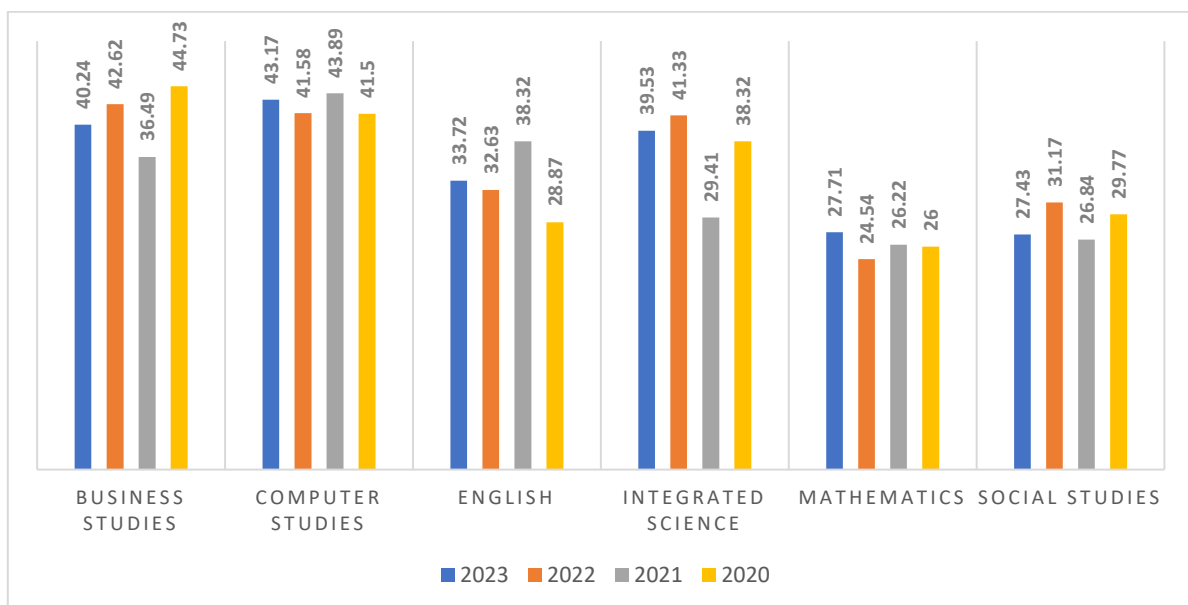


Figure 3: Comparison of Mean Scores for 2020 to 2023

Boys and girls performed relatively similarly in the six core subjects. Nonetheless, girls outperformed boys in English and Business Studies. Boys achieved the highest mean scores in the other subjects.

Table 7: Performance by sex

Subject	Girls	Boys	Total
Business Studies	40.26	40.23	40.25
Computer Studies	42.41	44.03	43.22
English	35.33	31.9	33.62
Integrated Science	38.86	40.27	39.57
Mathematics	26.30	29.29	27.80
Social Studies	27.10	27.8	27.45

Comparison of the 2022 and 2021 School-Based Assessment (SBA) Results

A comparison of the 2023 and 2022 SBA results is discussed. The mean scores were standardized for comparison purposes. In 2019, nine (9) Practical Papers were converted into School Based Assessments (SBAs). Consequently, schools have been setting and administering these papers since the 2019 examination. SBA contributes to the final grade, a weighting carefully determined by subject experts. Comparing candidates' performances in 2023 to 2022, improvements were observed in all nine SBA papers except for Art & Design and Design & Technology. Conversely, in 2022, improvement in performance was noted across all SBA papers except for Home Economics.

The largest percentage point increase in SBA papers in 2023 from 2022 was observed in Agricultural Science at 2.43 percentage points, followed by Integrated Science at 1.97. The least increase was recorded in Musical Arts Education at 0.43 percentage points. In 2022, Physical Education recorded the least increase (0.85). Continuous monitoring of the conduct of School Assessments in schools is recommended if adherence to the SBA guidelines and standards is to be ensured.

Table 8: Performance in School-Based Assessment (2021 to 2023)

Practical Subjects	2023	2022	2021	Change	Movement
Agricultural Science	77.91	75.48	73.2	2.43	↑
Art & Design	80.27	81.53	75.77	-1.26	↓
Computer Studies	80.75	79	77.83	1.75	↑
Design and Technology	80.48	81.18	78.56	-0.70	↓
French	80.28	78.9	74	1.38	↑
Home Economics	82.31	81.23	81.44	1.08	↑
Integrated Science	77.76	75.79	72.55	1.97	↑
Musical Arts Education	83.99	83.56	81.27	0.43	↑
Physical Education	84.89	84.04	83.07	0.85	↑

Performance across all practical papers was comparable between boys and girls. However, a slightly larger disparity was observed in French and Home Economics, with girls outperforming boys by 2.99 and 2.16 percentage points respectively (Refer to Table 9).

Table 9: 2023 Performance by sex in School-Based Assessment

Practical Subjects	Girl	Boy
Agricultural Science	77.89	77.93
Art & Design	80.46	80.08
Computer Studies	80.78	80.72
Design and Technology	80.16	80.64
French	81.52	78.53
Home Economics	83.17	81.01
Integrated Science	78.05	77.42
Musical Arts Education	84.41	83.51
Physical Education	84.28	85.57

Performance Analysis of Grades Distributions

At this level of examination, subjects are classified into four categories: pass (grade 4), credit (grade 3), merit (grade 2), and distinction (grade 1). The analysis of division three or better performance across subjects indicated that the proportions of candidates who obtained grades three or better ranged from 29.7 percent in Social studies to 93.8 percent in the French Language. Further, the proportions of candidates who failed varied from 1.7 percent in the French Language to 51.94 percent in Mathematics.

In the Division One category, French had the highest proportion of candidates at 37.6 percent, while Computer Studies had the lowest at 0.4 percent. Design & Technology (45.4%), Chinese (38.9%) and Social Studies (32.7%) recorded the highest proportions, respectively, in Division Two, Three and Four categories.

Similar to 2019, 2020, 2021, and 2022, Mathematics in 2023 recorded the largest proportion of candidates who failed at 51.94 percent. The 2023 Mathematics failure rate, however, decreased by 5.1 percent (see Figure 6).

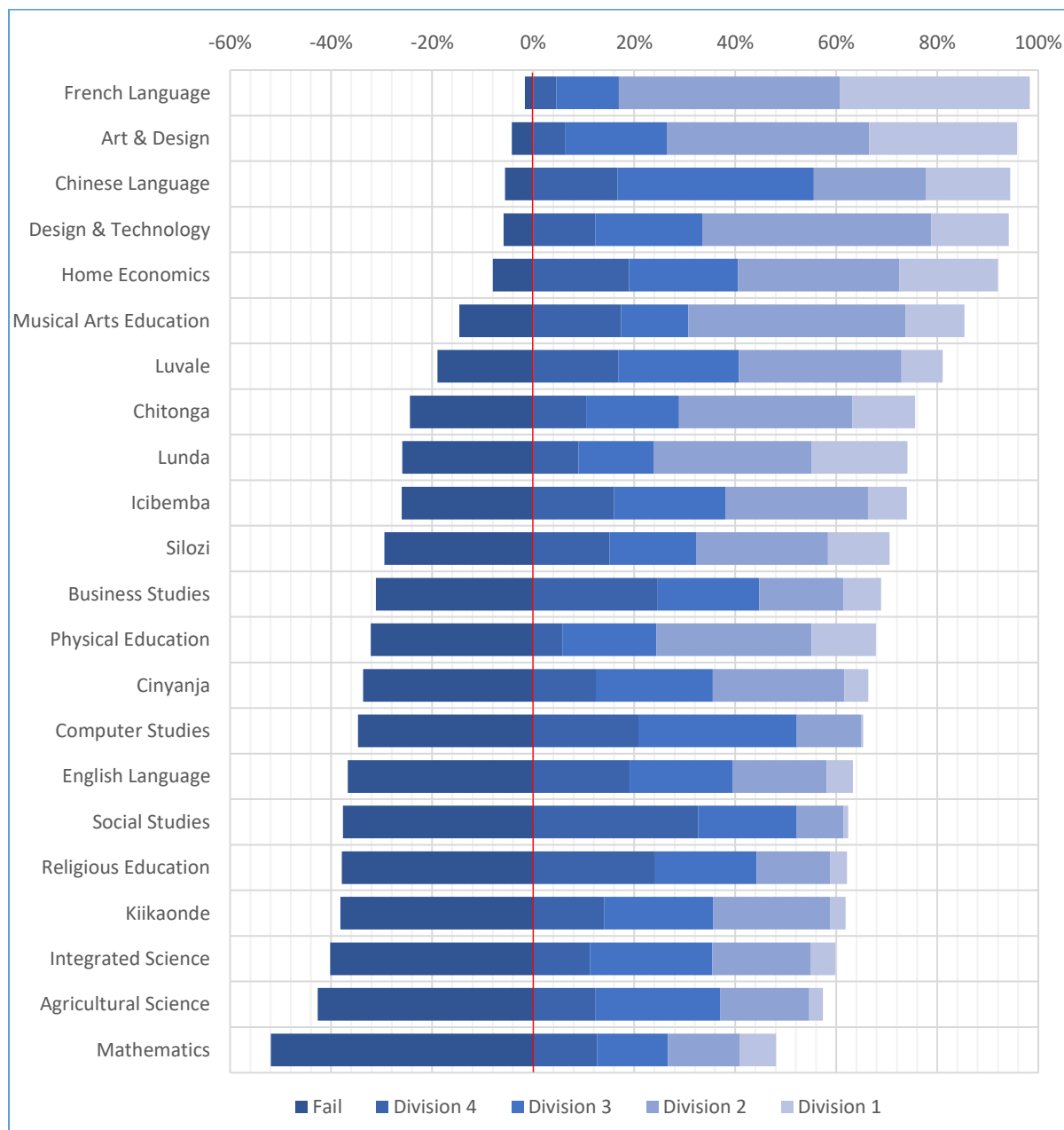


Figure 4: Grade Distribution for the 2023 Grade 9 Internal Examinations in all subjects

Performance According to Grade Distributions across Subject Groupings

Literature and Languages

French recorded the largest proportion of candidates who obtained division one at 37.56 percent, followed by Lunda at 18.93 per cent. The Chinese Language was third at 16.67 percent. The lowest

Division One proportions were recorded in Kiikaonde at 3.06 and Cinyanja at 4.70 percent. In 2022, the largest proportions were recorded in French (26.08%), followed by Chitonga (19.85%). The lowest proportions were recorded in the Chinese Language at 0.86 per cent.

The proportion of candidates obtaining division one in the English Language in 2023 decreased by 0.95 percentage points from 6.15 in 2022 to 5.20 percent in 2023. The analysis of division three or better performance in the languages grouping indicated that the highest performance was recorded in French at 93.8 percent, followed by Chinese at 77.8 percent. The lowest proportions were recorded in the English Language at 44.2 percent.

In terms of failure rate, the highest proportion of candidates was recorded in Kiikaonde (38.2 percent). The English Language was second at 36.70 percent, while Cinyanja was third at 33.7 percent (see Figure 7).

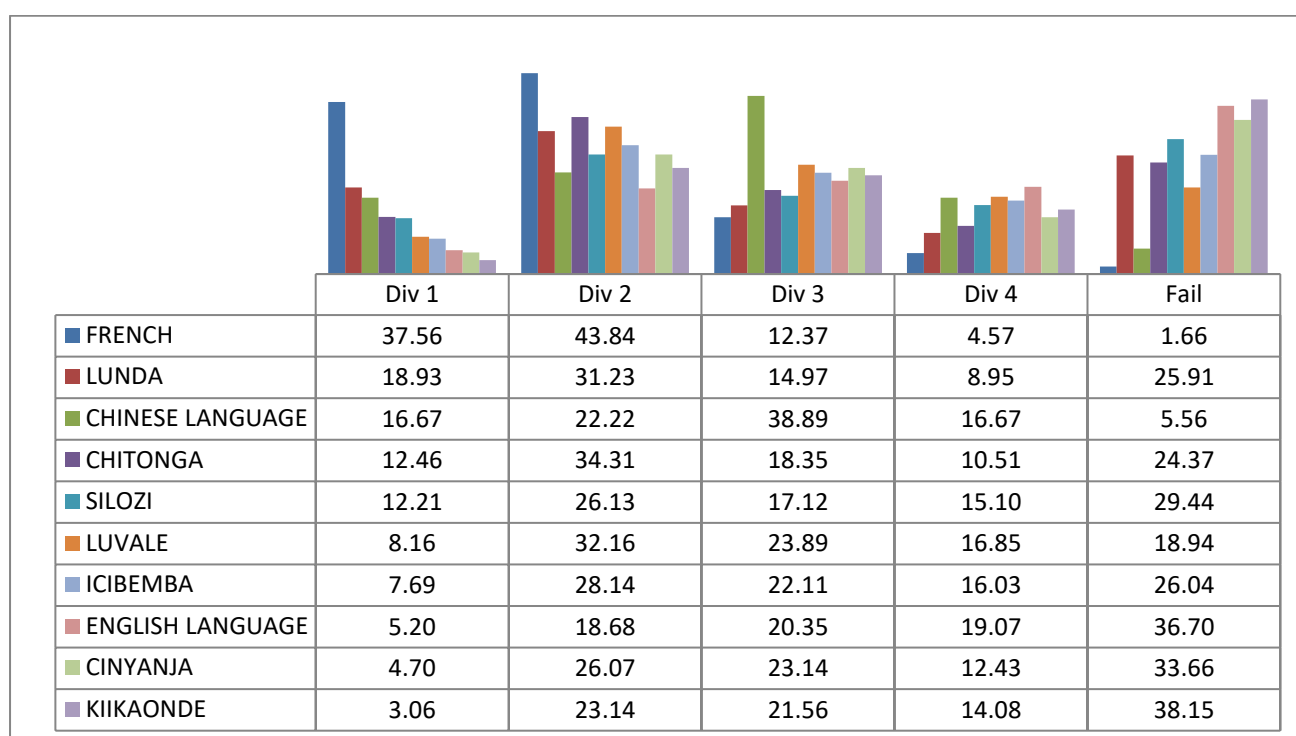


Figure 5: Candidate Performance in Literature and Languages Subjects

Girls outperformed boys in Literature and Language subjects, with higher proportions of girls obtaining Division 3 or better in all subjects except Lunda and Luvale.

