Examinations Council of Zambia

2023 SCHOOL CERTIFICATE EXAMINATION PERFORMANCE REPORT

Suggested Citation:

The Examinations Council of Zambia (ECZ) (2023). Primary School Leaving Examination Performance Review Report, ECZ.

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Lusaka

Foreword

The School Certificate Examination is an important milestone for learners in their academic journey. It signifies the completion of secondary education and the transition to tertiary education. The examination also provides system-level feedback on learning achievement, which could be useful in improving teaching and learning processes. To provide feedback to stakeholders, the Examinations Council of Zambia (ECZ) develops performance reports that contain detailed analyses of candidates' performance. The reports offer essential information on the performance of candidates on which teaching and learning decisions and policy interventions could be based. Additionally, the reports serve as a valuable resource for research and development, benchmarking, and cross-country comparisons.

This report provides an analysis of the performance of candidates who took the 2023 School Certificate Examination. It provides an overview of candidates' performance and qualitatively identifies gaps, and areas for improvement in teaching and learning processes. It is my hope that this report will benefit the system and lead to improvement in learner achievement levels.

Dr. Michael Chilala
Executive Director
Examination Council of Zambia

Acknowledgements

The ECZ would like to acknowledge and thank the provincial and district education officers, school managers, teachers, and candidates who participated in the 2022 SC examination for their support and cooperation.

Special appreciation is extended to all individuals involved in preparing this report. The following officers are recognized for their extensive experience, knowledge, and expertise in producing and publishing this report:

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Contents

1.0. Introduction

This report outlines key highlights of the 2023 School Certificate Ordinary Level Examination, segmented into two sections.

The first section presents an overview of examination results, including candidature, absenteeism, certificate division, and statistical data on candidates with Special Educational Needs (SEN). The second on the other hand, provide a detailed analysis of subject-specific performance across 33 subjects, grouped into five categories: Literature and Languages, Business Studies, Social Sciences, Natural Sciences, and Practical Subjects.

2.0. Examination Results Highlights

2.1. Candidature

2.1.1. In 2023, a total of 166,593 candidates registered for the **2023** School Certificate examination, representing a 30.88 percent rise from the 2022 figure of 127,289 candidates. Among them, 166,501 were from Zambian schools, while 92 were from St. Jeff College in Gauteng, South Africa. Of the Zambian school candidates, 82,304 (49.43%) were boys and 84,197 (50.57%) were girls, showing an increase of 27.88 percent for boys and 33.95 percent for girls compared to 2022.

2.1.2. At St. Jeff College, 42 (45.65%) of the 92 candidates were boys while 50 (54.35%) were girls, representing a total of 31.43 percent rise from 70 candidates that registered in 2022.

2.1.3. From the Zambian schools, 163,408 (98.14%) of the 166,501 registered candidates sat the 2023 examination, representing a marginal decrease of 0.17 percentage points from 98.31 percent in 2022.

2.1.4. Of the total registered candidates, 80,729 (98.09%) boys and 82,679 (98.20%) girls sat the examination. Compared to 2022, the proportion of boys who sat the 2023 examination decreased by 0.18 percentage points, while that of girls decreased by 0.16 percentage points.

Table 1: Candidate Entry (Zambian Schools) for 2020 to 2023

Year	Boys	Girls	Total
2023	82304	84197	166501
2022	64362	62857	127219
2021	62593	61438	124031
2020	77955	72027	149982
Δ 2022 to 2023 (Absolute figures)	17942	21340	39282
Δ in Percentage	28.66	33.95	31.67

2.2. Absenteeism

2.2.1. In the 2023 examination, absenteeism among candidates from the Zambian schools increased to 1.86 percent, up by 0.17 percentage points from 1.69 percent in 2022, contrary to the previous trend that exhibited a continued decrease over the past years.

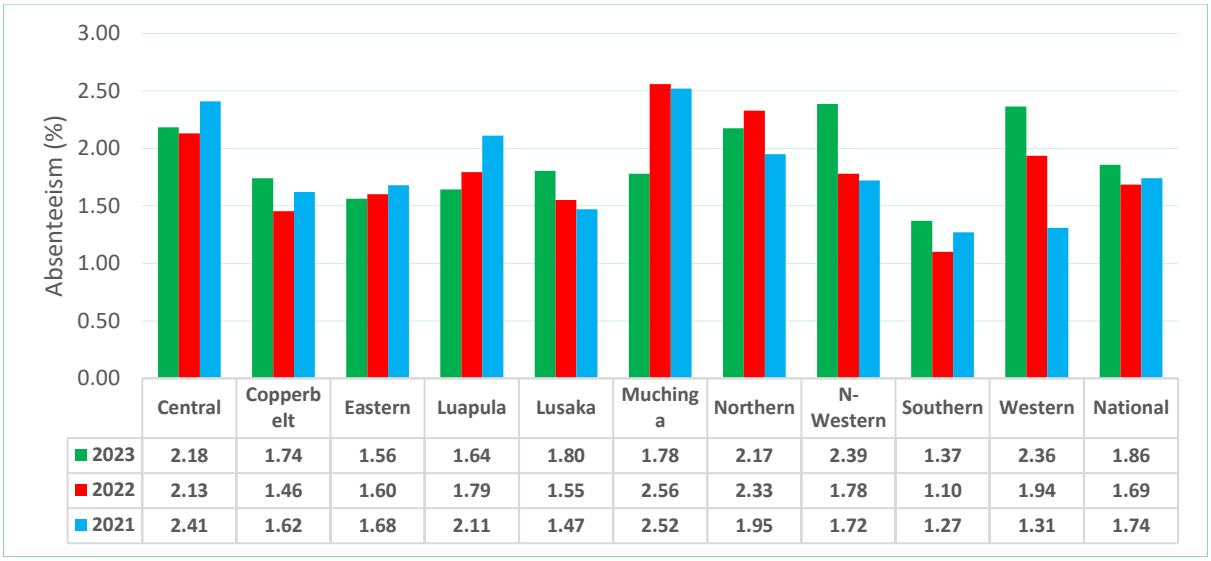
2.2.2. Boys had a higher absenteeism rate at 1.91 percent compared to girls at 1.80 percent in 2023, reflecting a similar trend observed in 2022 with boys surpassing girls by 0.09 percentage points.

Table 2: Grade 12 Candidate Absenteeism Rates for 2020 to 2023

Year	Boys		Girls		Total	
	Absolute	Proportion	Absolute	Proportion	Absolute	Proportion
2023	1575	1.91	1518	1.80	3093	1.86
2022	1111	1.73	1033	1.64	2144	1.69
2021	1208	1.93	952	1.55	2160	1.74
2020	1631	2.09	1296	1.80	2927	1.95
Δ 2022 to 2023	464	0.18	485	0.16	949	0.17

2.2.3. The analysis of absenteeism across provinces revealed variations. Four provinces—North-western (2.39%), Western (2.36%), Central (2.18%), and Northern (2.17%)—experienced higher absenteeism rates than the national average of 1.86 percent. Conversely, Southern Province reported the lowest absenteeism rate at 1.37 percent, consistent with the 2022 examination.

2.2.4. Copperbelt, Lusaka, and Southern provinces have consistently maintained absenteeism rates below the national average for four years (Refer to Figure 2).



	Central	Copperbelt	Eastern	Luapula	Lusaka	Muchinga	Northern	N-Western	Southern	Western	National
2023	2.18	1.74	1.56	1.64	1.80	1.78	2.17	2.39	1.37	2.36	1.86
2022	2.13	1.46	1.60	1.79	1.55	2.56	2.33	1.78	1.10	1.94	1.69
2021	2.41	1.62	1.68	2.11	1.47	2.52	1.95	1.72	1.27	1.31	1.74

Figure 1: Absenteeism rates across provinces (2023 – 2021)

2.3. Performance Analysis

2.3.1. Performance by Certificate Awards

The School Certificate Examination Ordinary Level Certificate awards are categorised into School Certificate, General Certificate of Education and Fail.

i. A School Certificate (SC) is awarded to a candidate who, at one sitting and during the same examination;

   a. Passes in at least six subjects, including English Language, with credit in at least one of them; or

   b. Passes in five subjects, including English Language, with credit in at least two of them.

ii. A candidate who obtains GRADE ONE TO EIGHT in at least one subject but fails to meet the School Certificate requirements is awarded a Statement of results.

iii. A candidate who scores Grade 9 in all subjects will have failed the examination.

2.3.1.1. School Certificate Pass Rate

i. Out of 163,408 candidates that sat the examination, 111,116 (68.03%) obtained a School Certificate, a decrease of 1.26 percentage points from 2022.

ii. Boys (67.75%) and girls (68.30%) had similar School Certificate attainment rates, with a marginal 0.55 percentage points difference in favour of girls.

iii. Compared to 2022, the School Certificate attainment rate dropped by 1.26 percent, with boys declining by 1.56 percent and girls by 0.97 percent.

iv. Among 84 St. Jeff College candidates that sat, 81 (96.43%) obtained School Certificates.

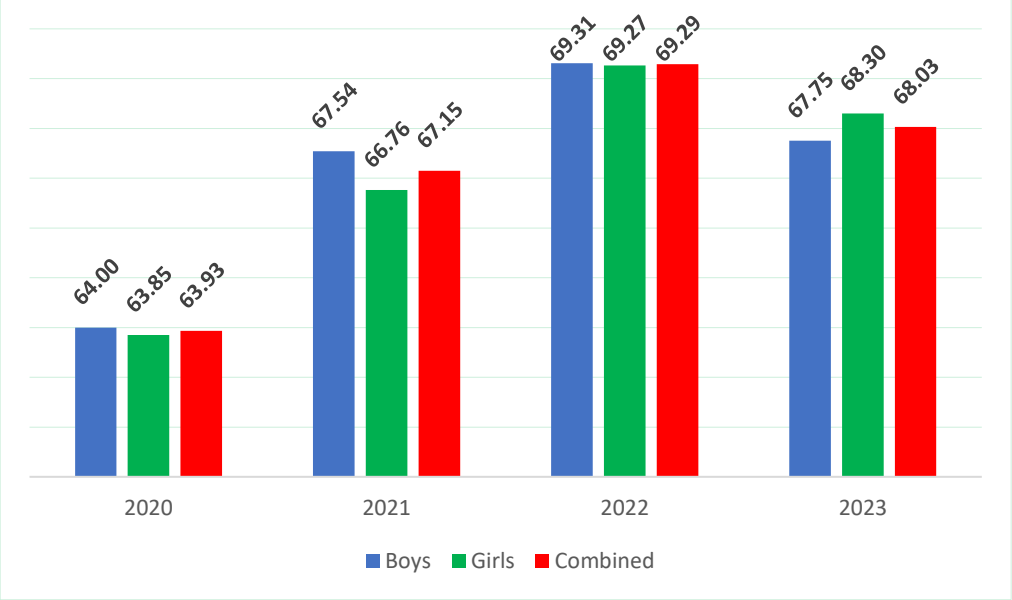


Figure 2: School Certificate Pass rates (2020 – 2023)

2.3.1.2. School Certificate Pass Rate Across Regions

i. Seven provinces recorded a decline in the proportion of candidates that obtained School Certificates, except North-Western, Northern, and Eastern provinces.

ii. Eastern Province recorded the highest proportion of candidates that obtained School Certificates at 79.23 percent, consistent with 2022, while Western Province had the lowest at 45.68 percent.

iii. Luapula Province experienced a significant decrease in the proportions of candidates obtaining School Certificates at 6.72 percentage points, followed by Muchinga and Western provinces at 2.63 and 2.16 percentage points, respectively.

iv. Five provinces—Western (45.68%), North-Western (47.03%), Luapula (58.24%), Muchinga (63.65%), and Northern (67.83%)—recorded proportions of candidates obtaining School Certificates below the national average of 68.03 percent.