The proportion of girls who obtained Division One was higher than boys in seven (7) out of the ten (10) subjects. Similar to 2022, more boys obtained Division Four than girls across the subjects in this grouping. Boys recorded the highest failure rate in the English language at 40.15 per cent, while girls had the highest failure rate in Kiikaonde at 36.58 percent.

Natural Sciences

The largest proportion of candidates in 2023 who scored in Division One in this category was recorded in Mathematics at 7.12 percent. The lowest proportion was recorded in Computer studies at 0.43 per cent. In 2022, the subject with the largest proportion of candidates obtaining division one was Integrated Science at 5.94 percent while the lowest proportion was recorded in Computer studies at 1.08 percent.

The highest performance by subject for Division Three or better category was recorded in Integrated Science at 48.53 per cent; followed by Agricultural Science at 45 percent while the lowest proportion was recorded in Mathematics at 35.42 percent. In 2022, the highest proportion was recorded in Integrated Science at 54.38 percent.

The largest proportion of candidates that failed was recorded in Mathematics at 51.94 percent (See Figure 8).

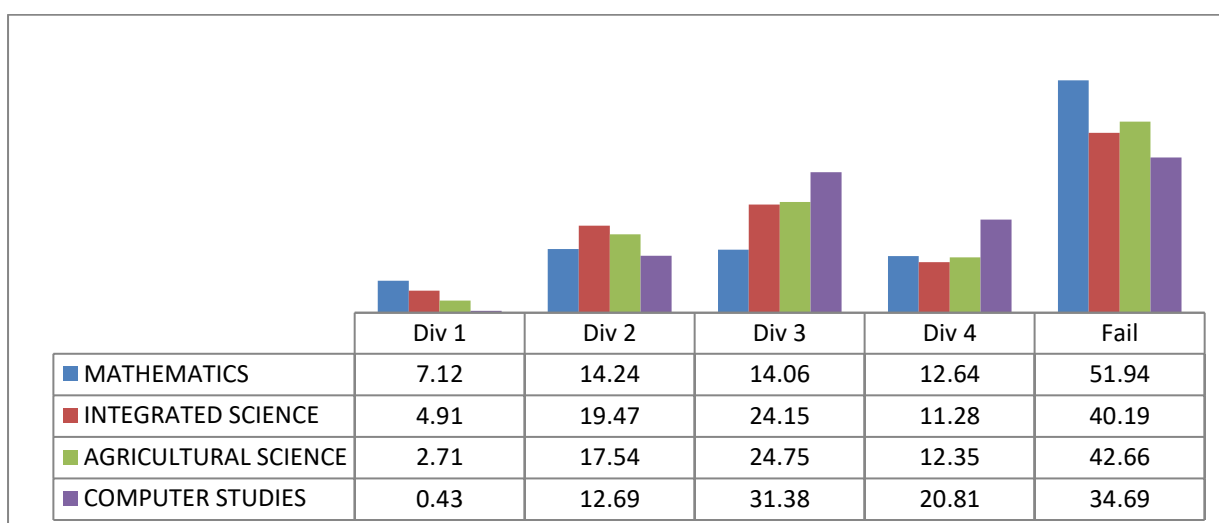


Figure 6: Candidate Performance in Natural Science Subjects

In the Division One category, boys performed better than girls in all four Natural Sciences subjects. This was the case in 2022. Similar to 2022, the proportion of boys who obtained Division Three or better was higher than girls across all the subjects in this category.

Boys' and girls' best performance in this category was recorded in Integrated Science at 50.56 and 46.73 per cent, respectively, for the division three or better category. In 2022, they both performed better in Agricultural Science.

Similar to 2021 and 2022, girls and boys had their highest proportion of candidates failing in Mathematics at 54.46 and 49.10 per cent, respectively. Mathematics remains a challenging subject for both sexes, as indicated by the high proportion of candidates who failed.

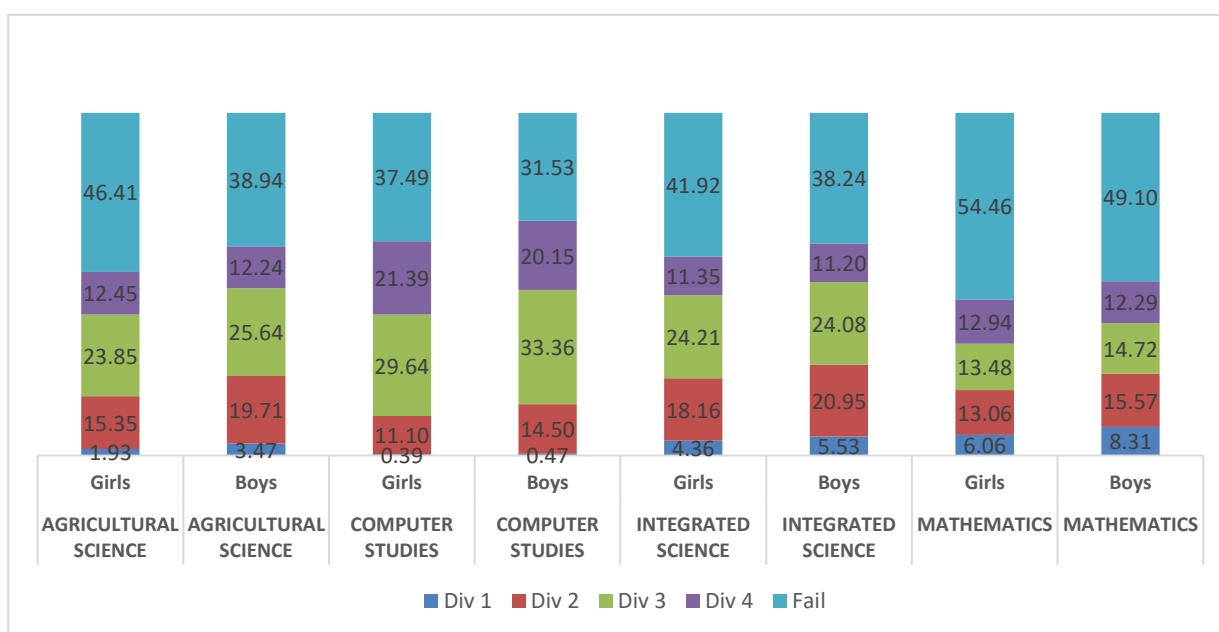


Figure 13: Performance of boys and girls in Natural Science grouping

Social Sciences

The largest proportion of candidates who obtained Division One was recorded in Religious Education at 3.33 percent while Social Studies recorded the least proportion at 0.91 percent. In 2022, Religious Education was at 2.49 per cent, while Social Studies was at 0.75 percent. In 2023, the proportion of Religious Education candidates who obtained grades between Division One and Three was 37.98 per cent, while Social Studies had 29.70 percent. This is a decline compared to the 2022 examinations, where Religious Education was at 38.51 percent and Social Studies at 35.09% (see Figure 9).

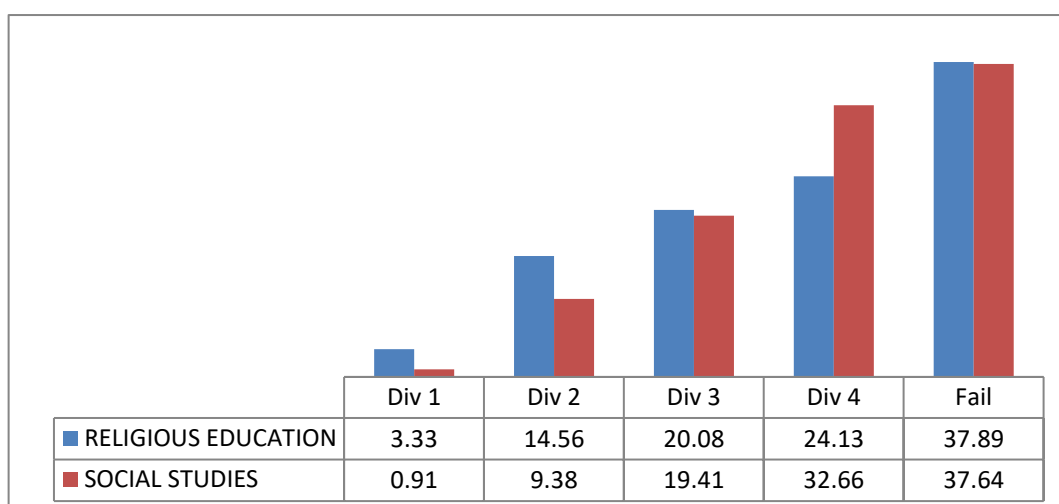


Figure 7: Candidate Performance in Social Sciences Subjects

Despite recording high proportions in the Division One category and for candidates obtaining grades between One and Three, Religious Education (37.89%) in 2023 recorded the highest proportion of candidates that failed, compared to Social Studies. This was the case in 2022.

In the Division One category, boys performed slightly better than girls in Social Studies, while girls outperformed boys in Religious Education. The proportion of girls who obtained Division Three or better in Religious Education (40.50%) was higher than that of boys (35.10%). On the other hand, the percentage of boys (30.75%) in social studies was higher than that of girls (28.76%). It has been observed from the 2021, 2022 and 2023 results that boys and girls have consistently exhibited the highest rate of failure in Religious Education and Social Studies, respectively.

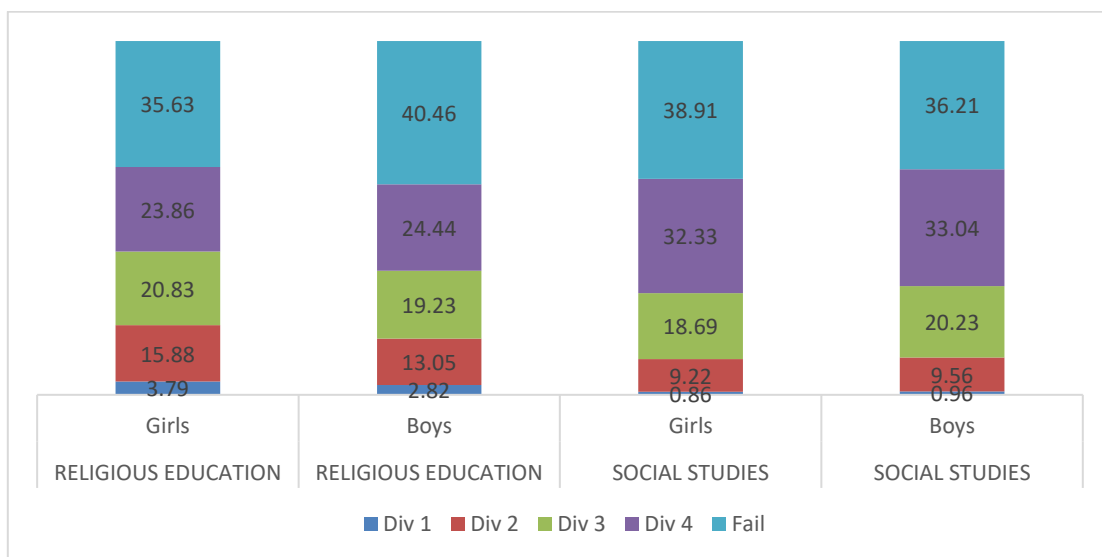


Figure 14: Performance of boys and girls in Social Sciences

Business Studies

More than 30 percent of the candidates that sat Business Studies in 2023 failed the subject, while only 7.4 percent obtained division One. The proportion of Business Studies candidates who obtained grades between division one and three was 44.3 per cent.

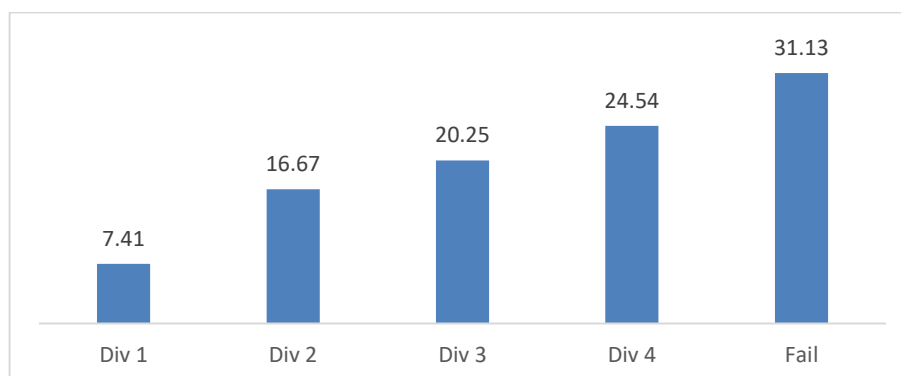


Figure 10: Candidate Performance in Business Studies

By sex, boys (7.65%) performed slightly better than girls (7.20%) in the division one category. Girls (44.35%) and Boys (44.32%) recorded similar proportions of candidates who obtained division three or better in Business Studies. The proportion of boys (31.55%) who failed Business Studies in 2023 was slightly higher than that of girls (30.75%).

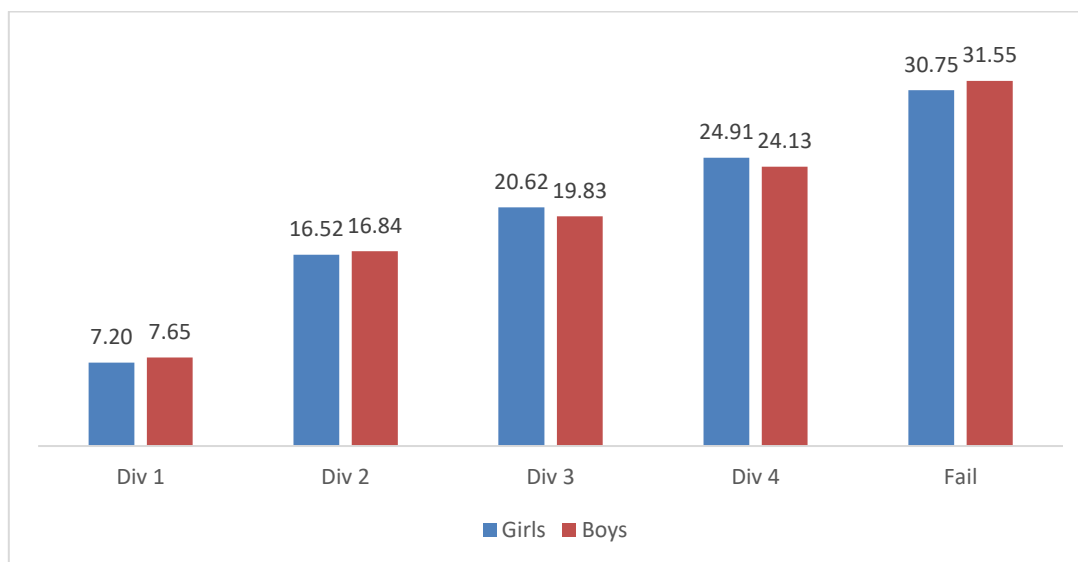


Figure 15: Performance of boys and girls in Business Studies

Vocational & Technology Pathway Subjects

The largest proportion of candidates who scored Division One was recorded in Art and Design at 29.23 percent, followed by Home Economics at 19.51 percent. The lowest proportion was recorded in Musical Education at 11.69 percent. In 2022, Design and Technology recorded the highest at 18.25 per cent, while Physical education was the least at 4.95 percent.

The highest performance by subject for Division Three or better category was recorded in Art and Design at 89.51 per cent; followed by Design and Technology at 81.86 percent while the lowest proportion was recorded in Physical Education at 62.09 per cent. In 2022, Design and Technology was highest while Physical Education was the least.

Physical Education in 2023, recorded the largest proportion of candidates that failed (32.12%) in this category. This was the case in 2022. The 2023 rate, however, decreased by 1.5 percentage points.

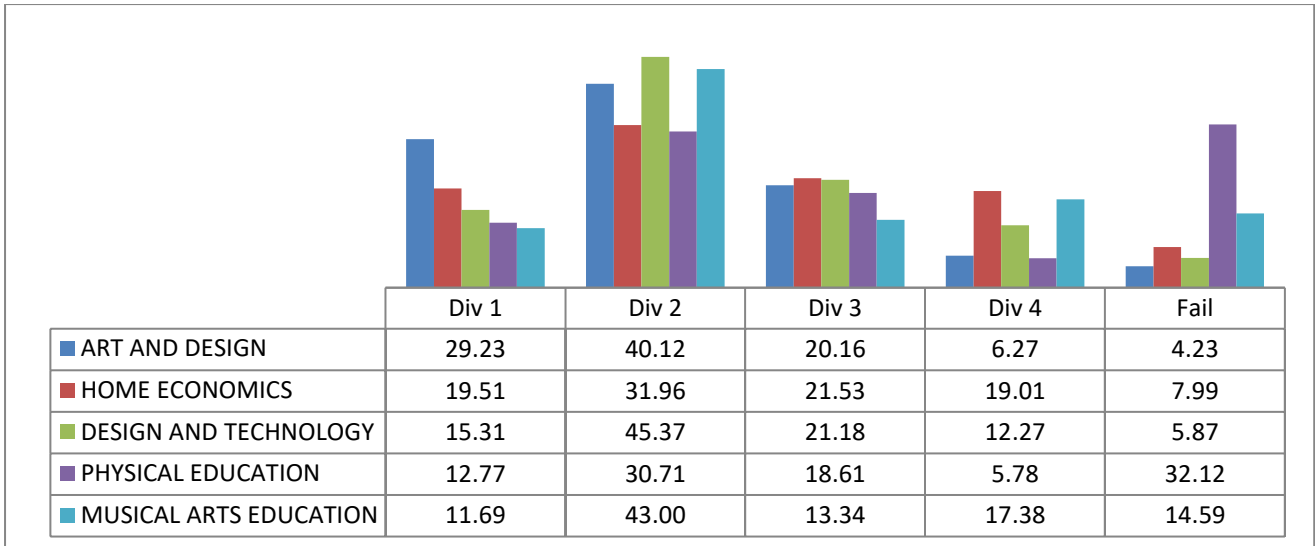


Figure 11: Candidate Performance in Vocational Subjects

In the Division One category, boys in 2023 outperformed girls in all subjects of this category except Home Economics and Physical Education. In 2022, boys performed better than girls in Art & Design and Design & Technology, while girls performed better in Home Economics and Musical Arts Education.

In terms of the proportions of boys and girls getting division three or better, boys recorded higher proportions than girls in Design and Technology and Musical Arts Education. On the other hand, girls had higher proportions in Home Economics and Physical Education compared to boys. The proportions in Art and Design were similar for both sexes. Physical Education, with 31.36 percent and 32.98 percent for girls and boys, respectively (refer to Figure 16), recorded the largest proportions of candidates that failed in this category.

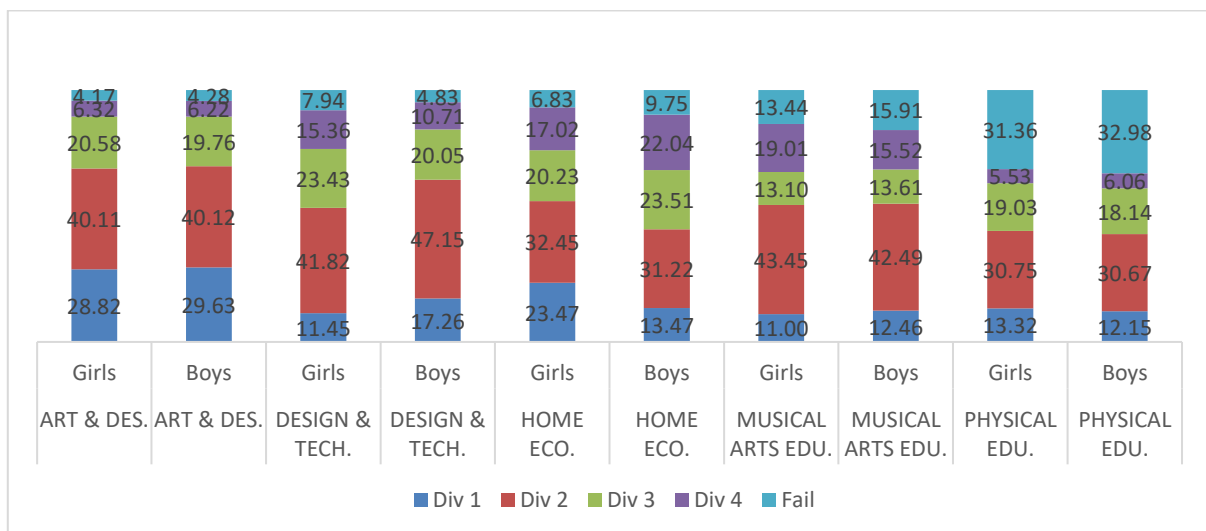


Figure 16: Performance of Boys and Girls in Vocational Subjects

Section Two - Subject-Specific Level Performance Analysis

This section provides a detailed qualitative analysis of performance, organized by subject area. Each subject area is scrutinized by elucidating the purpose of assessment, performance breakdown by paper, distinguishing characteristics of candidates ranging from low to high performers, and concluding with recommendations aimed at enhancing overall performance. The subject specific analysis involved examining reports from Chief Markers along with sample scripts.

English Language

Paper 1 was relatively well handled by the candidates except those whose mastery of the English Language was almost non-existent. Most candidates handled the layout of the narrative composition in Section A relatively well. The challenges mainly centred on the command of the language itself. Section B (Summary) posed more of a problem for a large percentage of the candidates. The bright ones easily presented the required notes. However, a markable percentage merely reproduced sections of the passage without even observing the word limit.

Paper 2, Section A, Part 1 (Contextual Communication) and Section B (Comprehension) were generally well handled by candidates. However, Section A, Parts 2 (Tense Recognition), 3 (Rewrites) and 4 (Cloze Passage) were poorly handled by the majority of the candidates. In Part 2, the tenses that were most problematic were those involving the passive voice: Question 3 present simple, Question 5 and Question 7 past simple and Question 9 future perfect. The structures that were most poorly handled were Part 3 Question 3 on question tags and Question 4 on result (... such ... that ...). For Part 4 (Cloze Test), the most difficult questions were Question 14 coordination (... as well as...), Question 16 coordination (also) and Question 17 adjectives (good / better / positive).

Characteristics of High-Performing Candidates

The following characteristics were exhibited by high-performing candidates:

- Adherence to the rubric
- Correct comprehension of questions
- Good presentation of composition and summary answers
- Ability to use punctuation marks appropriately
- Laudable utilisation of varied structures and vocabulary
- Ability to construct and punctuate sentences correctly
- Good response to comprehension questions
- Good understanding and application of tense

Characteristics of Average Performing Candidates

The candidates in this category exhibited the following common traits:

- Fairly good understanding of questions
- Fairly good presentation of the composition
- Reasonably good presentation of summary and comprehension skills
- Minimal mishandling of structures
- Fair ability to construct grammatically correct sentences
- Minor spelling errors
- Fairly good handling of ten

Characteristics of Low-Performing Candidates

The traits of the low-performing candidates were observed as:

- Rampant rubric infringement especially with Paper 1 (Composition and Summary): e.g. word limit not adhered to
- Mere lifting of points provided as opposed to answering the question (Composition)
- Total lack of summary and comprehension skills
- Inability to construct grammatically correct sentences
- Poor comprehension and application of structures
- Mishandling of tense
- Poor punctuation
- Low spelling competency
- Presentation of blank answers (composition)

Recommendations

- i. Learners should be exposed to most or all of the structures in the syllabus
- ii. Teachers should ensure that all aspects of composition writing such as paragraphing are taught adequately.
- iii. Teachers should emphasise the importance of punctuation in language.
- iv. Teachers should emphasise the need for learners to follow instructions i.e. word limit and note/prose
- v. Teachers should provide remedial lessons on areas identified to be challenging to learners.

Zambian Languages

Zambian Languages assessment focuses on measuring candidates' competence and proficiency in the five components of language namely reading, writing, language structure, translation and literature. The seven Zambian Languages covered are; Icibemba (301), Cinyanja (302), Chitonga (303), Silozi (304), Kiikaonde (306), Lunda (307), and Luvale (308). Zambian Languages comprises two papers namely; Paper 1 which assesses Composition and Literature and Paper 2 which assesses Language Structure, Translation, Reading Comprehension, Summary, Proverbs and Sayings.

Analysis of Performance

In terms of the 2023 performance, Luvale had the highest mean of 57.2 percent against the 2022 mean of 61.0 percent representing an appreciation of 3.8 percentage points. Chitonga had a mean of 49.0 percent against the 2022 mean of 50.2 percent representing an increase of 1.2 percent. Cinyanja had a mean of 48.9 percent against 45.3 percent mean for 2022 representing a decline of 3.66 percent. Silozi recorded a mean of 48.0 percent in 2023 against a mean of 50.7 percent in 2022 representing an increase of 2.7 per cent. Lunda had a mean of 46.1 percent against the 2022 mean of 43.4 percent representing a decline of 2.78 per cent. Kiikaonde had the lowest mean in 2023 of 37.5 percent against the 2022 mean of 41.8 percent representing an increase of 2.8 percent.