Table 3: Proportions of Candidates obtaining School Certificates (2020-2022)

Region	2023	2022	Change

Northern	67.83	63.55	4.28
North - Western	47.03	45.28	1.75
Eastern	79.23	78.66	0.57
Southern	74.20	75.33	-1.13
Lusaka	71.34	72.60	-1.25
National	**68.03**	**69.29**	**-1.26**
Central	71.18	72.61	-1.43
Copperbelt	74.41	76.13	-1.72
Western	45.68	47.84	-2.16
Muchinga	63.65	66.28	-2.63
Luapula	58.24	64.96	-6.72

v. Eastern Province, Copperbelt Province, and Southern Province retained their respective first, second, and third positions in the provincial ranking for School Certificate Pass Rate, consistent with 2022.

Table 4: Provincial Ranking According to School Certificate Pass Rate (2023, 2022 & 2021)

Region	2023		2022		2021	
	SC (%)	Position	SC (%)	Position	SC (%)	Position
Eastern	79.23	1	78.66	1	69.33	4
Copperbelt	74.41	2	76.13	2	67.94	5
Southern	74.20	3	75.33	3	70.44	2
Lusaka	71.34	4	72.60	5	64.10	7
Central	71.18	5	72.61	4	70.11	3
Northern	67.83	6	63.55	8	62.69	9
Muchinga	63.65	7	66.28	6	62.20	10
Luapula	58.24	8	64.96	7	63.32	8
Northwestern	47.03	9	45.28	10	67.80	6
Western	45.68	10	47.84	9	73.73	1

2.3.1.3. Statement – Internal Candidates

i. A Candidate that obtains grades one to eight in at least one subject but fails to meet School Certificate requirements is awarded a Statement.

ii. The proportion of candidates that obtained a Statement increased by 1.49 percentage points from 28.43 percent in 2022 to 29.98 percent in 2023.

iii. The decrease in candidates that obtained a School Certificate has led to a rise in those that obtained Statements. Except for Eastern, Northern and North-western

provinces, seven provinces recorded an increase in candidates obtaining Statements.

iv. In 2023, more boys (29.98%) obtained Statements than girls (29.86%), an opposite scenario from 2022 when more girls (28.55%) obtained Statements than boys (28.31%).

Table 5: Proportion of Candidates Obtaining a Statement (2022 – 2023)

Region	Boys			Girls			Total		
	2023	**2022**	**Change**	**2023**	**2022**	**Change**	**2023**	**2022**	**Change**
Luapula	36.66	30.76	5.90	40.94	34.62	6.32	38.52	32.40	6.12
Muchinga	33.63	30.28	3.35	33.93	29.22	4.71	33.78	29.81	3.97
Western	46.44	41.94	4.50	48.45	48.05	0.40	47.48	45.14	2.34
Copperbelt	25.17	23.41	1.76	23.75	21.67	2.08	24.41	22.49	1.92
Central	27.17	25.19	1.98	26.84	25.41	1.43	27.00	25.30	1.70
National	**29.98**	**28.31**	**1.67**	**29.86**	**28.55**	**1.31**	**29.92**	**28.43**	**1.49**
Lusaka	27.56	26.08	1.48	27.74	26.36	1.38	27.65	26.22	1.43
Southern	25.06	23.06	2.00	25.13	24.37	0.76	25.10	23.72	1.38
Eastern	20.53	21.01	-0.48	20.03	20.25	-0.22	20.30	20.67	-0.37
N - Western	47.75	48.71	-0.96	47.28	48.08	-0.80	47.51	48.40	-0.89
Northern	29.77	32.68	-2.91	29.79	34.36	-4.57	29.78	33.39	-3.61

2.3.2. Performance by Subject Mean Scores

The raw scores were converted to a 100-point scale for cross-subject performance comparison (mean comparisons).

2.3.2.1. Mean scores ranged from 26.62 percent in Mathematics to 70.0 percent in Food and Nutrition, comparable to 2022.

2.3.2.2. Highest means were recorded in Food and Nutrition (70.0%), Fashion and Fabrics (66.76%), and Art and Design (64.33%), respectively.

2.3.2.3. Lowest means were recorded in Mathematics (26.62%), History (26.99%), and Science (27.24%).

2.3.2.4. Natural Sciences subjects generally recorded a decrease in performance, with Biology dropping the most by 17.45 percent, while Additional Mathematics increased the most by 15.33 percent.

2.3.2.5. Literature and Languages subjects generally dropped in performance, with the most decrease in Literature in English (8.73%), and the highest increase in Chitonga (6.52%).

2.3.2.6. Social Sciences showed a decline in performance in four out of five subjects, with History dropping the most by 7.25 percent.

2.3.2.7. Both Business Studies subjects increased, with Commerce rising by 5.27 percentage points and Principles of Accounts by 3.47 percentage points.

2.3.2.8. Practical Subjects had decreased performance, except for Food and Nutrition, which maintained 70.0 percent from 2022.