Characteristics of a High Performer

A candidate in this category demonstrated the following characteristics:

- Exceptionally applied essay writing skills.
- Excellent letter writing skills such as correct address layout, introduction, logical flow of ideas in the main body, clear paragraphing, and concise conclusion with correct valediction.
- Excellent presentation of narrative essays with accurate titles, introduction, logical flow of ideas and conclusion
- Exceptional use of narrative language.
- Accurate spelling and correct use of approved Orthography
- Excellent reading and comprehension skills. Candidates were able to identify key content, facts, opinions and terminologies, difficult vocabulary, figures of speech and themes.
- Excellent interpretation and analysis of comprehension texts.
- Outstanding application of various Language Structures such as Nouns, adjectives, ideophones; and

- Correctly transformed sentences from active to passive voice and from direct speech to reported speech.
- Applied high analytical skills in interpreting literature questions
- Demonstrated superior knowledge of the meanings of proverbs and provided correct equivalents of sayings.
- Accurately classified proverbs according to situations
- Exceptionally translated more complex ideas, phrases or terminologies given sentences from source to target
- Summarize the given passage precisely well. They brought out all the required points precisely through short text responses in prose form

Characteristics of an Average Performer

A candidate in this category demonstrated the following characteristics:

- Fairly applied essay writing skills. Though they demonstrated Knowledge of narrative and explanatory essays, their essays did not completely bring out key ideas related to the titles.
- Demonstrated satisfactory knowledge of basic elements in letter writing as their letters fell short of accuracy in areas such as address layout, introduction, logical flow of ideas, paragraphing, punctuations and conclusion
- Narrative essays had good titles, introductions, flow of ideas and conclusion
- Had minor challenges in the use of approved Orthography
- Exhibited good reading and comprehension skills. They were able to identify key content, facts, opinions, themes and terminologies required in the passages.
- Good interpretation and satisfactory analysis of comprehension texts.
- Demonstrated fair knowledge of the Structure of Language though with challenges in direct and reported speech, active and passive voice.
- Applied moderate analytical skills in interpreting and evaluating concepts tested in literature questions
- Demonstrated average knowledge in explaining meanings of proverbs and sayings.
- Translated complex ideas, phrases and terminologies fairly well from source to target though borrowed some words from source language.
- Average summary skills as they failed to bring out all the required points precisely.

Characteristics of a Low Performer

A candidate in this category demonstrated the following characteristics:

- Failed to apply essay writing skills. Candidates demonstrated a lack of knowledge of narrative and explanatory essays, the essays did not bring out key ideas related to the titles.
- Demonstrated little or no knowledge of basic elements in letter writing, the letters presented had no address or were poorly positioned, lacked introductions, ideas were incoherent, poor paragraphing, lack of punctuation marks and no conclusion
- Poor presentation of narrative essays. They lacked titles, introductions, a logical flow of ideas and a conclusion
- Failed to demonstrate command of narrative language. The essays presented had many wrong spelling errors and orthography
- Exhibited poor reading and comprehension skills. Candidates failed to identify key content, facts, opinions, themes and terminologies required in the passages.
- Poor interpretation and analysis of comprehension texts
- Demonstrated limited or no knowledge of the Structure of Language. Candidates failed to apply the required knowledge in direct and reported speech and active and passive voice.
- Could not identify adjectives from the given sentences and construct sentences using ideophones
- Lacked analytical skills in interpreting and evaluating the concepts tested in literature questions
- Demonstrated lack of knowledge of meanings of proverbs and sayings.
- Failure to translate complex ideas, phrases and terminologies from source to target thought and borrowed some words excessively from source language.
- failed to bring out the required points in the Summary.
- failed to give correct responses to the structure questions in section A

Observations

- Translation and Summary sections were poorly answered by most candidates
- Some candidates faced challenges in the Structure component of the paper especially particularly those in the 'Below average category+.
- Some candidates had challenges in Composition writing. Most candidates had challenges in paragraphing, punctuation, and the general layout of Compositions. Some candidates did not attempt any composition Questions.
- Some candidates performed poorly in the Literature section.

Recommendations

- Teachers should adequately teach appropriate Translation techniques

- Teachers should teach both summary types and the necessary skills required in summary writing.
- Teachers should teach comprehensively on all aspects of Structure as guided in the syllabus.
- Teachers should teach all the types of compositions
- School authorities must procure sufficient Literature books for learners to access.
- Candidates should apply correct essay writing skills.
- Candidates should improve in spelling and use the approved orthography.
- Candidates should read extensively the prescribed books for literature in Zambian languages
- Candidates should improve in their use and interpretation of proverbs and sayings
- Candidates should improve their translation techniques and avoid literal translation
- Candidates should widen their knowledge of the Structure of Language.

French Language

The Junior Secondary School French Examination focuses on assessing candidates' proficiency in the areas of language namely: oral, aural, reading comprehension, summary and translation, language structure and basic composition writing. French is assessed both at the school level as a School Based Assessment (SBA) and as a centrally set theory paper. The purpose of assessing French Oral and Aural as School Based Assessment from Grades 8 to 9 is to measure speaking and listening comprehension competencies achieved by learners. The theory paper assesses language structures, reading comprehension, summary, translation and composition.

Analysis of Performance

In 2023, there was an improvement in candidates' performance in comparison to the 2022 cohort. Candidates performed better in Paper 1 with a 36.2 percent mean score in comparison to the 32.1 percent score in Paper 2. Further, 5,666 Candidates in all sat the French language examination, while 174 candidates were absent. The grade score percentage comparison for 2023 and 2022 is as follows;

GRADE	2023 (%)	2022 (%)	% INCREASE (+)/DECREASE (-)
Distinction	37.54	26.08	+11.46
Merit	43.82	46.64	-2.82
Credit	12.37	18.83	-6.46
Pass	4.57	5.57	-1
Fail	1.66	1.07	-0.59

Some average-performing candidates and low-performing candidates had challenges in structure and grammar, comprehension involving short answer questions, translation and composition writing. The challenge was attributed to limited knowledge of grammatical rules as well as inadequate vocabulary to effectively express themselves in writing.

Characteristics Exhibited by High-Performing Candidates

Candidates in this category demonstrated the following characteristics:

- Exhibited exceptional knowledge of French structure and grammar. As such, candidates were able to answer Section A of the examination excellently.
- Excellent usage of vocabulary that helped them express their ideas in well-connected sentences written logically.
- Ability to interpret comprehension and summary questions correctly. This helped the candidates score highly in the comprehension and summary sections.

Characteristics Exhibited by Average Performing Candidates

Candidates in this category demonstrated the following characteristics:

- Exhibited fair knowledge levels of French structure and grammar.
- Good reading comprehension skills that enabled the candidates to respond to comprehension and summary questions fairly well.
- Fair translation skills. Some candidates were able to translate sentences from French to English but had challenges to translate the given sentence from English to French.
- Exhibited limited vocabulary and fair spelling skills. Consequently, candidates could not bring out and logically connect their ideas in the composition section.

Characteristics Exhibited by Low-Performing Candidates

Candidates in this category demonstrated the following characteristics:

- Poor knowledge and application of the language structures and grammar grammatical rules. As a result, candidates performed poorly in the Structure and Grammar section.
- Inability to interpret comprehension and summary questions. The majority of candidates in this category were not able to answer short answer questions correctly.
- Inability to translate the given sentences, especially from English to French.
- Exhibited poor sentence construction, spelling, and limited vocabulary in the composition section. Candidates presented work that was muddled and illegible.

Recommendations

- Teachers should intensify teaching summary and translation skills.
- Teachers should expose the candidates to more composition writing activities such as letter writing and descriptive compositions.
- Candidates should grasp and practice all the structures at this level to enhance speaking and writing skills.
- Schools should support the subject by providing necessary resources such as textbooks, audio and visual equipment as well as dictionaries.
- To stimulate interest in the subject and increase candidature, teachers of French and schools can consider encouraging educational tours, twinning with other schools in French-speaking countries, formation of French clubs in schools among others.

Chinese Language

The purpose of the Grade 9 Chinese Language assessment is to measure learners' acquisition of knowledge, skills, values and competencies in the four skills of listening, speaking, reading and writing. The Language is assessed both at the school level as a School Based Assessment (SBA) and as a centrally set theory paper. The purpose of assessing Chinese Language Oral and Aural as School Based Assessment from Grades 8 to 9 is to measure speaking and listening comprehension competencies achieved by learners. The theory paper assesses reading comprehension and writing.

Analysis of Performance

A total of 123 Candidates sat for the 2023 Chinese language examination and from these, 6.5 percent obtained distinctions, 15.5 percent obtained merits, 26.8 percent obtained credits and 22.8 percent obtained satisfactory pass. 13 candidates representing 10.6 percent failed the Chinese language examination. The general performance in the examination was average. Candidates performed well in comprehension and sentence structure. However, candidates had challenges in the writing section due to the inability to write Chinese characters and strokes as well as place strokes in the correct order.

Characteristics of High-Performing Candidates

Candidates in this category demonstrated the following characteristics:

- Outstanding reading comprehension skills that enabled them to perform well in the section.
- Exhibited excellent ability to recognise and write Chinese characters.
- Portrayed outstanding ability to write strokes in the correct order.
- Excellent ability to arrange Chinese characters and Pinyin

Characteristics of Average Performing Candidates

Candidates in this category demonstrated the following characteristics:

- Fair ability to recognise and write Chinese characters.
- Demonstrated adequate reading comprehension skills.
- Adequate usage of vocabulary.
- Fair ability to write strokes in the correct order.
- Fair ability in arranging Chinese characters and Pinyin.

Characteristics of Low-Performing Candidates

Candidates in this category demonstrated the following characteristics:

- Inability to recognise and write Chinese characters.
- Exhibited limited reading comprehension skills.
- Inadequate vocabulary to correctly write Chinese characters.
- Inability to write strokes and place them in the correct stroke order.

Recommendations

- Teachers should employ various teaching methods that will stimulate interest among candidates to continue learning the Chinese Language.
- Candidates should be encouraged to grasp all the words in the Chinese Language Junior Secondary School syllabus to help improve speaking, listening, reading, and writing.
- Candidates should practise more reading and writing of Pinyin and Chinese characters.
- Schools should provide the necessary resources such as textbooks, and audio and visual aids to enable teachers to cover the syllabus adequately.
- The Ministry of Education should employ teachers of Chinese in schools that offer Chinese Language.

Mathematics

The purpose of the Grade 9 Mathematics assessments is to measure learner achievement against the set competencies as well as the acquisition of reasoning and problem-solving skills as outlined in the syllabus. Candidates are assessed based on the following objectives: Knowledge and Comprehension, Application and Analysis of concepts and skills acquired from Grades 8 to 9.

Analysis of Performance

The performance of the candidates in Mathematics in 2023 increased marginally by 3.15 percentage points. The mean in Mathematics increased from 24.54 percent in 2022 to 27.69 percent in 2023. The performance of the candidates was better in Mathematics Paper 1 in 2023 with a mean of 34.44 percent

compared to 2022 which recorded a mean of 28.30 percent. There was a marginal increase in performance in 2023 in Mathematics Paper 2 with a mean of 21.44 percent compared to 2022 which recorded a mean of 20.75 per cent.

The analysis of candidates' performance across the three categories of high, average and low, was based on question 2 in Mathematics Paper 2. The question read as follows:

2. (a) Given that $X = (■(3&-2@4&-5))$ and $Y = (■(1&2@2&-1))$, find XY .
- (b) Multiply 114five by 23five, giving your answer in base five.
- (c) (i) Use geometrical instruments to construct triangle DEF in which $DE = 7\text{cm}$, $DF = 5\text{cm}$ and $EF = 6\text{cm}$.
- (ii) Measure and write angle DFE.
- (iii) Construct a perpendicular line from F to meet DE at G
- (iv) Measure and write the length of FG.

Characteristics of high-performing candidates

High-performing candidates exhibited the following characteristics:

- Mastery of most of the concepts on the topics.
- Good interpretation of word problems.
- Applied correct formulae for questions involving formulae.
- Mastered the prerequisites to most of the topics and applied them correctly.
- Had a good understanding of how to draw and interpret diagrams and graphs.
- Used mathematical instruments correctly for construction questions.
- Demonstrated understanding of all the concepts for finding the solution to the whole question.
- Demonstrated understanding of multiplying a matrix by another matrix.
- Had a good understanding of the concepts of multiplying numbers in base five.
- Demonstrated understanding of how to construct a triangle, measure an angle and the length of a side and draw a perpendicular from one vertex to a side of a triangle.
- Showed all the necessary work and earned full method and accuracy marks.
- The presentation of the work was very good.
- High-performing candidates were able to answer correctly most parts of question 2 on Matrices, multiplication in base 5 and Geometrical Construction and earned most of the marks.

Characteristics of average-performing candidates

Candidates with average performance exhibited the following characteristics:

- Mastery of some of the concepts on the topics.
- Interpreting correctly some of the word problems.
- Applying correctly some of the formulae for questions involving formulae.
- Understanding the prerequisites to some of the topics and applying some of them correctly.
- Drawing and interpreting correctly some of the diagrams and graphs.
- Could not use mathematical instruments to construct all the parts of the construction question. Failure to construct the triangle accurately. Could not use instruments to measure an angle and a side of the triangle accurately. Could not construct a perpendicular from a vertex of the triangle to one of the sides.
- Demonstrated understanding of multiplying a matrix by another matrix.
- Had a good understanding of the concepts of multiplying numbers in base five.
- Showed some of the essential working and some of the method and accuracy marks.
- Most of the average performing candidates were able to answer two parts (a) and (b) correctly or showed correct working for the two parts but lost accuracy marks. Multiplication of matrices and multiplication in base five in most cases were answered correctly and candidates earned full marks.

Part (c) on Geometrical Construction was a challenge to most average-performing candidates.