2.3.2.9. Practical subjects' means in 2023 exceeded the 40 percent pass mark, consistent with 2022 and 2021.

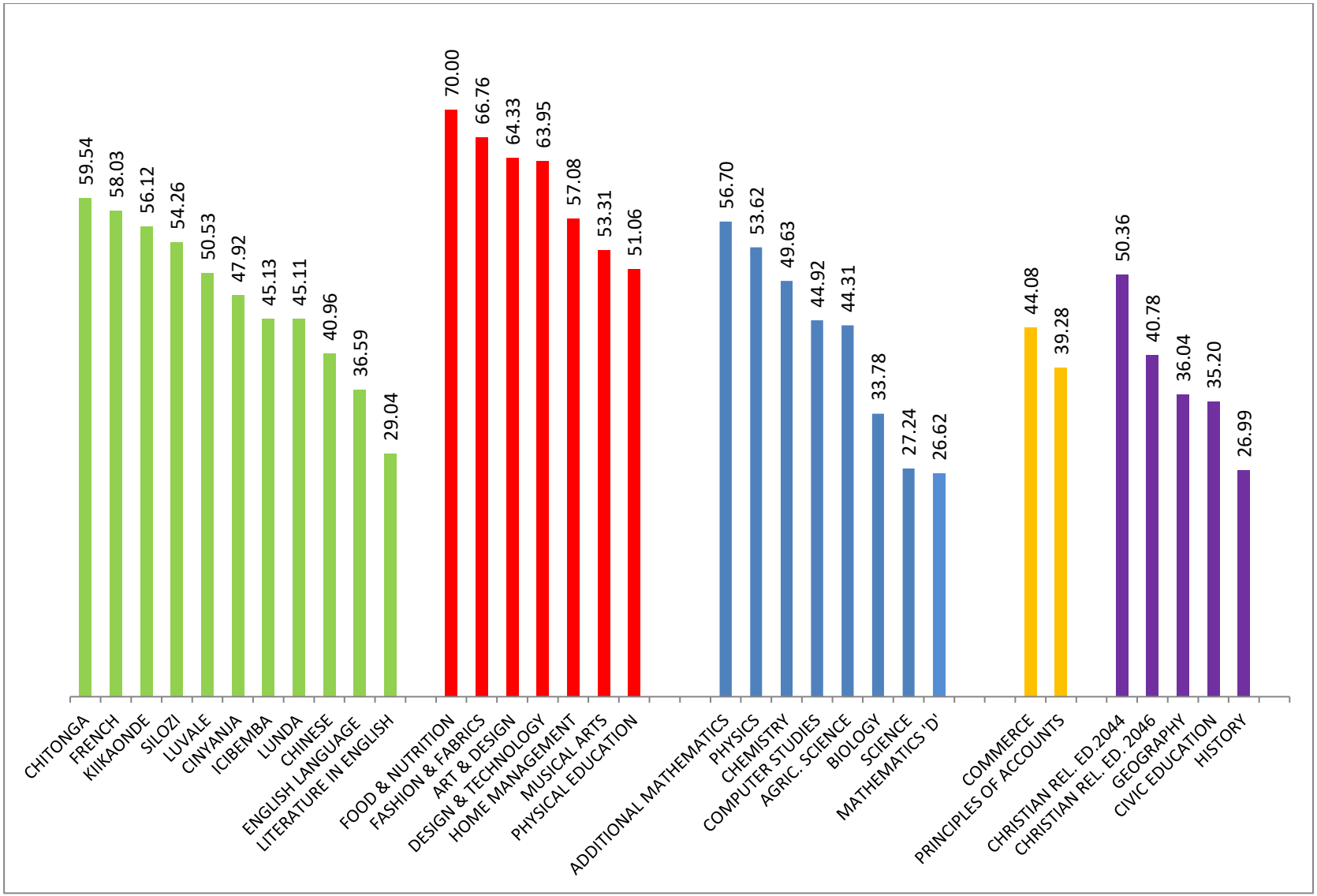


Figure 3: 2023 Mean Scores (%) in all Subjects

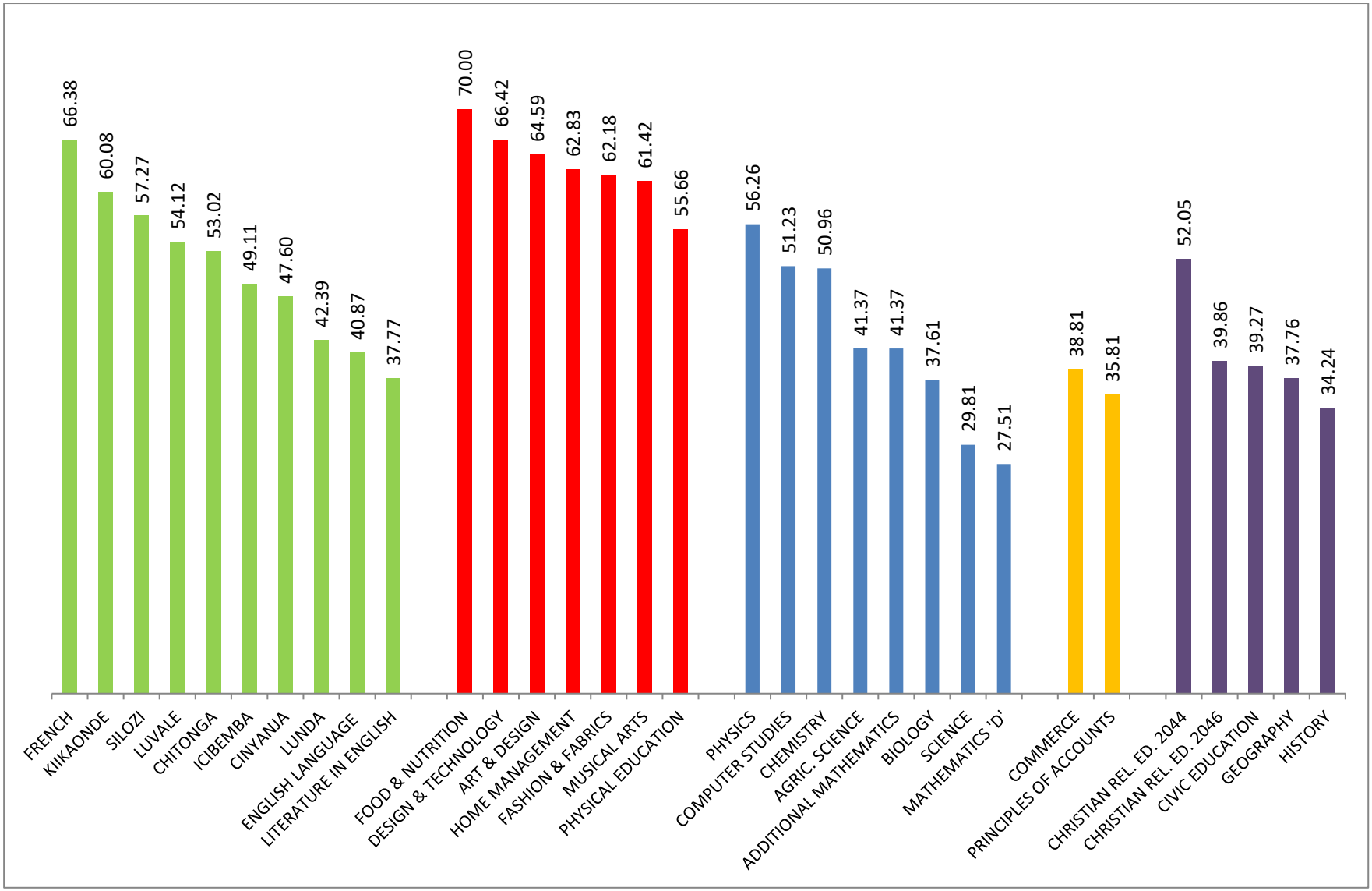


Figure 4: 2022 Mean Scores (%) in all Subjects

2.3.3. Mean Scores in Practical Subjects Across Regions

Practical subjects include Art and Design, Music, Design and Technology, Fashion and Fabrics, Food and Nutrition, Home Management, and Physical Education.

2.3.3.1. In Musical Arts Education, Muchinga Province had the highest pass rate at 69.92 percent, while North-Western Province had the lowest at 49.28 percent.

2.3.3.2. In Arts and Design, Eastern Province had the highest pass rate at 66.39 percent, while Northern Province had the lowest, consistent with 2022, at 61.53 percent.

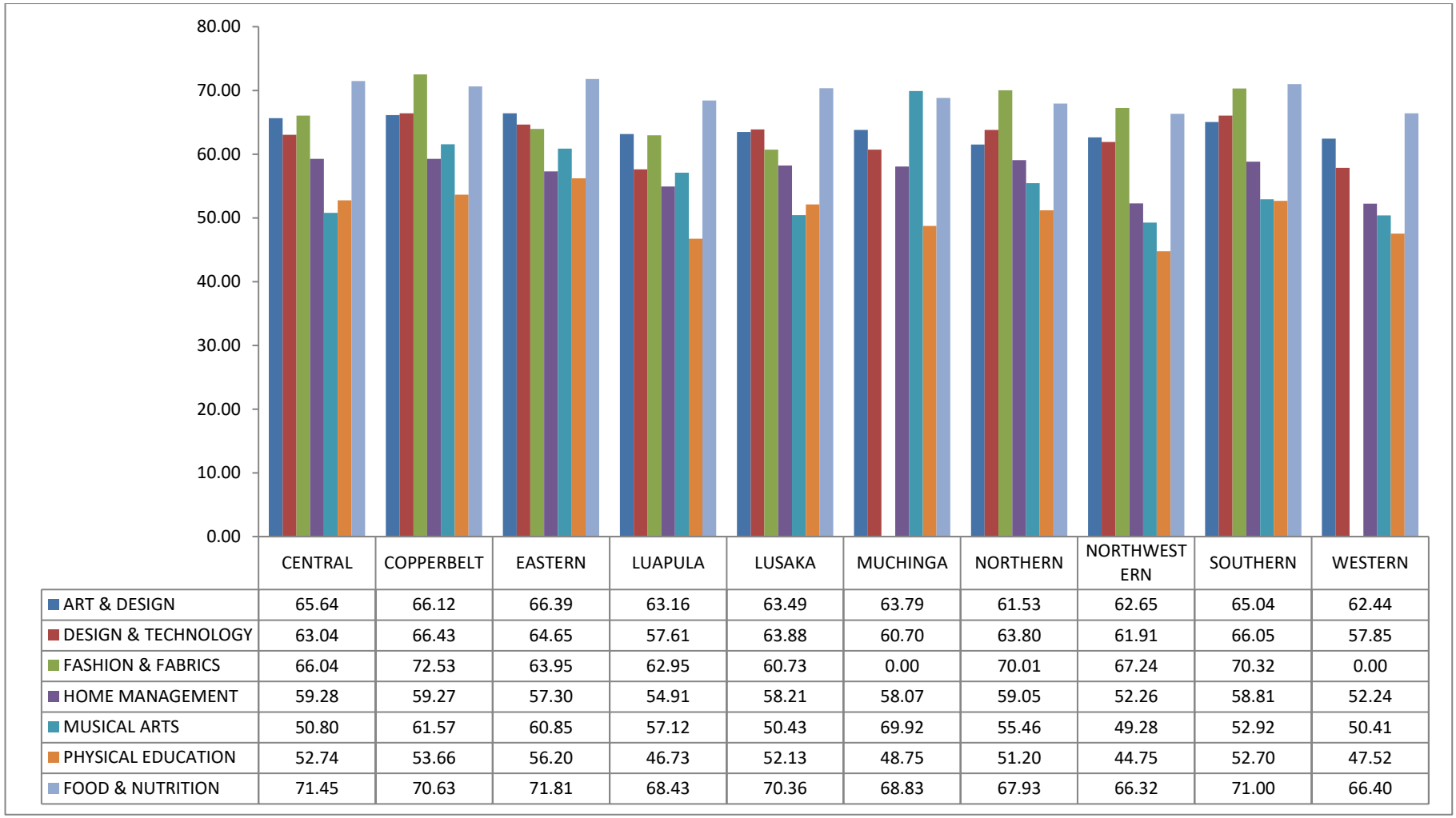
2.3.3.3. In Design and Technology, Copperbelt Province had the highest pass rate at 66.43 percent, while Luapula Province had the lowest at 57.61 percent.

2.3.3.4. In Fashion and Fabrics, Copperbelt Province had the highest pass rate at 72.53 percent, while Lusaka Province had the lowest at 60.73 percent. Western and Muchinga Provinces did not have candidates in this subject.

2.3.3.5. In Food and Nutrition, Eastern Province had the highest pass rate (71.81%), while North-western Province had the lowest at 66.32 percent.

2.3.3.6. Home Management's highest pass rates were in Central Province with an average of 59.28 percent, while Western Province had the lowest at 52.24 percent.

2.3.3.7. Physical Education's highest pass rates were in Eastern Province with an average 56.20 percent, similar to 2022, while Northern Province had the lowest at 44.75 percent. Mean scores for Physical Education across provinces in 2023 remained below 60 percent.



	CENTRAL	COPPERBELT	EASTERN	LUAPULA	LUSAKA	MUCHINGA	NORTHERN	NORTHWESTERN	SOUTHERN	WESTERN
ART & DESIGN	65.64	66.12	66.39	63.16	63.49	63.79	61.53	62.65	65.04	62.44
DESIGN & TECHNOLOGY	63.04	66.43	64.65	57.61	63.88	60.70	63.80	61.91	66.05	57.85
FASHION & FABRICS	66.04	72.53	63.95	62.95	60.73	0.00	70.01	67.24	70.32	0.00
HOME MANAGEMENT	59.28	59.27	57.30	54.91	58.21	58.07	59.05	52.26	58.81	52.24
MUSICAL ARTS	50.80	61.57	60.85	57.12	50.43	69.92	55.46	49.28	52.92	50.41
PHYSICAL EDUCATION	52.74	53.66	56.20	46.73	52.13	48.75	51.20	44.75	52.70	47.52
FOOD & NUTRITION	71.45	70.63	71.81	68.43	70.36	68.83	67.93	66.32	71.00	66.40

Figure 5: 2023 Performance in Practical Subjects by Province

2.3.4. Mean Scores in Practical Subjects by Sex

2.3.4.1. Girls outperformed boys in Food and Nutrition (71.16%), Fashion and Fabrics (68.42%), and Home Management (58.16%).

2.3.4.2. Conversely, boys performed better in Art and Design (64.43%), Design and Technology (64.40%), Musical Arts Education (53.59%), and Physical Education (51.71%).

2.3.4.3. Performance trends in practical subjects by sex remained consistent with those observed in 2020, 2021, and 2022. Boys performed better in Design & Technology, Musical Arts Education, and Physical Education, while girls performed better in Fashion and Fabrics, Home Management, and Food and Nutrition.

2.3.4.4. Both boys and girls showed improvements in Food and Nutrition, Fashion and Fabrics, and Art and Design. In Art and Design, boys improved by 1.47 percentage points and girls by 0.18 percentage points. In Fashion and Fabrics, girls improved by 6.4 percentage points and boys by 4.6 percentage points, while in Food and Nutrition, boys improved by 0.99 percentage points and girls by 0.61 percentage points.

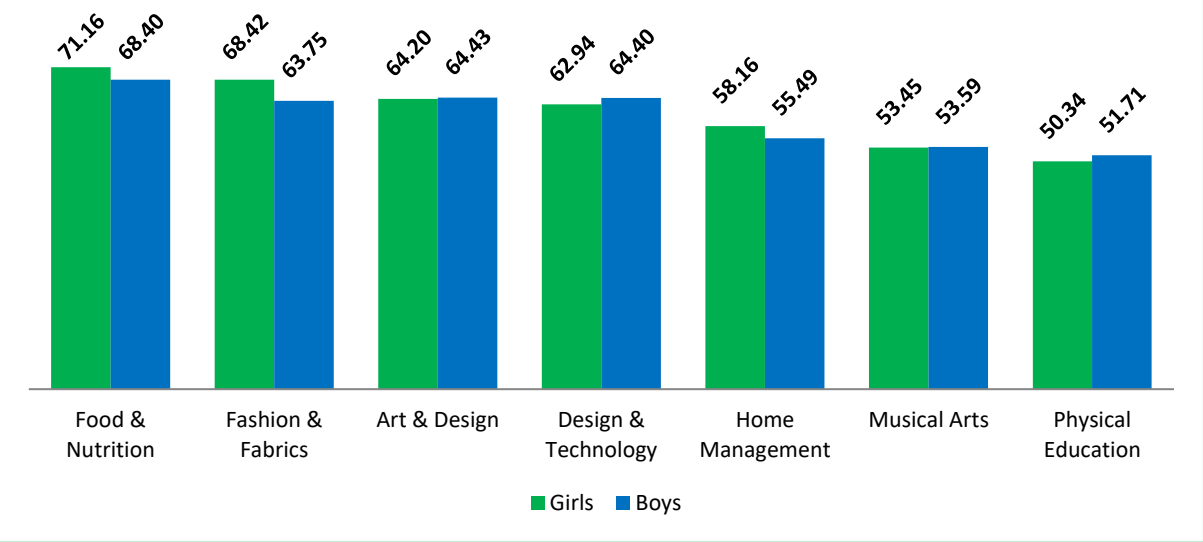


Figure 6: 2023 Performance in Practical Subjects by Sex

2.3.5. Performance by Grade Distribution

Grades in the School Certificate examination range from Grade one (1) to Grade nine (9), broken down as follows:

Table 6: School Certificate Grades Description

Range	Grade	Grade Description
75% - 100%	Grade 1	Upper Distinction
70% - 74%	Grade 2	Lower Distinction
65% - 69%	Grade 3	Upper Merit
60% - 64%	Grade 4	Lower Merit
55% - 59%	Grade 5	Upper Credit
50% - 54%	Grade 6	Lower Credit
45% - 49%	Grade 7	Upper Pass (Satisfactory)
40% - 44%	Grade 8	Lower Pass (Satisfactory)
0% - 39%	Grade 9	Fail (Unsatisfactory)

2.3.6. Performance by Grade Distribution by Gender

2.3.6.1. In the 2023 examination, boys were more represented in grades one to four, while girls dominated grades five to nine.

2.3.6.2. The proportion of boys that obtained grade 1 increased slightly by 0.34 percentage points from 5.62 percent in 2022 to 5.96 percent in 2023. Girls recorded a marginal increase from 4.92 percent in 2022 to 5.13 percent in 2023, up by 0.21 percentage points.

2.3.6.3. Boys' proportion obtaining quality pass grades (1-6) decreased by 0.84 percentage points from 50.74 percent in 2022 to 49.90 percent in 2023. Similarly, girls' proportion decreased by 0.63 percentage points from 48.86 percent in 2022 to 48.23 percent in 2023.

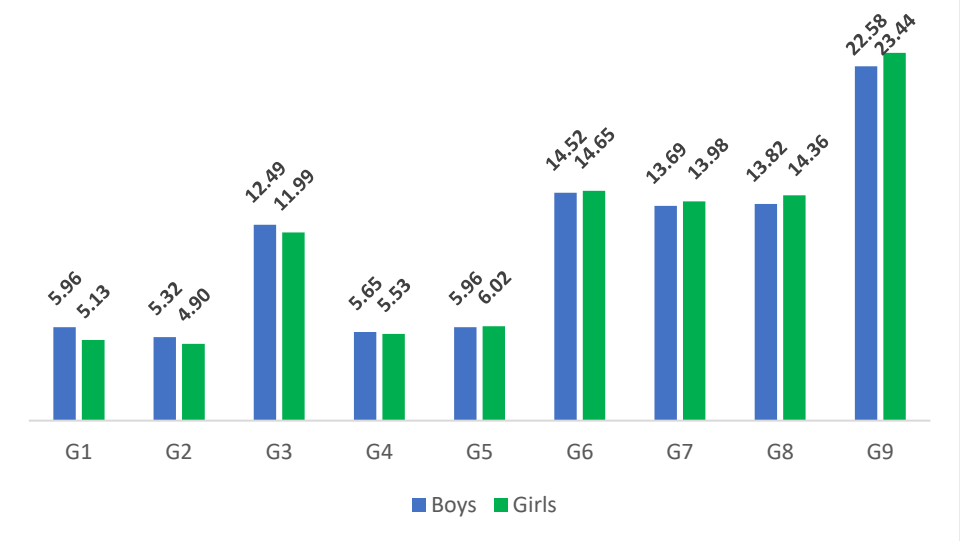


Figure 7: 2023 Performance According to Grade Distributions by Sex

Table 7: 2023 Performance According to Grade Distributions for Boys and Girls

Subjects	Grades 1 - 6		Grades 7 - 8		Fail	
	Girls (%)	Boys (%)	Girls (%)	Boys (%)	Girls (%)	Boys (%)
Additional Mathematics	66.32	72.38	11.74	9.61	21.95	18.01
Agricultural Science	54.20	60.61	22.12	19.97	23.68	19.43
Art and Design	69.79	72.21	29.74	26.80	0.47	0.99
Biology	39.58	42.21	33.83	32.43	26.59	25.37
Chemistry	57.82	63.60	26.96	21.32	15.22	15.08
Chinese Language	44.44	62.50	44.44	25.00	11.11	12.50
Chitonga	62.18	58.05	33.39	36.44	4.43	5.51
Cinyanja	64.15	64.46	31.60	29.79	4.25	5.75
Civic Education	55.57	52.83	24.20	24.35	20.23	22.82
Commerce	53.01	56.16	11.90	11.49	35.09	32.35
Computer Studies	53.29	61.17	34.92	30.50	11.80	8.33
Design and Technology	66.41	73.35	29.80	23.56	3.79	3.09
English Language	63.46	57.76	27.46	30.38	9.08	11.86
Fashion and Fabrics	68.42	51.67	26.32	39.58	5.26	8.75
Food & Nutrition	70.09	60.10	28.96	38.35	0.94	1.55
French	37.90	36.65	54.03	51.42	8.07	11.93
Geography	42.13	50.66	45.21	39.21	12.66	10.12
History	44.47	51.06	26.29	23.33	29.24	25.61
Home Management	67.77	55.79	29.36	40.25	2.87	3.96
Icibemba	52.41	54.09	30.73	28.48	16.86	17.43
Kiikaonde	64.44	61.93	24.69	26.41	10.88	11.66

Literature in English	50.45	40.32	22.54	24.03	27.01	35.65
Lunda	67.04	75.69	15.74	14.35	17.21	9.96
Luvale	53.99	64.93	40.44	31.67	5.57	3.40
Mathematics	39.42	47.44	15.70	13.81	44.87	38.75
Musical Arts Education	56.01	63.00	42.89	35.44	1.10	1.56
Physical Education	49.44	55.20	44.26	39.61	6.31	5.19
Physics	58.92	66.68	26.95	20.42	14.14	12.90
Principles of Accounts	41.16	43.08	44.43	42.50	14.41	14.41
Religious Education 2044	65.66	49.51	13.41	16.07	20.93	34.43
Religious Education 2046	50.64	46.37	27.82	28.62	21.53	25.01
Science	30.53	38.82	36.52	33.40	32.95	27.79
Silozi	66.73	62.10	23.51	24.68	9.76	13.22

2.3.7. Performance by Grade Distribution – Literature and Languages

Literature and Language Subject grouping comprises English, French, Literature in English and the seven Zambian languages (Chitonga, Cinyanja, Icibemba, Kiikaonde, Lunda, Luvale and Silozi). Below is the analysis of performance for this category:

2.3.7.1. Luvale and Chitonga maintained high pass rates (grades 1-8) at 95.51 percent and 95.04 percent respectively in 2023, but both decreased slightly from 2022 by 1.48 and 0.38 percentage points respectively.

2.3.7.2. Literature in English continued to record the lowest pass rate at 69.32 percent in 2023, consistent with figures from 2020, 2021, and 2022.

2.3.7.3. Girls outperformed boys in all Literature and Languages subjects except in Lunda and Luvale, based on the analysis of pass rates (grades 1-8) by sex.