Characteristics of low-performing candidates

Candidates with low performance exhibited the following characteristics:

- Did not have mastery of all the concepts for all the topics.
- Could not Interpret correctly word problems.
- Failure to state and apply correctly all the formulae for questions involving formulae.
- Did not have sufficient knowledge of the prerequisites to all the topics.
- Drawing and interpretation of diagrams and graphs was a challenge.
- Could not use mathematical instruments to construct all the parts of the construction question. Failure to construct the triangle accurately. Could not use instruments to measure an angle and a side of the triangle accurately. Could not construct a perpendicular from a vertex of the triangle to one of the sides. The construction question was not attempted in most cases. Some candidates used a free hand to respond to the construction question.
- Did not understand how to multiply a matrix by another matrix. Some candidates just added the numbers and this was incorrect.
- Did not understand the concepts of multiplying numbers in base five. The question involving number bases was not attempted in some cases.

- Most questions could not be answered correctly by candidates in this category and as such they were not attempted in some cases.
- Did not earn most of the method marks because of lacking the concepts and skills tested.
- Most questions were left blank.
- Low-performing candidates were unable to answer correctly question 2 (a), (b) and (c).

Challenges experienced by candidates in Mathematics

- Candidates' understanding of some of the new topics, such as Matrices, Functions, Computers (flowcharts), Number Bases (decimal numbers) and Mensuration (total surface area and volume of prisms) was a challenge. Most candidates did not respond correctly to these questions. In most cases, questions involving the new topics were avoided or the parts were left blank by the candidates.
- Most of the challenges faced by candidates in some of the topics have been reported over the years. Construction, decimal numbers, and Computers are some topics that have been challenging to the candidates over the years.

Recommendations

- To improve candidates' performance in Mathematics at Grade 9, the following are some of the recommendations:
- Teachers should introduce topics from a practical point of view where possible and apply mathematics to real life. Application of mathematics to real life will make the subject interesting and this will enable the learners to develop a positive attitude towards mathematics.
- Teaching methods that are learner-centred should be used by teachers for the learners to have meaningful learning of all the concepts in the subject.
- Teachers should provide feedback promptly for all assessment activities given to the learners.
- Misconceptions and errors in learners' solutions should be acknowledged by the teacher through meaningful feedback that will help learners correct their work and have a conceptual understanding of the topics.
- Teachers should ensure that learners use mathematical instruments to draw diagrams and have hands-on activities with all of the concepts under geometric construction.
- Professional Development (CPD) meetings at the school level should be enhanced to help teachers build capacities for them to teach challenging topics through the sharing of best practices.

Integrated Science

The purpose of the Integrated Science assessment is to measure learners' competencies and achievements as outlined in the Grade 8 to 9 Integrated Science syllabus. The assessment is also used for certification of learners' achievements as well as placement into Junior secondary level and engagement in entrepreneurial activities.

Analysis of Performance

The mean score for 2023 in integrated science was 37.28. Very good performance was observed in the School-Based Assessment at 77.50 percent while the theory examination was at 37.28 per cent.

The assessment is based on two components of Integrated Science namely; Paper 1 a centrally set examination and Paper 2 which is School Based. Paper 1 consisted of 20 multiple choice items carrying a total of 20 marks and 10 long questions carrying a total of 60 marks.

Analysis of performance on selected questions

The following questions were well-scored by candidates:

- In section A average performance was spread across the items except in question 9 on heat and expansion and question 19 on communication. In question 9, the item required pairing expansion in a given physical state to correct everyday use in a device. Most candidates managed to choose the correct pair matching the state and the use.
- In section B good performance was observed in questions requiring recall such as question 1 on the human body which had most part questions requiring identification or naming parts of the male reproductive organs or comparing an organ in the male reproductive system which had similar functions to an organ in the female reproduction system.

Candidates did not perform well in:

- Question 6: The Human Body's heart. This question required identifying some parts of the heart from a diagram of the heart, explaining the functions of the semilunar valves (valve labelled R) and describing the difference in composition of the blood in the right and left ventricles. Candidates had challenges even in both identity and descriptions required.
- Question 9: Materials and energy (light-Ray diagram). The candidates were provided with a ray diagram and were required to identify the lens used as convex and also identify the focal length and focal point. They were also required to explain the characteristics of the image formed in the ray diagram. Candidates had challenges in both cases.

Characteristics of high-performing candidates

Candidates with high performance exhibited the following characteristics:

- Identified correctly the labelled parts of diagrams and stated, explained or described functions or processes including organs and structures which perform various functions such as the reproductive organs in humans.
- Interpreted and applied the scientific facts well, such as stating types of foodstuffs that provide the named nutrients or are suitable for certain types of persons such as pregnant women.
- Correctly identified the symptoms of a nutritional deficiency disease such as kwashiorkor.
- Identified and used scientific terms correctly.
- Manipulated figures and units to calculate required variables including changing the subject of the formula.
- Demonstrated knowledge in interpretations of diagrams using scientific facts to calculate variables such as density.

Characteristics of average-performing candidates

Candidates with average performance exhibited the following characteristics:

- Identified correctly with minor confusion of the labelled parts of diagrams and fairly stated, explained or described functions or processes or organs and structures which perform various functions such as the reproductive organs in humans.
- Interpreted and applied the scientific facts fairly well, such as stating types of foodstuffs that provide the named nutrients or are suitable for certain types of persons such as pregnant women.
- Some struggled to identify the symptoms of a nutritional deficiency disease such as kwashiorkor.
- Mostly identified and used scientific terms satisfactory.
- Manipulated figures and units to calculate required variables including changing the subject of the formula with some not able to change the subject of the formula in calculations such as on electricity.
- Demonstrated minor difficulties in knowledge in interpretations of diagrams using scientific facts to calculate variables such as density.

Characteristics of low-performing candidates

- The majority failed to identify correctly the labelled parts of diagrams and state, explain or describe functions or processes or organs and structures which perform various functions such as the reproductive organs in humans.
- Got confused when interpreting and applying the scientific facts, such as failing to state types of foodstuffs that provide the named nutrients or are suitable for certain types of persons such as pregnant women.
- Failed to identify the symptoms of a nutritional deficiency disease such as kwashiorkor.
- Could not correctly identify and use scientific terms.
- Could not manipulate figures and units to calculate required variables including changing the subject of the formula.
- Demonstrated lack of in-depth knowledge in interpretations of diagrams using scientific facts to calculate variables such as density.

Common Challenges observed

- Failure to provide clear definitions or explanations due to limited understanding of the concepts.
- Lack of in-depth knowledge leading to misinterpretation of questions and information
- Poor Presentation of work was common among performers
- limited application of skills in related contexts
- Misrepresentation of concepts and relationships among quantities and principles
- Some candidates failed to express themselves in English and resorted to local languages

Recommendations

- Need for in-depth coverage of the syllabus coupled with the use of teaching aids such as such to enhance learners' ability to identify and comprehend different animal and plant body parts.
- More emphasis should be on teachers using various modes of teaching to enhance learners' understanding. The mean score in theory was way below that of school based.
- The teaching/learning process must include more practical work to complement theory and use of various modes of teaching to enhance learners' understanding.
- Consistent, adequate and quality assessment such as class exercises, homework, research and experimental work that covers higher order thinking skills is needed at the school level (Teaching Process) and prompt feedback to learners on their comprehension of the work given.
- More science-trained teachers to replace the seconded non-science-trained teachers.

Agricultural Science

Candidates in Agricultural Science in Grade 9 will be assessed in this subject to help with certification, tracking academic progress, promoting them to Grade 10, and providing feedback to teachers on how well they are teaching.

Analysis of Performance

Overall Performance for Agricultural Science

The assessment was based on two components of Agricultural Science namely; Paper 1 and Paper 2 which is a School-based field project. Generally, candidates performed better in Section A which contained multiple choice questions than in Section B which had short answer questions requiring them to give reasoned explanations. The mean score in 2023 was 36.8 percent while that in 2022 was 45.1 per cent. This represents a decrease in performance of 8.3 per cent.

Agricultural Science Paper 1

Agricultural Science Paper 1 consisted of 20 multiple choice items carrying a total of 20 marks and eight structured questions carrying a total of 80 marks. In 2023 the mean score in Agricultural Science paper 1 was 24.32 while in 2022 the mean score was 30.23 representing a decrease in performance of 5.91.

The following questions were well-scored by candidates:

- Question 1: Agriculture in Zambia.
The question tested candidates' understanding of the farming systems practised in Zambia. The question was well answered by most of the candidates.
- Question 4: Forestry and Conservation Farming.
The question was based on the role of trees in improving the fertility of soil on a farm. The question was well answered by most of the candidates.
- Question 6: Farm Management
The question was based on candidates' understanding of interest (simple and compound) and how it was determined. The question also required candidates to give reasons for keeping records on a farm.

Candidates did not perform well in the following questions:

- Question 2: Soil Science
 - The question tested candidates' understanding of the following aspects;
 - Soil erosion and its methods of prevention.

- Determination of the amount of humus contained in a soil sample.
- Characteristics of the soil types
- Disadvantages of chemical fertilizers on the fertility of soil.

Most candidates had challenges with this question. The candidates had challenges identifying the methods of soil erosion prevention displayed in the pictures and explaining how they help prevent soil erosion.

Agricultural Science Paper 2

Agricultural Science Paper 2 is a School-based field project. In 2023 the mean score in Agricultural Science paper 2 was 15.40 while in 2022 the mean score was 14.64 representing an increase in performance of 0.76.

Characteristics of high-performing candidates

Candidates with high performance exhibited the following characteristics:

- Interpreted the pictures and diagrams correctly and applied the concepts indicated in the question. For instance, candidates were able to identify the type of farming system in the picture to be subsistence farming using the types of tools shown.
- Identified the parts indicated in a diagram, picture or image and stated their functions. For instance, candidates were able to identify the parts of a Knapsack sprayer and explain their functions clearly.
- Presented logical explanations of some scientific principles. For instance, why spraying a crop field should not be done in windy conditions, hot weather or when it's about to rain?
- Gave correct meaning of some scientific terms used in Agricultural Science, such as farm structure.
- Demonstrated knowledge and understanding of nutritional values of different types of feed, for instance, alternative diets and recommended feeds.
- Demonstrated knowledge of instruments, tools, implements, machinery and structures used in Agriculture.

Characteristics of average-performing candidates

Candidates with average performance exhibited the following characteristics:

- Identified the parts indicated in a diagram, picture or image but had difficulties stating their functions. For instance, candidates were able to identify the parts of a Knapsack sprayer but failed to explain their functions clearly.

- State scientific facts but not give a logical explanation as to why some things happen the way they do, for instance, spraying should not be done against the wind.
- Demonstrated knowledge of animal feeds but had challenges explaining the nutritional values of the different types of feed, for instance, alternative diets and recommended feeds.
- Demonstrated knowledge of instruments, tools, implements, machinery and structures used in Agriculture, but could not explain clearly their usage.

Characteristics of low-performing candidates

Low-performing candidates had difficulties;

- Interpreting the pictures and diagrams correctly and applying the concepts indicated in the question. For instance, candidates were not able to identify the type of farming system in the picture to be subsistence farming using the types of tools shown.
- Identifying the parts indicated in a diagram, picture or image and stating their functions. For instance, candidates were not able to identify the parts of a Knapsack sprayer and explain their functions.
- Presenting logical explanations of some scientific principles. For instance, why spraying a crop field should not be done in windy conditions, hot weather or when it's about to rain?
- Giving the correct meaning of some scientific terms used in Agricultural Science, such as farm structure.
- Demonstrating knowledge and understanding of nutritional values of different types of feed, for instance, alternative diets and recommended feeds.
- Demonstrating knowledge of instruments, tools, implements, machinery and structures used in Agriculture.

Challenges

- Limited understanding of the concepts leading to misinterpretation of information.
- Poor work presentation was common among Low performers.
- Misrepresentation of scientific concepts and principles.
- Failure to handle questions at higher order thinking skills, for instance, application, especially among the average and low-performing candidates.
- Failure to interpret information presented in diagrammatic form.

Recommendations

- Need for thorough coverage of the syllabus.
- The teaching/learning process must include more practical and fieldwork (hands-on) to complement theory.

- Consistent and quality assessments that cover higher-order thinking skills to be administered at school level.
- Frequent and effective monitoring of teaching and learning.
- Use of effective teaching and learning strategies that include learner-centered approaches.
- Teachers to frequently administer class exercises, homework and assignments and provide feedback on the work given to learners in a timely.
- Provision of learning materials such as textbooks for learners to review what is learnt and read ahead of the teacher what is to be taught.

Social Studies

The purpose of examining Social Studies at the Grade 9 level is to assess the learners' understanding of the economic, political, civic, cultural, geographical and historical factors that influence social development. It is also important for selection and certification purposes.

Analysis of Performance

Section A. Multiple choice

This section was well covered across categories. The majority of candidates fairly did well in this section except those in the lower category of which the lowest score was 0 out of 40

Questions not well answered.

Question 2. Topic: 8.2 Basic Map Reading Technique

Sub-Topic:8.2.1 Maps and Diagrams

The candidates were required to identify the approximate latitude of Chambeshi town on the extract for Chambeshi. Generally, the candidates did well. Some candidates failed to locate the town due to poor reading culture, especially the low category candidate.

Question 3. 8.2 Basic Map Reading Technique

Sub-Topic:8.2.1 Maps and Diagrams

Candidates were required to plot the distance between the main tarred road from the edge of the main grid square 2194 to grid square 1699 on the extract.