Table 8: 2023 Grade 12 Proportion of Candidates by Grade and Sex in Literature & Language

Subject	Sex	One	Two	Three	Four	Five	Six	Quality Pass	Seven	Eight	Nine	Pass Rate
CHINESE LANGUAGE	Girls	0.00	0.00	0.00	0.00	33.33	11.11	**44.44**	11.11	33.33	11.11	**88.89**
	Boys	25.00	0.00	0.00	0.00	0.00	37.50	**62.50**	12.50	12.50	12.50	**87.50**
	Total	11.76	0.00	0.00	0.00	17.65	23.53	**52.94**	11.76	23.53	11.76	**88.24**
CHITONGA	Girls	5.33	9.49	19.25	8.46	8.19	11.46	**62.18**	23.36	10.03	4.43	**95.57**
	Boys	4.81	7.23	18.32	8.24	7.32	12.13	**58.05**	24.56	11.87	5.51	**94.49**
	Total	5.07	8.38	18.79	8.36	7.76	11.79	**60.15**	23.95	10.93	4.96	**95.04**
CINYANJA	Girls	1.98	5.46	19.87	10.10	8.40	18.34	**64.15**	19.39	12.20	4.25	**95.75**
	Boys	2.98	6.04	20.20	9.13	8.26	17.86	**64.46**	18.69	11.10	5.75	**94.25**
	Total	2.50	5.77	20.04	9.59	8.33	18.09	**64.31**	19.03	11.62	5.04	**94.96**
ENGLISH LANGUAGE	Girls	5.06	5.94	14.90	8.70	7.74	21.12	**63.46**	14.62	12.84	9.08	**90.92**
	Boys	4.46	5.25	13.08	7.79	6.96	20.22	**57.76**	15.49	14.88	11.86	**88.14**
	Total	4.76	5.60	14.00	8.25	7.35	20.67	**60.65**	15.05	13.85	10.45	**89.55**
FRENCH	Girls	6.57	6.19	8.82	6.38	3.00	6.94	**37.90**	25.52	28.52	8.07	**91.93**
	Boys	6.53	3.41	7.10	7.10	3.69	8.81	**36.65**	27.84	23.58	11.93	**88.07**

	Total	6.55	5.08	8.14	6.67	3.28	7.68	**37.40**	26.44	26.55	9.60	**90.40**
ICIBEMBA	Girls	2.53	4.47	14.78	7.05	7.20	16.38	**52.41**	16.91	13.82	16.86	**83.14**
	Boys	3.96	5.57	15.31	6.57	7.74	14.95	**54.09**	16.21	12.26	17.43	**82.57**
	Total	3.31	5.07	15.07	6.79	7.49	15.60	**53.33**	16.53	12.97	17.17	**82.83**
KIIKAONDE	Girls	4.38	7.38	21.88	5.69	8.38	16.75	**64.44**	14.56	10.13	10.88	**89.13**
	Boys	4.02	7.04	18.57	8.71	8.24	15.35	**61.93**	16.22	10.19	11.66	**88.34**
	Total	4.20	7.21	20.28	7.15	8.31	16.07	**63.23**	15.36	10.16	11.25	**88.75**
LITERATURE IN ENGLISH	Girls	3.77	4.74	13.05	5.60	6.48	16.82	**50.45**	11.96	10.58	27.01	**72.99**
	Boys	2.13	2.75	9.58	4.42	5.81	15.64	**40.32**	12.00	12.03	35.65	**64.35**
	Total	3.07	3.89	11.58	5.10	6.19	16.32	**46.15**	11.98	11.19	30.68	**69.32**
LUNDA	Girls	2.72	6.57	20.72	10.08	10.08	16.87	**67.04**	9.97	5.78	17.21	**82.79**
	Boys	4.75	10.88	25.69	10.79	8.14	15.45	**75.69**	9.32	5.03	9.96	**90.04**
	Total	3.84	8.95	23.47	10.47	9.00	16.08	**71.83**	9.61	5.36	13.20	**86.80**
LUVALE	Girls	1.47	5.46	14.92	5.04	7.67	19.43	**53.99**	30.04	10.40	5.57	**94.43**
	Boys	2.13	6.48	18.38	8.61	9.46	19.87	**64.93**	24.12	7.55	3.40	**96.60**
	Total	1.80	5.97	16.64	6.81	8.56	19.65	**59.43**	27.10	8.98	4.49	**95.51**
SILOZI	Girls	6.74	9.37	20.26	9.03	7.97	13.36	**66.73**	13.38	10.13	9.76	**90.24**
	Boys	6.36	8.70	17.20	8.97	6.89	13.99	**62.10**	13.72	10.96	13.22	**86.78**
	Total	6.56	9.06	18.83	9.00	7.46	13.65	**64.57**	13.54	10.52	11.38	**88.62**

2.3.8. Performance by Grade Distribution – Social Sciences

Social Science subjects comprise Civic Education, Christian Religious Education (2044 and 2046), History and Geography. An overview of learner performance follows below:

2.3.8.1. Geography maintained the highest pass rate at 88.61 percent in 2023, followed by Civic Education at 78.49 percent, consistent with figures from 2021 and 2022.

2.3.8.2. History had the largest proportion of candidates failing in 2023 at 27.60 percent, similar to figures from 2021 and 2022.

2.3.8.3. Girls outperformed boys in Civic Education and Religious Education 2044 and 2046 based on the analysis of pass rates (grades 1-8) by sex.

Table 9: 2023 Grade 12 Proportion of Candidates by Grade and Sex in Social and Business Studies

Subject	Sex	One	Two	Three	Four	Five	Six	Quality Pass	Seven	Eight	Nine	Pass Rate
CHRISTIAN RELIGIOUS EDUCATION 2044	Girls	9.58	11.95	20.79	4.97	6.09	12.27	**65.66**	7.64	5.77	20.93	**79.07**
	Boys	4.08	7.10	16.22	4.89	5.23	11.99	**49.51**	8.58	7.49	34.43	**65.57**
	Total	7.44	10.06	19.01	4.94	5.75	12.16	**59.37**	8.01	6.44	26.18	**73.82**
CHRISTIAN RELIGIOUS EDUCATION 2046	Girls	6.68	6.63	14.95	3.88	5.94	12.56	**50.64**	15.38	12.44	21.53	**78.47**
	Boys	6.08	5.80	13.37	3.64	5.52	11.96	**46.37**	15.47	13.15	25.01	**74.99**
	Total	6.39	6.24	14.19	3.77	5.74	12.27	**48.61**	15.43	12.78	23.19	**76.81**
	Girls	7.03	6.22	14.00	8.10	6.48	13.74	**55.57**	11.54	12.66	20.23	**79.77**

CIVIC EDUCATION	Boys	6.12	5.98	13.46	7.62	6.15	13.50	**52.83**	11.50	12.85	22.82	**77.18**
	Total	6.58	6.10	13.74	7.86	6.31	13.62	**54.22**	11.52	12.76	21.51	**78.49**
GEOGRAPHY	Girls	2.16	2.97	9.53	4.41	5.65	17.40	**42.13**	22.84	22.37	12.66	**87.34**
	Boys	3.63	4.57	12.16	5.37	6.22	18.70	**50.66**	20.31	18.90	10.12	**89.88**
	Total	2.90	3.77	10.85	4.89	5.94	18.05	**46.41**	21.57	20.63	11.39	**88.61**
HISTORY	Girls	3.88	3.61	10.13	5.00	5.58	16.27	**44.47**	12.16	14.13	29.24	**70.76**
	Boys	4.56	4.74	12.81	5.60	6.61	16.73	**51.06**	11.47	11.86	25.61	**74.39**
	Total	4.19	4.12	11.34	5.27	6.04	16.48	**47.45**	11.85	13.10	27.60	**72.40**

2.3.9. Performance by Grade Distribution – Business Studies

Business Studies group comprised Commerce and Principles of Accounts. An overview of learner performance follows below:

2.3.9.1. Principles of Accounts recorded the highest pass rate at 85.59 percent in 2023, consistently recording the highest even in 2021 and 2022.

2.3.9.2. Commerce recorded the lowest proportion of candidates passing at 66.27 percent.

2.3.9.3. Commerce also had the largest proportion of candidates failing at 33.73 percent, with a decrease of 2.06 percentage points from 2022.

2.3.9.4. Boys outperformed girls (grades 1-8) in Commerce, while both genders recorded similar pass rates in Principles of Accounts.

Table 10: 2023 Grade 12 Proportion of Candidates by Grade and Sex in Social and Business Studies

Subject	Sex	One	Two	Three	Four	Five	Six	Quality Pass	Seven	Eight	Nine	Pass Rate
COMMERCE	Girls	3.23	5.68	15.67	5.35	7.42	15.67	**53.01**	6.13	5.77	35.09	**64.91**
	Boys	3.79	6.38	17.29	5.36	7.65	15.69	**56.16**	5.86	5.63	32.35	**67.65**
	Total	3.51	6.03	16.47	5.35	7.53	15.68	**54.57**	6.00	5.70	33.73	**66.27**
PRINCIPLES OF ACCOUNTS	Girls	4.14	4.64	10.71	4.68	4.61	12.38	**41.16**	18.85	25.57	14.41	**85.59**
	Boys	4.72	5.24	10.99	4.78	4.87	12.48	**43.08**	18.76	23.74	14.41	**85.59**
	Total	4.43	4.93	10.85	4.73	4.74	12.43	**42.10**	18.81	24.68	14.41	**85.59**

2.3.10. Performance by Grade Distribution – Mathematics and Science Subjects

The subjects under this grouping include Computer Studies, Mathematics, Additional Mathematics, Physics, Chemistry, Biology, Agricultural Science and Science. The performance of learners in this category was as follows:

2.3.10.1. Computer Studies had the highest pass rate at 90.32 percent, consistent with 2020, 2021, and 2022. Physics followed at 86.57 percent, and Chemistry at 84.86 percent.

The lowest pass rate was recorded in mathematics at 58.15 percent. However, there was a marginal improvement (0.23 percentage points) from 2022.