Question 17 Topic: 8.1 Man, the Social Being

Sub-Topic: 8.1.2 Origins and Development of Man. Man, the Social Being.

The question was based on the chart showing important events in Hilda's life. Candidates were required to identify how old Hilda was when her husband was transferred. Most of the candidates failed to interpret the time as a result they missed out on the correct response.

Section B.

Questions not well answered.

Question B Semi-Structured

Question 3. The question was based on Map work showing some physical features that candidates were required to identify about the questions asked. The question was drawn from the Topic:8.5 Political Development in Zambia

Sub-Topics: 8.5.2 Zambia's Path to Independence and 8.5.3 Symbols of National Identity.

The following proficiencies were to be acquired after learning:

Knowledge: Zambia's Path to Independence:(1890-1964)

Symbols of national identity

Value of national symbols

Skills Tested, Knowledge, Comprehension, and Analytical skills.

The candidates were required to use the skills tested for them to give correct responses. This was a challenge even among the high and average categories. However, those who attempted got fair marks compared to those in the lower category who had incomplete work and were characterised by blank spaces.

Section C, Part Two. Question 2. Topic 9.1 Foreign Influence on Zambia

Sub-Topic: 9.1.1 Development of slavery and the slave trade.

The candidates were required to write about the political, social and economic motives of the slave trade. It was one of the most popular questions that was attempted by the majority of candidates. The following proficiencies were to be acquired after learning:

Knowledge: Social, economic and political.

Skills: Analysis of the motives behind slavery and the slave trade.

Skills Tested: Comprehension, application and analytical skills.

It was highly scored by the candidates in the high and average performance categories. The presentation of their work was good in terms of the flow and accuracy of the information given. However, some of them failed to analyse the points in full. They brought out good points but were written in bullet form without developing them fully to deserve more marks. That is, they wrote them in bullet form instead of short paragraphs. It was in essay writing that the right skills were to be addressed to earn more marks. This was common among average and low-category performers thereby leading to poor grades.

Question 3. Topic: 9.1 Foreign Influence on Zambia

Sub-Topic 9.1.4 African Reaction to Foreign. rule.

The question required candidates to describe the Bambatha, Maji Maji and Chimurenga rebellions used by Africans to resist colonial rule. This was the most unpopular question that was avoided by the majority of candidates and the few that attempted the following proficiencies were to be acquired after learning:

Knowledge: Primary resistance

Skills: Analysis of the role primary and secondary resistance played.

Skills Tested: Knowledge, comprehension, analytical and evaluation skills.

Part Three, Question 2. Topic 9.4 Governance

Sub-Topic: 9.4.1 Fundamental Human Rights

The Syllabus guides that learners will acquire the following proficiencies after learning:

Knowledge - Freedoms and privileges that a person has by being human

- Universal Declaration of Human Rights (UDHR)
- Background to United Nations Convention on the Rights of the Child (UNCRC)
- Human Rights Violations

Skills - identification of Human Rights and their Violation

The candidates were required to give reasons why the Universal Declaration of Human Rights (UDHR) document was known as a declaration and to describe the characteristics of human rights. The question was not popular, few candidates attempted it and those that did had generally an average score. Most of them had scanty knowledge and were not sure of part (a) which required them to explain why the UDHR document was known as a declaration.

Questions will be answered

Section B. Part one, Section. Question 1. Topic: 8.4 Man and The Environment

Sub-Topic:8.4.5 Fishing.

The candidates were required to describe the major fisheries and explain the challenges faced by the fishing industry in Zambia. This was a very popular question across the three categories of candidates and most candidates got everything correct.

Question 3. Topic: 8,4 Man and the Environment

Sub-Topic: 8.4.4 Farming

In this question, candidates were required to describe the factors affecting commercial livestock farming and explain the effect on the environment. It was a very popular question but those who attempted it did not score very high marks. This was because most candidates were not bringing out many points according to the mark allocation. There were mostly answers on the disease aspect overlooking a wide range of factors affecting livestock farmers.

Part Three. Question 1 Topic: 8.6 Governance

Sub-Topic: 8.6.5 Elections

The question was based on the campaign stage, candidates were required to explain the electoral process and analyse the significance of democratic governance. It was a very popular question and demonstrates mastery of the electoral process and the significance of elections. Many candidates got high scores.

Question 3. Topic: 9.3 Economic Development

Sub-Topic: 9.3.2 Budget

The candidates were required to explain the meaning of the National Budget and explain the role of parliament in the budget process. This question was well answered and the majority of the candidates got good grades.

Competencies (skills) exhibited by High performers:

- Ability to use map reading techniques to measure, interpret and locate named features on maps and diagrams in section A, multiple choice questions and section B Semi-structured section.
- Information flow was orderly and very good in section C for essays.
- Ability to write fully developed essays in Section C with clear points, good grammar and correct punctuation.

- Displayed understanding of geographical, historical and civic education facts.
- Scores were good across all the sections of the examination.
- Display of higher-order cognitive levels was good in Section C.

Competencies (skills) exhibited by Average performers:

- Poor presentation of historical facts
- Fair command of the English language
- The presentation of essays was not orderly especially section C.
- Fair interpretation of maps, charts, diagrams, and statistical data in sections A and B.
- Inability to fully apply the knowledge of historic, civic, cultural, geographical and political nature across sections
- Presentation of incomplete work in sections B and C.

Competencies (skills) exhibited by Low performers:

- Poor essay writing skills in section C.
- Presentation of irrelevant information and failure to interpret charts, diagrams and maps.
- Lack of coherence in essay writing.
- Poor knowledge of basic map reading techniques in section A
- Failed to read, identify and indicate named features on the maps and diagram in sections Band C

Challenges observed:

- Identifying and interpreting features on the map.
- Interpretation of map reading.
- Identification and location of places on the map.
- Limited knowledge of the subject matter especially in sections B and C.
- Incomplete work and blank spaces in Sections B and C

Recommendations:

The following should be undertaken by Teachers;

- Expose learners to hands-on exercises on map reading and aspects such as identification of map features.
- Presentation of teaching Aids to be enhanced during lessons, teaching and learning process.
- Ensure wide coverage of the Social Studies syllabus.
- Drill candidates in essay writing skills and choice of questions in Section C.

- Emphasis on the use of brief paragraphs and not bullets in section C as it contributes to loss of marks.
- Frequent use of past examination questions for revision.
- Participate in Association meetings and Continuous Professional Development meetings.

Religious Education

The purpose of the Religious Education Examination at the Grade 9 level is to assess the learning outcomes of the Spiritual, moral, religious and cultural behaviour as drawn from the four main religions in Zambia. These are Christianity, Hinduism, Islam and Zambian Tradition. The examination will be used for certification, selection and placement.

Analysis of Performance

The performance of candidates in 2023 has shown a decline from 62.38 percent pass in 2022 to 62.11. There was also a decline in the mean score in 2023 from 34.09 in 2022 to 30.02. However, there was a slight improvement in the quality of the results. In 2022, 2.49 percent of candidates who sat for the examination in Religious Education got a grade 1 (Distinction) while in 2023, it increased by 3.33 per cent.

Competences exhibited by outstanding performers

- Showed understanding and ability to recall information and characters of Bible passages
- They understood the questions very well and provided the correct responses
- They exhibited mastery of knowledge and skills in Religious Education.
- Their use of language was excellent and easily understood.
- They were able to comprehend information from provided passages.
- They scored very well across all the sections of the paper.
- Their writing was neat and legible

Competencies (skills) exhibited by Average performers:

- They experienced challenges with section D where and scored average marks.
- Demonstrated partial understanding of the content, structure, and meaning of the teachings of the Bible.
- They could recall information on customs and practices of the four religions and Zambian Modern society.
- Scored fairly across the four sections of the examination.

Competencies (skills) exhibited by Low performers:

- They had little knowledge or information on the subject matter
- Demonstrated very little to no understanding of the content, structure, and meaning of the teachings of the Bible.
- Struggled with questions in Section D which are linked to passages.
- Scored poorly across the four sections of the examination.
- Some of them copied the story and filled the spaces in the answer booklet.

Observations

- The overall analysis of performance indicated that most candidates performed well in section A, (multiple-choice questions).
- However, the low-performing candidates did not do well and were getting zeros. Sections B, C and D were difficult for both average and below-average-performing candidates.
- Section B comprises short answers based on all topics: the candidates especially. The high-performing and average candidates performed very well.
- Section C is based on the Bible passage, high performing candidates performed extremely well in this section, however, the average and low-performing candidates scored very low marks in this section. It seems the candidates did not master the Bible passages very well.
- In Section D, the average-performing candidates got between 10 and 20 out of 40, while below-average candidates got zeros in the same section. The candidates who did not do well in this section expected the question to be comprehension in nature.
- It is important to note that the focus of the questions in this section is not to test comprehension skills, as this is already being tested in language-based subjects, but to test the candidates' knowledge of the content learnt in each topic for RE.
- The passages used in the RE examination are thematic and situational, and the candidates are therefore expected to relate the situations given in the passage to the content learnt in each RE topic.
- Candidates are also expected to make inferences and references to the passage to provide the correct responses.
- The passages in this section are used to provoke the candidates' critical thinking by relating the situations in the passage to real-life situations and they are expected to draw the values and demonstrate superior knowledge of the topics and content.

Business Studies

Assessments in Business Studies aim to measure candidates' knowledge and competencies in office organization, entrepreneurship and ability to practice book-keeping and accounting basic skills.

Analysis of Performance

In 2023, the number of candidates increased by 4 631 from 275 977 in 2022 to 280 608 in 2023. The subject recorded a pass percentage of 68.87 percent in 2023 compared to 68.95 percent in 2022. 31.12 percent of the candidates failed in 2023 compared to 30.42 in 2022.

The number of candidates in the distinction and merit grade divisions slightly dropped by 3.16 and 0.38 percent respectively, while those in the credit and satisfactory increased by 2.2 and 1.28 percent respectively.

High Performing Candidates

Candidates under this category exhibited the following competencies:

- Adhered to the rubric and interpreted almost all the questions accordingly.
- Exhibited outstanding knowledge and applied themselves well in structured, computational and final accounts questions.
- Performed well in both the lower and higher cognitive domain questions.
- A few struggled with the alphabetical order of filing and the preparation of the ledger account.
- Majority obtained full marks on preparation of trading profit and loss account, and balance sheet in Section C.

Competencies Exhibited by Average Performing Candidates

- Exhibited limited skills in application questions such as filing in documents, and recording and posting transactions in the petty cash book and ledger account respectively.
- Presented jumbled trading profit and loss accounts, and balance sheet items which denied them optimal marks.
- Poorly handled the alphabetical order and budget preparation in filing and financial management respectively.

Competencies Exhibited by Low-Performance Candidates

- Exhibited low understanding and interpretation of some questions. For instance, some failed to attempt the question of matching given items on wages and salaries.
- Failed to respond to knowledge and comprehension questions which were low-order thinking skills, and worse performance was recorded in the application type of questions.
- Exhibited inability to prepare final accounts and related financial aspects in the examination.

Challenges

- The subject has been recording a high failure rate of around 30 percent in the past three years due to the use of non-business studies teachers in many schools. For instance, it recorded a failure rate of 33.29 percent in 2021, 30.42 percent in 2022 and 31.12 percent in 2023.
- The finance content of the subject which involves transactions, books of accounts, ledger accounts trading profit and loss accounts, and the balance sheet was problematic. Candidates who were not competent in the finance aspect fell into either average or low-performance categories.
- Candidates exposed similar gaps in topics leaning towards the end of the syllabus such as personal financial management, postal and telecommunication services, and banking giving an impression of either non or minimal coverage.

Recommendations

- Teachers and the Business Studies Association of Zambia should ensure frantic efforts are put in place to reduce the failure rate.
- Candidates should put in frantic efforts and understand the financial aspect thoroughly during the learning process, by practising and revising past papers intensively as groups and individuals.
- Teachers should cover the whole syllabus with deserved attention to every topic and detail. Teachers should share experiences and strategies that could be useful to enhance complete syllabus coverage.
- The Ministry of Education should ensure that trained and qualified teachers of Business Studies teach the subject in the schools and not any other.

Computer Studies

The purpose of the Grade 9 Computer Studies examination is to measure the candidates' achievements against the competencies as outlined in the Grade 8 to 9 Syllabus. The examination is also used for certification and selection to the Senior Secondary School Level.

The Computer Studies examination paper 1 consists of Sections A, B and C. Section A consists of multiple-choice questions (MCQs), Section B of Semi-structured short answers and Section C structured questions. A higher proportion of candidates performed well in section A than B and C.

Analysis of Performance

The mean score for the 2023 Junior Secondary Leaving Examination in Computer Studies 2023 was 43.13%. Candidates generally did better in Section A compared to the other two sections C and D.

The following questions were poorly answered by candidates.

- **Section A:**

Question 15: Most Candidates failed to give the type of software licence that gives end users rights and what to use software for.

- **Section B**

Question 4: This question presented a challenge generally to most candidates giving double click as the answer. To delete a slide, one has to Right-click it for the delete command to appear.