2.3.10.2. Similar to 2021 and 2022, boys outperformed girls in this category in 2023.

Table 11: 2023 Grade 12 Proportion of Candidates by Grade and Sex in Natural Sciences

Subject	Sex	One	Two	Three	Four	Five	Six	Quality of Pass	Seven	Eight	Nine	Pass Rate
Additional Maths	Girls	10.14	10.79	20.08	6.95	6.89	11.47	**66.32**	6.00	5.73	21.95	**78.05**
	Boys	16.51	13.49	20.54	6.53	5.21	10.10	**72.38**	5.18	4.43	18.01	**81.99**
	Total	13.59	12.25	20.33	6.72	5.98	10.73	**69.60**	5.56	5.03	19.82	**80.18**
Agricultural Science	Girls	3.83	4.76	14.28	8.01	6.50	16.83	**54.20**	11.05	11.07	23.68	**76.32**
	Boys	5.34	7.05	16.02	9.41	7.21	15.57	**60.61**	10.13	9.84	19.43	**80.57**
	Total	4.67	6.04	15.25	8.79	6.90	16.13	**57.78**	10.54	10.38	21.30	**78.70**
Biology	Girls	4.70	3.53	8.62	3.17	5.20	14.36	**39.58**	15.36	18.47	26.59	**73.41**
	Boys	5.66	4.04	9.62	3.31	5.30	14.27	**42.21**	14.94	17.49	25.37	**74.63**
	Total	5.18	3.78	9.11	3.24	5.25	14.32	**40.87**	15.15	17.99	25.99	**74.01**
Chemistry	Girls	10.37	6.71	15.04	6.50	7.36	11.84	**57.82**	14.43	12.53	15.22	**84.78**
	Boys	15.32	8.38	16.98	6.59	5.07	11.26	**63.60**	11.74	9.57	15.08	**84.92**
	Total	13.19	7.66	16.14	6.55	6.06	11.51	**61.12**	12.90	10.85	15.14	**84.86**
Computer Studies	Girls	8.54	6.24	13.29	4.54	4.61	16.07	**53.29**	19.93	14.98	11.80	**88.20**
	Boys	7.94	7.77	16.14	6.03	5.99	17.31	**61.17**	18.22	12.28	8.33	**91.67**
	Total	8.17	7.17	15.03	5.45	5.45	16.83	**58.10**	18.89	13.33	9.68	**90.32**
Mathematics	Girls	5.16	3.62	8.73	4.49	5.01	12.43	**39.42**	7.33	8.37	44.87	**55.13**
	Boys	8.45	5.49	11.15	5.20	5.26	11.89	**47.44**	6.64	7.17	38.75	**61.25**
	Total	6.78	4.54	9.92	4.84	5.13	12.16	**43.38**	6.99	7.78	41.85	**58.15**
Physics	Girls	13.38	7.75	14.24	7.25	5.53	10.76	**58.92**	13.81	13.13	14.14	**85.86**
	Boys	22.86	9.30	14.23	6.82	4.92	8.55	**66.68**	11.17	9.25	12.90	**87.10**
	Total	18.78	8.64	14.24	7.00	5.18	9.50	**63.34**	12.31	10.92	13.43	**86.57**
Science	Girls	4.09	2.57	6.40	3.06	3.89	10.51	**30.53**	13.76	22.76	32.95	**67.05**
	Boys	6.71	3.83	8.71	3.83	4.41	11.32	**38.82**	13.29	20.11	27.79	**72.21**
	Total	5.37	3.19	7.53	3.44	4.15	10.91	**34.58**	13.53	21.46	30.42	**69.58**

2.3.11. Performance by Grade Distribution – Practical Subject

Practical subjects include Art and Design, Musical Arts Education, Design and Technology, Fashion and Fabrics, Food and Nutrition, Home Management and Physical Education.

2.3.11.1. All practical subjects in the 2023 examination recorded pass rates above 90 percent, consistent with 2021 and 2022. Art and Design had the highest pass rate at 99.24 percent, while Fashion and Fabrics had the lowest at 93.53 percent.

2.3.11.2. Fashion and Fabrics had the highest proportion of candidates failing the subject at 6.47 percent, followed by Physical Education at 5.72 percent.

2.3.11.3. In 2023, girls outperformed boys in all practical subjects except Design and Technology and Physical Education.

Table 12: 2023 Grade 12 Proportion of Candidates by Grade and Sex in Practical Subjects

Subject	Sex	One	Two	Three	Four	Five	Six	Quality Pass	Seven	Eight	Nine	Pass rate
Art and Design	Girls	2.11	5.11	18.88	12.22	10.12	21.35	69.79	26.27	3.47	0.47	99.53
	Boys	2.81	7.37	21.51	12.20	8.64	19.69	72.21	22.69	4.10	0.99	99.01
	Total	2.49	6.35	20.32	12.21	9.31	20.44	71.11	24.31	3.82	0.76	99.24
Design and Technology	Girls	8.48	8.59	18.69	8.08	7.47	15.10	66.41	23.79	6.01	3.79	96.21
	Boys	10.74	11.05	21.78	9.27	7.19	13.32	73.35	17.14	6.42	3.09	96.91
	Total	10.06	10.30	20.85	8.91	7.27	13.86	71.25	19.15	6.30	3.30	96.70
Fashion & Fabrics	Girls	8.99	8.33	21.49	7.02	11.18	11.40	68.42	14.25	12.06	5.26	94.74
	Boys	5.00	5.00	21.25	4.17	5.00	11.25	51.67	23.75	15.83	8.75	91.25
	Total	7.61	7.18	21.41	6.03	9.05	11.35	62.64	17.53	13.36	6.47	93.53
Food & Nutrition	Girls	9.91	9.92	20.48	6.26	8.18	15.34	70.09	22.26	6.70	0.94	99.06
	Boys	5.36	7.15	17.27	6.07	7.65	16.60	60.10	27.78	10.58	1.55	98.45
	Total	8.30	8.94	19.34	6.19	7.99	15.78	66.56	24.21	8.07	1.16	98.84
Home Management	Girls	4.72	6.55	20.56	9.86	10.68	15.40	67.77	20.00	9.36	2.87	97.13
	Boys	1.48	3.29	15.04	8.44	9.68	17.86	55.79	27.80	12.46	3.96	96.04
	Total	3.41	5.24	18.34	9.29	10.28	16.39	62.95	23.14	10.61	3.31	96.69
Musical Arts Education	Girls	4.04	6.04	17.43	6.14	8.14	14.23	56.01	30.29	12.60	1.10	98.90
	Boys	3.60	7.33	19.55	6.72	9.50	16.29	63.00	24.51	10.93	1.56	98.44
	Total	3.85	6.60	18.35	6.39	8.73	15.13	59.06	27.77	11.87	1.30	98.70
Physical Education	Girls	5.54	5.83	12.98	3.30	6.20	15.59	49.44	26.69	17.57	6.31	93.69
	Boys	7.47	6.93	15.72	3.53	7.32	14.23	55.20	24.25	15.36	5.19	94.81
	Total	6.56	6.41	14.43	3.42	6.79	14.87	52.48	25.40	16.40	5.72	94.28

3.0. Subjects Specific Performance Analysis

Candidates' performance was evaluated through qualitative and quantitative analysis, which involved reviewing sample scripts and Chief Examiner's reports, and results statistics. The analysis categorized candidates' characteristics into three categories based on their level of performance, namely, High Performing, Average Performing, and Low Performing candidates. This method offers a thorough understanding of candidates' strengths and weaknesses, enabling teachers to design interventions that meet their specific needs and improve overall performance.

3.1. Literature and Languages

The Literature and Languages category is composed of English Language, French, Literature in English, and seven Zambian Languages: Chitonga, Cinyanja, Icibemba, Kiikaonde, Lunda, Luvale, and Silozi.

3.1.1. English Language (1121)

The purpose of the School Certificate English Language Paper Examination is the assessment of candidates' proficiency and competency in the English language, as outlined in the Grade 10 to 12 Curriculum (CDC, 2013). The two papers also evaluate the candidates' linguistic ability to communicate effectively in various contexts.

Analysis of Performance

In 2023, candidate performance declined by 4.28 percentage points compared to 2022, with the mean score dropping from 40.87 percent to 36.59 percent. Candidates generally performed well in paper 1 as compared to Paper 2. Despite a decrease in passing quality for both genders between 2022 and 2023, males had a lower passing quality overall at 57 percent compared to females at 63.46 percent. In Paper 1, unpopular narrative questions 1 and 4 were poorly answered, while descriptive, discursive, and argumentative questions were popular but yielded poor performance. Section B, focusing on informal letter writing, varied in performance. Paper 2, with three questions, saw Question 1 as the worst answered, particularly in vocabulary and rewrites. Candidates struggled with transformations in Section 2, such as changing 'comp + than' to 'as + adj + as', rewriting 'after' time clauses, and transforming impossible conditional sentences starting with 'if' to those beginning with 'but for'.

General observations

In English Paper 1, candidates encountered difficulties in applying writing concepts like abbreviations, agreement, conjunctions, figures, homophones, informal language, paragraphing, punctuation, run-on sentences, spellings, and word order. In Paper 2, candidates had trouble with structural concepts including impossible conditions, comparison, and coordination (using 'apart from'). Many also struggled to comprehend the summary question fully and meet the word limit.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Good linguistic ability
- Use of a variety of correct sentence structures
- Adequate and relevant content
- Clear arrangement and good paragraphing
- Use of wide range of vocabulary
- Ability to understand concepts/structures.
- Very good language usage
- Excellent spelling and writing skills.
- High levels of punctuation application and correct application of grammar.
- Adherence to rules of summary (grammatical sentences and word limit)
- Producing readable and cohesive summary pieces

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Flat and uncertain to fair linguistic ability characterized by some faulty sentences
- Satisfactory treatment of subject
- Fair number of spelling and grammatical errors
- Some problems in the arrangement of essays
- Fair understanding of concepts
- Use of short or contracted forms in composition, rewrites, and summary
- Some mishandling of vocabulary and spelling skills.
- Minimal use of language variety in compositions and rewrites.
- Fair handling of punctuation.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Frequent to multiple errors
- Work characterised by broken English.
- Muddled or poor arrangement with erratic development.
- High percentage of misunderstood or inadequately handled subject.
- Low or no understanding of instructions and rubrics.

- Failure to copy words provided in the question paper.
- Poorly presented answers
- Lack of or no understanding of the comprehension passage and its questions.
- High levels of rubric infringement especially in summary

Recommendations

i. Teachers should conduct remedial lessons after administering composition exercises in class to make learners aware and conversant with challenges raised in connection with composition writing.

ii. The structural topics in the syllabus should be sufficiently handled and taught especially the problematic ones such as condition, adverbial phrases, and coordination.

3.1.2. Literature in English (2011)

The Literature in English Examination evaluates candidates' performance based on the competencies outlined in the Literature in English Syllabus for Grade 10-12 (CDC, 2013). Specifically, it aims to assess candidates' understanding and application of literary terminologies and devices within various contexts, including poetry, drama, and prose. Candidates must interpret literary forms, recognize genres, and explain figures of speech.

Additionally, the examination evaluates candidates' comprehension of contexts by assessing their ability to read, extract relevant information, and make inferences. Furthermore, it emphasizes the analysis and synthesis of information through essay writing, which involves distinguishing between fact and fiction, analysing elements of set books, and evaluating various writing styles found in plays, prose, and poems, such as humour, satire, and irony.

Literature demands critical and aesthetic thinking, expecting candidates to appreciate stories and understand societal dynamics. It covers diverse subjects like politics, religion, and marriage, requiring critical analysis and interpretation. Candidates should discuss, analyse, interpret, and deduce the texts' underlying meanings effectively.

Analysis of Performance

In the 2023 Paper 1, Question 3, focused on prose (novel), emerged as the most challenging of the three questions, with overall poor performance. Candidates displayed

limited knowledge of the text, particularly evident in Mission to Kala. The questions in Paper 1 primarily assessed lower-order skills, of Bloom's Taxonomy: knowledge, comprehension, and application. Many candidates struggled to recall information and apply literary terminologies and devices effectively.

In Paper 2, questions on No Longer at Ease (Chinua Achebe), Romeo and Juliet (William Shakespeare), and The Chrysalids (John Windham) were the least attempted, while questions on Quills of Desire (Sinyangwe) and The River Between (Ngugi wa Thiongo) were the most attempted. Theme-based questions, such as 1(a) for No Longer at Ease and 2(b) and 5(a) for Romeo and Juliet, posed greater difficulty for candidates compared to plot-based questions, like 3(a) for Quills of Desire, 3(b) for Quills of Desire, and 4(a) for The Government Inspector.

General observations

The primary challenges included poor internalization of literary terminologies, insufficient knowledge of set text content, and notable difficulties in Paper 2, particularly questions 5 (Shakespeare: Romeo and Juliet) and 7 (Ngugi: The River Between). Candidates often provided superficial answers in Question 5, merely reproducing the story, while in Question 7, misinterpretation or lack of knowledge led to inadequate responses. Mission to Kala also highlighted widespread lack of understanding despite relatively straightforward sub-questions.

Characteristics of Candidates

i. *High Performing Candidates*

The candidates in this category demonstrated the following characteristics:

- Strong reading and comprehension skills
- Utilization of provided texts or teacher notes.
- Clear understanding of questions and task requirements
- Logical presentation of responses
- Adherence to the skills being assessed.
- Excellent linguistic proficiency
- Crafting answers (essays) tailored to question demands.
- Demonstrating deep understanding of texts beyond mere retelling
- Competent use of literary terminologies and devices

- Effective incorporation of relevant examples.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Fair comprehension of questions
- Better performance in knowledge and memory-based questions than those requiring application and higher-order skills.
- Moderate language usage.
- Understanding questions but struggling to fully address them.
- Reasonable linguistic ability.
- Competent grasp and application of literary terminologies and devices.
- Adequate handling of subject matter.
- Decent familiarity with prescribed books.
- Occasional rubric violations.
- Issues with punctuation and paragraphing.
- Limited internalization of themes and sub-themes.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Limited demonstration of text knowledge.
- Presence of unintelligible run-on sentences.
- Deficiencies in spelling and grammar.
- Incorporating imaginary details or characters inaccurately.
- Difficulty in effective communication due to linguistic weaknesses.
- Inability to construct grammatically correct sentences.
- Low or absent appreciation of themes.

Recommendations

It is imperative for school authorities to ensure access to the prescribed texts for learners and dedicate the initial two terms of Grade 10 or more to the thorough instruction of literary terminologies and devices. Equally important is the emphasis on teaching the structure of questions and how they should be approached in the subject curriculum.

3.1.3. French (3016)

The Senior Secondary School French examination assesses candidates' language proficiency in listening, speaking, reading, and writing. It consists of two components: Paper 1 (60 marks) and Paper 2 (40 marks). Paper 1 assesses composition, translation, structure, reading comprehension, and summary skills. Paper 2, a school-based assessment, assesses listening comprehension and contextual communication skills in aural and oral assessments. The examination aims to comprehensively assess candidates' proficiency across various language skills and objectives.

Analysis of Performance

In 2023, candidates' performance decreased by 5.84 percentage points compared to 2022, with a mean score dropping from 66.36 percent to 60.52 percent. Female candidates outperformed males, with quality pass rates of 91.93 percent and 88.07 percent respectively.

Average and low performing candidates faced significant challenges in translation and composition writing, mainly due to limited vocabulary hindering effective expression in writing. Additionally, these candidates struggled with Transformation and Cloze exercises, displaying inadequate application of grammar rules and knowledge of Parts of Speech.

Characteristics of Candidates

i. *High Performing Candidates*

The candidates in this category demonstrated the following characteristics:

- Strong understanding and application of grammatical rules
- Excellent translation skills
- Outstanding comprehension and summary abilities
- Accurate interpretation of comprehension questions
- Proficient linguistic ability in composition writing
- Good sentence construction and spelling
- Logical presentation of ideas in compositions
- Effective punctuation and extensive vocabulary usage
- Correct usage of sentence connectors and conjunctions

ii. *Average Performing Candidates*

The candidates in this category demonstrated the following characteristics:

- Limited understanding of grammatical rules and sentence structures
- Weak translation skills from English to French
- Fair translation skills from French to English
- Adequate summary writing abilities
- Limited vocabulary and weak sentence construction

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Poor application of grammatical rules and language structures
- Inadequate translation skills in both directions
- Weak summary writing abilities
- Limited vocabulary and poor sentence construction
- Weak punctuation and spelling skills
- Limited or no understanding of the subject matter in Section D (Composition)

Recommendations

- Teachers should intensify teaching of translation skills.
- Teachers should ensure thorough instruction on all language structures.
- Teachers should expose the candidates to more composition writing activities.
- Teachers should cover all types of compositions outlined in the syllabus.

3.1.4. Chinese (3017)

The Senior Secondary School Chinese Examination focuses on assessing candidates' proficiency in the areas of language namely: oral, aural, reading comprehension, translation, transformation, and Sentence construction.

Analysis of Performance

In the 2023 examination, candidates achieved an average performance with a mean percentage score of 49.53. However, Paper 2 (school-based assessment) saw better performance, with a mean score of 69.5 percent compared to Paper 1 (ECZ-administered exams), which had a mean score of 51.4 percent.

Except for Section A: Part I (matching) and Part III (passages), where candidates performed well, other sections posed challenges, mainly due to difficulties in reading Chinese characters.

General observations

Candidates faced challenges in Section B, struggling with translating Chinese to English, often producing irrelevant English sentences unrelated to the given Chinese sentences. Similarly, Section C posed difficulties, particularly in Part I (Language Structure) and Part II (Sentence Construction). Candidates encountered problems with writing Chinese characters and arranging words in the correct sentence order. For instance, in Section C Part I, candidates commonly mistook 月 for 乐 and 国 for 果. Additionally, the sentence structure "是 …… 的" proved challenging for candidates in Section C Part II.

Characteristics of Candidates

i. *High Performing Candidates*

The candidates in this category demonstrated the following characteristics:

- Proficient in writing sentence structures.
- Adequate translation skills.
- Competent understanding of Chinese characters.
- Fair grasp of Chinese language grammar.

ii. *Average Performing Candidates*

The candidates in this category demonstrated the following characteristics:

- Flawed translation sentences.
- Poor sentence construction.
- Moderate errors in writing Chinese characters.

iii. *Low Performing Candidates*

The candidates in this category demonstrated the following characteristics:

- Numerous errors in translation and sentence construction.
- Irrelevant responses in translation.
- Inability to write Chinese characters.
- Blank spaces in translation and sentence construction.

Recommendations

To enhance the teaching and learning of the Chinese Language, the following recommendations are suggested:

- Teachers should emphasize the distinctions among Chinese characters with similar pronunciations.
- Teachers should encourage candidates to master all vocabulary in the Chinese Language Senior Secondary School syllabus to enhance speaking, listening, reading, writing, and translation skills.
- Teachers should intensify the teaching of translation skills.
- Teachers should adequately teach all the language structures.
- Schools should furnish necessary resources like textbooks, audiovisual aids to facilitate complete syllabus coverage by teachers.

3.1.5. Zambian Languages

The purpose of assessing candidates at Grade 12 in the seven Zambian Languages namely: (Lunda, Luvale, Kiikaonde, Icibemba, Chitonga, Cinyanja and Silozi) is to measure their proficiency in Composition, Literature, Proverbs and Sayings, Translation, Comprehension, Summary and Language Structure. All these components assess the four language skills, which are: listening, speaking, reading, and writing.

Analysis of Performance

In the 2023 examination:

i. Chitonga had the highest mean score at 59.54 percent, increasing by 6.52 percentage points from 2022.
ii. Kiikaonde's mean score dropped by 10.24 percentage points to 56.12 percent.
iii. Silozi decreased by 5.82 percentage points to 54.26 percent.
iv. Luvale increased by 8.14 percentage points to 50.53 percent.
v. Cinyanja slightly increased by 0.32 percentage points to 47.92 percent.
vi. Icibemba dropped by 12.14 percentage points to 45.13 percent.
vii. Lunda had the lowest mean score at 45.11 percent, decreasing by 4 percentage points from 2022.

Chitonga, Luvale, and Cinyanja recorded mean score increases, while Kiikaonde, Silozi, Icibemba, and Lunda experienced decreases compared to 2022.

General observations

Candidates encountered various challenges in the examination:

i. Lack of skills in writing compositions (argumentative, narrative), reports and formal letters.
ii. Lack of skills in constructing proper titles, introductions, orthography, logical arrangement of ideas, paragraphing, and punctuation.
iii. Failure to write a prose summary as required, opting for note summaries instead.
iv. Many skipped all questions in the literature section, while those who attempted them struggled with analytical questions.
v. Inability to provide meanings of proverbs and idioms/sayings.
vi. Challenges with language structure, especially in responding to questions on affixes and concord.
vii. Issues with translation, including excessive borrowing and literal translation.
viii. Failure to use approved orthography and correct spellings.
ix. Difficulty extracting required information from comprehension passages.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following strengths:

- High synthesis skills when responding to language structure questions.
- High analytical skills when analysing literary elements.
- Demonstrated competence in Language Structure
- Outstanding composition writing skills.
- Exceptional literacy skills
- Excellent Summary writing skills.
- Proficient in translation

ii. Average Performing Candidates

The candidates in this category demonstrated the following strengths:

- Average comprehension and writing skills.