Characteristics of high-performing candidates

Candidates in high-performing categories were able to:

- Recall the End User Licence Agreement that gives the user the right to use and what to use software for.
- Recall various applications of computers such as Electronic Funds Transfer, Point of sale (EFPOS) hospital systems, and their operations.
- Recall and apply productivity tools and slide skills in Presentation Software
- Recall knowledge of computer security – virus, antivirus and backup
- Recall the Computer terms such as hardcopy and softcopy
- Understand the formula for adding and operations done in processing especially.
- Recall, keyboard functionality for function modifier keys such as the shift key
- Recall and understand components of multimedia files, i.e. audio, video, text, graphics and animations.
- Recall, how errors are reported by the system in Productivity tools such as Excel, Word and Publisher (Example-spelling, underline green, #DIV/0 Error)
- Applying Excel formulas such as sum, and sum-if.

Characteristics of average-performing candidates

Candidates exhibiting average performance were:

- Able partially to recall knowledge on computer security – virus, antivirus and backup.
- Failed to recall various applications of computers such as Electronic Funds Transfer, Point of sale (EFPOS) hospital systems, and their operations.
- Able to recall the Software licence called “End User Licence Agreement”, that gives the user the right to use and what to use software for.
- Able to recall but failed to apply knowledge on how to delete slides in Presentation Software.
- Recall the Computer terms such as hardcopy and softcopy.
- Not able to state how the formula for sum should be written for data held in B3 up to B7

- Not able keyboard functionality for function modifier keys such as the shift key
- Recall part of components of multimedia files, i.e. audio, video, text, graphics and animations.
- Not able to state completely, how errors are reported by the system in Productivity tools such as Excel, Word and Publisher (Example-spelling, underline green, #DIV/0 Error)
- not able to apply Excel formulas such as sum, and sum-if

Characteristics of low-performing candidates

Candidates exhibiting low performance had the following difficulties:

- software licensing especially -End User Licence Agreements (EULA)
- Failed to state applications of computers in situations given e.g. hospital, and understand their operations.
- Recall only a few aspects of computer security -antivirus and backup
- Not able to recall the Computer Abbreviations and terms –including Universal Serial Bus (USB); hardcopy and softcopy
- Lacked understanding of all arithmetic operations done in processing, especially multiplication and division
- Not able to recall, keyboard functionality for modifier keys such as the shift key
- Failed to state components of multimedia files, i.e. audio, video, text, graphics and animations.
- Failed to explain how errors are reported by the system in Productivity tools such as Excel, Word and Publisher (Example-spelling, underline green, #DIV/0 Error)
- Could not apply to Excel formulas such as sum, and Sum -If

Recommendations

- Teachers should emphasise the legal requirements of software use.
- Teachers should help learners master the basic skills in Excel on the use of formulas and If-functions and give learners opportunities to practice thoroughly special formulas.
- Teachers should help learners fully understand multimedia files.
- Productivity software basics should be taught in all applications.
- CPDs- should also be driven by feedback.

Art and Design

The purpose of the Grade 9 Art and Design examination is to test candidates’ artistic ability to observe, represent, analyse, and appreciate objects either natural or man-made as a total composition.

Art candidates should think creatively and make connections to other learning subjects within the curriculum. Candidates are assessed based on the following objectives: Knowledge and Comprehension, Application and Analysis of concepts and skills acquired from Grades 8 to 9.

Analysis of Performance

The mean performance at Grade 9 in 2023 was 57.85 percent. There was a decline in performance of 4.48 percent from 62.33 percent in 2022 to 57.85 in 2023.

The qualitative analysis of candidates' performance across the three categories of high, average and low was based on 2023 Art and Design paper 1, Section B, questions 1 to 6. The questions tested candidates on studying and interpreting pictorial artworks. It further, tested candidates' ability to exhibit artistic knowledge of visual art as taught in the school syllabus.

The question read as follows:

*Study the picture in **Figure 4*** and answer the questions that follow*

Mention two types of perspective depicted in the picture [2]

Suggest the title for the picture above [1]

Identify two art principles used in the picture [2]

Which two art elements were used mostly in the picture? [2]

Write the letter representing the;

Background [1]

Foreground [1]

Figure 4 depicts a picture in 3 dimensions. True or False [1]

*Figure 4 shows a pictorial artwork

Characteristics of high-performing candidates

High-performing candidates were able to answer correctly questions 1-6 in section B of the Picture study. They exhibited the following characteristics:

- Exhibited superior mastery of most of the concepts of still pictures, including different perspectives.
- Suggested titles for the picture were on point depicting mastery of art.
- Good application of Art principles was exhibited.
- Mastery of art element application was very clear in responses provided in question 4.
- Easily identify the Background and Foreground from the picture under study.

- Understanding the art of identifying and distinguishing 2-dimension drawings from 3-dimension pictures.
- Good understanding of concepts used when drawing in general.

Characteristics of average-performing candidates

Candidates with average performance exhibited the following characteristics:

- Exhibited average mastery of most of the concepts in still pictures. They could not mention more than one drawing perspective.
- Some suggested titles for the picture were off from the provided picture under study.
- Lacked good application of Art principles in their responses to question 3.
- Mastery of art element application was low as seen in responses provided in question 4.
- Although a few candidates in this cohort could identify Background and Foreground from the picture under study, the majority were swapping the terms.
- They could not ascertain the art of identifying and distinguishing 2-dimension drawings from 3-dimension drawings.
- little understanding of concepts used when drawing in general.

Characteristics of low-performing candidates

Candidates with average performance exhibited the following characteristics:

- Lacked mastery of most of the concepts of picture study and analysis.
- Failed to mention anyone drawing perspective used in drawing.
- They could not provide any meaningful suggested titles for the picture under study.
- Failed to identify any one Art principle in their responses to question 3.
- Only a few candidates in this group managed to identify the art element in question 4.
- Failed to distinguish between ‘Background and Foreground’. These two meant the same according to this cohort.
- Failure to identify and distinguish 2-dimension drawings from 3-dimension drawings, the majority missed it completely by most candidates in this category.
- Completely no understanding of concepts used when drawing in general.

Challenges experienced by candidates in Art and Design

- The majority of candidates found it difficult to understand some of the basic ideas and rules in picture reading, such as identifying perspectives used, suggesting appropriate titles to the pictures, and art principles and elements used.
- Many candidates found it difficult to distinguish art principles from art elements.

Recommendations

To improve candidates' performance in Art and Design at Grade 9, the following are some of the recommendations:

- Teaching and learning of Art and Design should be from a practical point of view and, applied to real life. This will make Art and Design interesting to the learners and in turn, develop a positive attitude of learners towards the subject.
- Teachers should ensure that meaningful feedback is given to candidates that include various tasks done in School Based Assessment. This will help learners identify and correct errors in their work.
- Teachers should actively participate in CPD meetings to enrich themselves with topics they find challenging

Design and Technology

The purpose of the Grade 9 Design and Technology assessments is to measure learner achievement against the set competencies as well as the acquisition of Knowledge and problem-solving skills as outlined in the syllabus. Candidates are assessed based on the following objectives: Knowledge and Comprehension, Application and Analysis of concepts and skills acquired from Grades 8 to 9.

Analysis of Performance

The mean performance in Design and Technology at Grade 9 in 2023 was 61.69 per cent. There was a marginal decline in the performance of 0.43 percent from 62.12 percent in 2022 to 61.69 in 2023.

The qualitative analysis of candidates' performance across the three categories of high, average and low was based on 2023 Design and Technology paper 1, Section C, Part I - compulsory question 32. The question tested problem identification and problem stating from the given visual situation. It further, tested graphic communication skills and proper application of correct material on the identified designs. The question read as follows:

32 (a) *The situation in Figure 21* is obtained in the Head of Department (HOD)'s office.*

*Identify the **Problem** from the given situation* [3]

*Formulate a **design brief** from the problem stated in **an (i)*** [3]

*One of the specifications to be considered is size. State **five specifications** that you would consider when developing a product.* [5]

Sketch a free-hand pictorial drawing of the possible solutions [13]

*Mention **two** materials you would use for your possible solution* [2]

*Explain why the materials mentioned in **(a)(v)** are suitable* [2]

What two safety measures would you consider when making the possible solution?
[2]

**Figure 21 shows a table with an assortment of stationery items scattered on top*

Characteristics of high-performing candidates

High-performing candidates were able to answer correctly question 32 on the design process. They exhibited the following characteristics:

- They exhibited mastery of most of the concepts on the topics therein.
- Presentation of work was very good.
- Good interpretation of the situation presented.
- Mastery of the prerequisites before developing a product through their responses under *specifications*.
- Correct application of drafting skills through their presentation of free-hand sketches.
- Understanding the art of selecting of correct material for the purpose or job.
- Showing essential annotations in their designs, thus effectively communicating.
- Used drawing instruments correctly in coming up with correct engineering drawings and basic constructions.
- Demonstrated understanding of all the concepts of solving real-life problems in our environment.
- Had a good understanding of ideas in designing artefacts.
- Mastered the concepts of ergonomics in their presented designs.
- Had a good understanding of the concepts of measurements.
- Had pre-requisite knowledge of application mensuration formulas in product designs.
- Calculations and dimensions, where applicable were correctly applied with a minimal allowance of +/-2mm.

Characteristics of average-performing candidates

Candidates with average performance exhibited the following characteristics:

- Average performing candidates were able to answer three parts i, ii and iii correctly of question 32 on problem identification, design brief and state specifications. They, however, exhibited poor drafting/sketching skills on their possible solutions.

They exhibited the following characteristics:

- Interpreted correctly some parts of the situation presented.
- They exhibited low mastery of the concepts of the design process in general.
- Missed some of the prerequisites before developing a product through their responses under *specifications*.
- Drafting skills lacked authentic tenets in their free-hand sketches presented.
- They lacked a good understanding of the art of selecting of correct material for the purpose or job.
- They showed a few or none of the essential annotations in their designs, thus failing to effectively communicate.
- Misapplied their drawing instruments when coming up with correct engineering drawings and basic constructions.
- Although they demonstrated an understanding of solving real-life problems in our environment, they failed to present their work correctly.
- Had a good understanding of ideas for designing artefacts, but with poor presentation of sketches.
- The concept of ergonomics was not seen in their presented designs.
- Concepts of measurements were lacking in their designs.
- They did not apply a minimal allowance of $\pm 2\text{mm}$ on calculations and dimensions where applicable.
- Knew prerequisites to some topics but limited.
- Presentation of work, especially sketches was not very clear in some cases.

Characteristics of low-performing candidates

Candidates with average performance exhibited the following characteristics:

- Lacked mastery of most of the concepts of the Design Process and choice of engineering materials.
- Could not interpret correctly the situation presented, thus affecting problem identification and formulation of design brief.
- Failure to apply correct mensuration formulae when designing artefacts
- Could not use drawing instruments correctly and used free hand in some cases where instruments were required.
- Could not sketch in 3d correctly as required
- Omission of essential steps needed in arriving at some solutions
- Presentation of work was not very good

Challenges experienced by candidates in Design and Technology

- The majority of candidates found it difficult to understand some of the basic ideas and rules in the design process, such as linking the situation to the problem, brief and possible solutions.
- Few candidates did not respond to this part question (iv) on free-hand sketching, the ones who tried to respond did so in writing.
- For some candidates, using drawing instruments in construction presented a challenge. While some candidates could use set squares, they were unable to use them effectively looking at skewed diagrams/sketches presented.

Recommendations

To improve candidates' performance in Design and Technology at Grade 9, the following are some of the recommendations:

- Teaching and learning of Design and Technology should be from a practical point of view and, applied to real life. This will make Design and Technology interesting to the learners and in turn, develop a positive attitude of learners towards the subject.
- Teachers to ensure that meaningful feedback that includes portfolio and artefact making in School Based Assessment, is provided to learners. This will help learners identify correct work and errors in their work.
- Teachers should ensure that learners have drawing instruments that each one of them should make use of in graphic communication involving constructions.
- Professional Development (CPD) meetings to be used in enhancing teachers' performance on topics that are found challenging. In 2023, these included tools and materials and the design process.

Musical Arts Education

The purpose of the Grade 9 Musical Arts Education assessment is to measure candidates' achievement against the set competencies as outlined in the syllabus. The assessment will also serve the purpose of certification and selection.

Analysis of Performance

There was a noticeable decrease in the candidate's performance in 2023 compared to 2022, with a 0.85 percentage points decrease in the mean score from 52.23 percent to 51.38. In terms of gender, in 2023 female candidates performed better than male candidates with a 1.50 difference.

Characteristics of high-performing candidates

Candidates who performed well demonstrated the following traits:

- Demonstrated mastery in describing intervals both in numeric and qualitative value.
- Identified melodies, by matching the melody played on the CD with the one in the paper.
- Displayed a clear understanding of different musical terms.
- Displayed correctness in constructing triads.
- Transposed the music a major 2nd higher.
- Applied good composition skills.
- Where able to analyse the musical scores.

High-performing candidates were able to answer correctly the following questions:

- **Question 1**, required candidates to describe the intervals in both numeric and qualitative values.
- **Question 2**, required the candidates to match the melody played on the CD with the ones provided in the paper and choose the correct option.
- **Section B, question 4**, which required candidates to give technical names. **Questions in section B**, which required candidates to answer the different musical terms were by adding bar lines in **question 5**, adding rests in **question 6**, constructing triads in **question 10** and translating staff notation to tonic-sofa notation in **question 11**. **In Section C**, candidates performed well in the following questions:

Characteristics of average-performing candidates

The candidates in this category exhibited the following common traits:

- They described some numeric intervals but failed to state their qualitative value.
- Demonstrated skills in the matching of some melodies.
- They were able to name some of the ethnic groups associated with the given dances.
- Translated correctly some parts of staff notation to tonic-sofa notation.
- Interpreted correctly some questions on the score analysis.

Average performing candidates were able to translate correctly some parts of staff notation to tonic-sofa notation in **question 11**. Interpreted some questions in the score analysis in **question 14**. In **question 2**, candidates were able to match some melodies and failed in other melodies.

Characteristics of low-performing candidates

The candidates in this category exhibited the following common traits:

- Failed to describe the intervals in both numeric and qualitative.

- Could not construct the F Major scale in descending order.
- Failed to translate the music from staff notation to tonic-sofa notation.
- They were unable to compose a melody, even after beginning for them.
- Could not transpose the melody a major 2nd higher.

Most questions were left blank.

Low-performing candidates were unable to answer correctly **question 1**, which required them to describe the intervals, **question 2**, which required candidates to match the melodies heard on the CD, with the one in the question paper, **question 3**, which required candidates to identify chords, **section C**, which required candidates to analyse the music score, **question 15**, which required candidates to write briefly on how one can earn a living through music, **question 16**, which required candidates to identify the musical instruments and **question 17**, which required candidates to name the ethnic group associated to a given dance.

General Challenges:

- Failure to interpret the musical score.
- Failure to Identify and match the melodies heard on the CD and in the question paper.
- Failure to identify the musical instruments.
- Difficulties in interpreting musical terms.

Recommendations

The following is recommended:

- Teachers should prepare candidates adequately in musical instruments.
- Teachers should teach candidates about the Zambian ethnic groups and their dances.
- Teachers should prepare candidates adequately on how to construct scales, and how to translate music from staff notation to tonic-sofa notation.
- Practical tasks should be given to learners frequently to enhance their understanding of practical work. Practical work should be incorporated into the teaching in a way that complements theoretical learning.

Home Economics

The purpose of the Grade 9 Home Economics assessments is to measure candidates' achievement against the set competencies outlined in the Grade 8 and 9 Home Economics syllabus. It also assesses the level of skills acquired in reasoning and problem-solving.

The quality of the 2023 Home Economics Paper 1 was set at the same level of difficulty as in 2022. The assessment was spread across all levels of Bloom's Taxonomy guided by the Assessment Objectives as outlined in the Examination Syllabus.

Analysis of Performance

The mean performance in Home Economics at Grade 9 in 2023 was 57.39 percent showing an increase of about 5.8 percent from 51.5 percent in 2022. Candidates performed better in Paper 1 in 2023 with a mean of 32.75 percent compared to 25.7 percent in 2022. The scenario was the same in Paper 2, candidates performed better in 2023 with a mean score of 82 percent in comparison to 81.2 percent in 2022. Overall, candidates performed better in Paper 2 (SBA), than in Paper 1 (theory).

Competencies exhibited by candidates with high performance

- understand the interpretation of interpreted questions with accuracy and relevance to the question requirements.
- Presented clear and straight-to-the-point responses that were easy to understand.
- attempted very good attempt of all questions in all four sections without leaving blank spaces.
- Neatly presented work, correctly numbered with corresponding number of points required for each question.
- Presented clear and neat diagrams, such as question 12 section A that required drawn care labels.
- Good interpretation of questions that required an application level of understanding. A good example was question 9 which required candidates to suggest sweet dishes that could be made using short-crust pastry. Even though candidates responded with a variety of dishes, they fit the needs of the question.

Competencies exhibited by candidates with average performance

- Failure to attempt all questions.
- Lack of subject mastery which was exhibited by limited responses to questions that asked to list several responses.
- Poor command of English was exhibited by poorly constructed phrases and sentences for questions that required simple explanations of concepts and definitions such as question 10(c) in section B (explain how we can preserve ripe mangoes at home), question 10(a) in section A (define the term 'non-perishable foods).
- Low-order questions were better handled than the higher-order questions that required comprehension of knowledge acquired to answer the question. A good example was Question 6 in section D on the uses of a crossway strip.

- Failure to outline responses logically in sequential type of questions. This was common in question 8 in section A on the procedure of bread-making.
- Candidates performed better in sections A (Food and Nutrition) and B (Home Management) compared to sections C (Health Education) and D (Needlework and Crafts).
- Candidates from urban schools performed better than those in rural schools especially in section D (Needlework).

Competencies exhibited by candidates with poor performance

- Failure to construct meaningful responses, most likely due to limited vocabulary and grammatical skills.
- Failure to respond to questions consequently leaving a lot of blank spaces.
- Presentation of irrelevant responses that were not in any way related to the needs of the question, completely out of context.
- Duplication of questions copied from the question paper as responses.
- Poor handwriting coupled with cancellations of the work.

• Sample Questions where Candidate Performed Poorly in ‘Home Economics

• *Section A: Question 8: outline the first two steps in bread-making*

Challenge: The majority of candidates presented responses out of guesswork while others skipped the question altogether. This question affected even the high performers, a sign of a lack of exposure to the procedure or non-syllabus coverage.

• *Section B: Question 10: ...is used to hydrolyse fats in soap-making*

Challenge: Despite the question being clear and simple recall, most candidates including high performers failed the question. Soap-making has long suffered non-coverage in most schools yet it is an interesting topic that could be used in SBA projects and experiments.

• *Section D: Question 11 (b): name two tools used in crocheting*

Challenge: The question was a simple recall at the knowledge level. For the high performers to fail to respond to such questions suggests non-syllabus coverage. Crocheting and knitting are yet another topic shunned in most schools.

Recommendations

- The paper has four sections covering all components of Home Economics and hence entails diverse thinking and good time management. Candidates need guidance on time management to avoid running out of time before the stipulated duration.
- Candidates need to be advised to first answer questions they are familiar with before turning to unfamiliar ones so that they do not run out of time.

- Candidates should attempt all parts of questions to minimise loss of marks. Teachers should aim at covering all learning outcomes of the topics as outlined in the syllabus, rather than focusing on certain areas of interest.
- Teachers should make lessons more learner-centred by engaging candidates during class or as SBA projects to explore and experiment with various aspects of practical-oriented topics such as soap-making, knitting, crocheting, and weaving among others.
- Teaching and learning of Home Economics should be from a practical point of view and, applied to real life. This would make lessons more interesting to the learners and in turn, allow them to own and master the subject.
- Capacity Professional Development (CPD) meetings should be intensified to enhance teachers' performance on unpopular topics and those that are found challenging.

Physical Education

The purpose of the Grade 9 Physical Education assessment will be to assess candidates in the following areas:

- ability to plan, perform, analyse, improve, and evaluate physical activities.
- knowledge, skills and understanding of a range of relevant physical activities.
- The assessment will also serve the purpose of certification and selection.

Analysis of Performance

There was a noticeable decrease in the candidate's performance in 2023 compared to 2022, with a 1.25 percentage point decrease in the mean score from 46.87 percent to 45.62. In terms of gender, in 2023 male candidates performed better than female candidates with a 1.10 difference.

Characteristics of high-performing candidates

Candidates who performed well demonstrated the following traits:

- Explained the abbreviation of ABC as used in First Aid treatment.
- Answered correctly on the importance of gymnastics to an athlete.
- Identified risk behaviours and factors in sports activities.
- Listed techniques used when throwing the ball in netball.
- Discussed the benefits of participating in sports and games.

*High-performing candidates were able to answer questions in **section A** correctly and also were able to abbreviate ABC letters as used in first Aid treatment in **question 4 section C**. In **question 2, section C** required candidates to explain different ways in which pool hygiene can be maintained. In **Section B, question 2**, required candidates to state characteristics of a safe swimming pool, **question 6**,*

*required candidates to state the Health effects of doping in athletes, **question 6, section C**, required candidates to suggest practices that prevent the transmission of HIV/AIDS among sports athlete and spectators.*

Characteristics of Average Performance

The candidates in this category demonstrated the following:

- Candidates answered fairly some of the questions in **section A**, e.g., **question 2**, which required them to state the perceptual skill demonstrated by players, **question 14**, which required the candidates to identify the gymnastic skills and **question 15**, which required the candidates to identify the skill used to receive a service in volleyball.
- Candidates were able to discuss the importance of recreation but failed to link it to traditional games in **question 3, of section C**.
- Candidates were able to state different examples of pool hygiene but failed to come out on how it can be maintained in **question 2, section C**.
- Candidates failed to bring out completely the benefits of participating in sports and games in **question 1, of section C**.

Characteristics of Low Performance

The candidates in this category demonstrated the following:

- Failed to state the characteristics of a safe swimming pool
- Could not identify components of fitness.
- Failed to state how HIV/AIDS can be transmitted among sports athletes and spectators.
- Candidates were unable to identify the type of fracture on an arm.
- Failed to explain the importance of gymnastics to athletes.

*Low-performing candidates were not able to answer correctly the following questions: **Question 2, in section B**, which required candidates to state the characteristics of a safe swimming pool, **question 4, of section B**, which required candidates to identify components of related fitness, **question 6 in section B**, which required candidates to state how the can prevent the spread of HIV/AIDS amongst sports athletes.*

General Challenges:

- Failure to present their work accurately in gymnastics
- Failure to interpret a diagram of the fractured arm.

Recommendations

The following is recommended:

- Teachers should prepare candidates adequately in Physical Education and Health.
- Practical tasks should be given to learners frequently to enhance their understanding of practical work. Practical work should be incorporated into the teaching in a way that complements theoretical learning.
- Teachers should prepare the learners adequately for recreation and traditional games, fitness activities and Gymnastics.
- Learners should be encouraged to explain key concepts clearly and in full.

2023 JSSLE Special Education Needs Examinations Review

The 2023 Junior Secondary School Leaving Examination had 664 candidates with special educational needs registered to write the examination at the end of the year. Out of the stated number of registered candidates 306, representing 46.08 percent were girls while 358, representing 53.91 percent were boys. During the actual examination, 558 (84.03%) candidates sat whereas, 106 (15.96%) stayed away from the examination. Among those present 264 (47.31%) were girls and 294 (52.68%) were boys.

The 2023 Junior Secondary School Leaving Examination candidates consisted of the three major groupings of educational needs categories. These included 269 (48.20%) hearing impaired, 150 (26.88%) physically challenged and 117 (20.96%) visually impaired candidates.

Further, a total of 733 (64.24%) candidates qualified to go to Grade 8 and among them 331 were girls representing 45 percent while 402 were boys representing 55 percent. The other 408 (35-76%) were not selected for Grade 8 or failed the examination.

Recommendations

It is advised that educators dissuade students from writing in bullet points. Encouragement should be given to students to fully and clearly explain important concepts. A range of methods, such as field trips, should be used to present some of the subjects, and they should discuss the benefits and drawbacks of village banking efforts. It is recommended that teachers use the syllabus rather than just textbooks as the primary planning document. Teachers are also urged to use their creativity to break down any complex language or concepts that students could find challenging. Teachers could also assist students with application, analysis, and evaluation abilities by outlining the principles included in essay questions or subjects. Finally, rather than teaching students to write essays in bullet points, teachers should teach them how to write essays correctly.

Conclusion

In contrast to a 9.8 percent increase in 2022, there was a 2.1 percent increase in the number of pupils who enrolled for the Junior Secondary School Leaving Examination in 2023. The number of applicants who sat the 2023 Examination increased by 2.4 percent from the 2022 Examination to 291,894. The absenteeism rate in 2023 was 0.3 percentage points lower than the 7.0 percent rate in the year before. A seven-year trend analysis revealed a decline in absenteeism, with rates falling from 12 percent in 2017 to 6.9 percent in 2023. We hope that this declining tendency will stay in place, however, Zambian Languages continue to record higher levels of absenteeism with subjects averaging slightly above 10 per cent. This is largely attributed to the negative perception of Zambian Languages.

Furthermore, the Grade 9 Internal Examination results for 2023 revealed a marginal decline in performance over the year before. Between 2022 and 2023, the percentage of candidates who received certificates fell from 54.2 percent to 53.6 per cent. In terms of sex, boys were more likely than girls (52.9%) to get certificates (54.2%). In comparison to the previous year, this indicates a 1.4 percentage point drop for girls and a 0.2 percentage point increase for boys.

Eastern Province had the lowest failure rate, at 5.6 percent, while the Western (13.9%) and North-western (13.5%) provinces recorded the highest. In 2022, Eastern Province also had the lowest failure rate. Similar to 2019, 2020, 2021, and 2022, mathematics saw the highest failure rate in 2023 (51.9%). On the other hand, the 2023 Mathematics failure rate dropped by 5.1%.

Further, schools are encouraged to nurture the use of school-based assessments to enhance and promote meaningful instruction and learning. Additionally, teachers are encouraged to utilise demonstrations and teaching aids such as maps, tables, diagrams, and graphs to promote concrete learning. Last but not least, teachers need to ensure that expressive feedback is provided to help learners understand what they are doing well and what they are not.

In conclusion, the 2023 candidates did not perform well compared to the 2022 cohort, although there was a slight improvement in terms of quality of results. The qualitative analysis of candidates' performance indicated varying levels of performance. The majority of the challenges identified rested on candidates' lack of understanding of what is demanded by the questions. This could be attributed to learners' lack of subject content matter and instructions associated with the questions. Schools and teachers are encouraged to ensure that subject syllabi are adequately covered and that learners are provided with hands-on experiences and remedial work where the need arises. Finally, the Grade 9 Internal Examination for 2023 was administered and completed without incident.