- Good summary skills. Candidates were able to summarise the given passages but couldn't bring out all required points and exceeded word limit.
- Candidates answered most comprehension questions generally well but failed in highly analytical and evaluative questions.
- Fair understanding of the subject matter
- Good translation techniques
- Average performance in composition writing
- Performed fairly well in literature though they failed to answer some analytical questions.
- Average performance in idioms and proverbs

iii. Low Performing Candidates

The candidates in this category demonstrated the following weakness:

- Difficulty in reading and understanding questions.
- Incorrect orthography usage
- Poor sentence construction
- Poor composition writing skills (e.g., incorrect format and ending of informal letters, one-sided argumentative composition structure, no or incorrect titles and introductions, poor sentence construction)
- Inadequate summary writing skills such as failure to identify major points and writing a wrong type of summary.
- Inability to explain proverb meanings.
- Inaccurate explanation of sayings
- Lack of understanding of language structure
- Spelling errors
- Left some questions blank (unattempted)

Recommendations

i. Teachers should thoroughly teach learners on presenting information in various composition types.
ii. Teachers must clarify the difference between Prose and Note Summaries and how to present them.
iii. Grammar teaching should encompass all aspects.

iv. Teachers must teach the differentiate between proverbs and sayings, familiarize learners with many proverbs, riddles, and idioms as possible through extensive reading.

v. Necessary literature and structure books should be made available for learners.

vi. Teachers should adhere to DCD approved orthography and teach correct spelling.

3.2. Social Sciences

The following subjects comprise the Social Sciences subject grouping: Civic Education (2030/1), Religious Education (2044/1), Religious Education (2046/1), History (2167), and Geography (2218).

3.2.1. Civic Education (2030)

Senior Secondary School Civic Education assessment evaluates learners' understanding of essential political, socio-economic, cultural, and technological factors underpinning Zambia's democracy. This subject aims at educating citizens about their responsibilities, rights, values, and attitudes, enabling them to engage critically with democratic processes.

The subject promotes a comprehensive understanding of Zambia's governance, societal, and technological landscapes, nurturing civic responsibility, appreciation for good governance, and recognition of rights and freedoms. Learners also gain insight into Zambian traditions, values, and beliefs while enhancing their problem-solving skills to address economic and social issues. This prepares them for active participation in national development, responsible financial management, and constructive navigation of daily challenges, fostering a more informed and engaged citizenry.

Analysis of Performance

In the 2023 examination, candidates' performance declined compared to 2022, with the mean score decreasing from 39.27 percent to 35.20 percent, indicating a reduction of 4.27 points.

Despite the decrease in performance, many candidates excelled in some questions. For example, Section A, candidates were able to Identify the two systems in the Mixed Member Proportionality System (Governance, Topic 10.2.2), recognize the type of right described in a passage (Citizenship, Topic 10.3.1) and choose the best combination of intangible cultural heritage (Cultural Studies, Topic 10.6.1). However, they struggled to explain the commission that paved the way for Zambia's electoral system (Governance, Topic 10.1.3), identify Parliament's role in fighting corruption

(Governance, Topic 10.5.1), recall the date of the American Declaration of Independence (Human Rights, Topic 10.4) and distinguish trade terminologies in a global context (Globalisation, Topic 12.7.1).

In Section B, candidates were able to identify factors contributing to poverty from a diagram (Poverty, Topic 12.5.1) but failed to relate separation of powers to good governance (Governance, Topic 10.2.2), explain how corruption is addressed using specific laws (Corruption, Topic 10.5.1), analyse legal concepts related to the Zambian Bill of Rights (Human Rights, Topic 11.1.1) and connect the Dag Hammarskjold memorial to peacebuilding strategies (Peace and Conflicts, Topic 11.6.1).

In section C, candidates were able identify different types of families and their community roles (Family Law, Topic 12.3.1). However, they failed to explain how residence rules affect acquiring citizenship (Citizenship, Topic 10.3), describe the historical development of human rights and citizen roles (Human Rights, Topic 10.4.1) and analyse financial institutions' contribution to development and the importance of standards (Economic and Social Development, Topic 11.3).

Characteristics of Candidates

iv. High Performing Candidates

- The candidates in this category demonstrated the following characteristics:
- Provided detailed descriptions of key concepts solicited in questions, particularly evident in Section B.
- Presented well-structured paragraphs in essays, demonstrating analytical and evaluative skills, notably in Section C.
- Used appropriate civic language with correct grammar and punctuation throughout.
- Demonstrated proficient essay writing skills with clear handwriting and precise work.
- Exhibited a strong command of the English language with minimal errors across all sections.
- Displayed a thorough understanding of the subject matter, delivering correct responses to most questions, including essay-type questions.

v. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Made fair attempts to comprehend and interpret questions across all sections.
- Provided correct responses to a reasonable number of questions in Section A.
- Attempted to explain key concepts in Section B but lacked depth in their development.
- Demonstrated limited knowledge of the syllabus content, resulting in lower marks.
- Presented essays with inadequate points and struggled with logical presentation.
- Provided mostly incorrect responses, particularly in Section B.
- Struggled with coherent essay writing, leaving key parts incomplete, especially in Section C.
- Often left questions unanswered, particularly in the semi-structured Section B and essay Section C.

vi. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Failed to answer questions across all sections, leaving blank spaces in Sections B and C.
- Attempted few questions with mostly incorrect responses.
- Demonstrated a lack of understanding of the syllabus content.
- Presented disorganized essays in Section C, affecting the flow of information.
- Exhibited poor writing skills in Section C, resorting to point form with scanty details.
- Misunderstood legal concepts related to the Zambian Bill of Rights.

Recommendations

- Emphasize interpretive skills over rote memorization, particularly for topics like Human Rights, which are consistently poorly answered.
- Pay attention to specific sections and parts of the syllabus to ensure the acquisition of knowledge, skills, and values outlined.

- Encourage regular revision of past papers to reinforce adherence to instructions and improve exam performance.
- Provide guidance on essay writing skills, assign homework, and offer constructive feedback to learners.
- Cover the syllabus extensively, focusing on application skills to enable learners to relate incidents and events to real-life situations.
- Develop proficiency in interpreting maps, graphs, statistical data, diagrams, charts, pictures, and passages.

3.2.2. History (2167)

The aim of assessing learners in History is to evaluate their understanding of the historical evolution of humanity. This is intended to help learners appreciate current events and cultivate an informed perspective on future societal trajectories. The subject comprises two components, Paper 1, and Paper 2, each marked out of 100.

Analysis of Performance

History Paper 1

Paper 1 focuses on African History, specifically Central and Southern Africa. It comprises four sections: Section A and Section C cover Central African History, while Section B and Section D cover Southern African History. Questions in Sections A and B are compulsory and structured/semi-structured, worth 30 marks each, while sections C and D consist of essay questions, each worth 20 marks. Candidates choose two essays from each section. On average, candidates scored 25 marks out of 100.

In Section A, candidates performed well in Question 1 (Centralised Societies of Central Africa), identifying succession systems and related tribes, but struggled with Question 2, failing to relate Kazembe to the Portuguese portrayal accurately.

In Section B, Question 3, focusing on European Settle Communities in Southern Africa, received good responses, with candidates identifying boycott places and squatter towns based on a map.

In Section C, Question 1 on the development and decline of the Luba Kingdom in Katanga was poorly answered due to difficulties understanding terms like 'Career and importance', leading to misinterpretation.

History Paper 2

Paper 2 focuses on European History, divided into four sections: Sections A and C cover events before 1945, while Sections B and D cover events after 1945. Questions in Sections A and B are compulsory and structured/semi-structured, worth 30 marks each, while sections C and D consist of essay questions, each worth 20 marks. Candidates choose two essays from each section. On average, candidates scored 29 marks out of 100.

In Section A, candidates struggled with questions concerning Japan's history and the rise of Adolf Hitler, showing gaps in knowledge and analytical skills. However, they performed better in interpreting maps and understanding economic depression indicators.

Section B saw better performance, particularly in analyzing maps depicting the Second World War course and discussing international organizations like the Commonwealth of Nations. Despite overall success, some candidates failed to fully answer specific parts of questions, resulting in lost marks.

Section C, Question 1 on Bismarck's alliances revealed incomplete analysis by many candidates, while Question 4 about the League of Nations highlighted a struggle to understand the establishment process.

In Section D, candidates encountered challenges in narrating the steps leading to the formation of the United Nations and discussing specialized UN agencies. Similarly, explaining the creation of Israel and the Arab-Israeli wars proved difficult for most candidates, with only a few from grant-aided schools performing well.

General observations

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Strong command of the English language.
- Exhibited proficient paragraphing skills and deep subject knowledge.
- Presented neat and legible work.
- Attempted all sections of the paper comprehensively.

- Demonstrated clear understanding of concepts and accurate explanation of terms.
- Completed work without leaving blank spaces across all sections.
- Expanded points with clarifications, definitions, and examples effectively.
- Interpreted pictures, maps, charts, and diagrams accurately, particularly in sections A and B.
- Adhered to instructions and applied analytical and interpretive skills effectively.
- Presented high-quality, orderly answers, especially in essay sections such as question 1 on the comparison of the San and Khoikhoi way of life in section D.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Limited knowledge of subject matter.
- Poor presentation of work, particularly evident in sections C and D for essays characterized by poor command of English Language.
- Lacked clarity in expanding points, especially in essay sections.
- Limited knowledge of historical facts, leading to incomplete presentations in some sections.
- Misunderstood and misinterpreted questions, such as in section C question 1, on comparing and contrasting the San and Khoikhoi way of life.
- Failed to fully develop points in an orderly manner, as seen in section C question 4 on the terms of the Federal Constitution of 1953.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Presented irrelevant information.
- Failed to interpret charts/illustrations accurately, resulting in loss of marks.
- Poor command of the English language, notably in section C for essays.
- Provided many incomplete responses and left questions unanswered.
- Misinterpreted questions across all sections of the examination.
- Exhibited poor recall skills when answering questions based on passages or pictures.
- Unable to construct coherent essays with proper structure.

- Inability to construct coherent essays, limited historical knowledge.
- Low literacy and comprehension levels; lacking essay writing skills.
- Unable to logically raise points to the expected number of marks.

Recommendations

- Teachers should guide learners in interpretive skills rather than rote learning.
- Teachers should prioritize assisting candidates in essay writing skills, homework, and feedback.
- Teachers should ensure comprehensive coverage of the Syllabus and teach application skills for real-life situations.
- Teachers should discourage learners from writing in bullet form and encourage clear, full explanations of key concepts.

3.2.3. Geography (2218)

Geography aims to measure the learners' the understanding of the physical, Social, cultural, and economic developments and their impact on spatial patterns. Candidates are expected to demonstrate the ability to identify, understand, apply, evaluate, and synthesize information.

Geography consists of three components – Paper 1, Paper 2, and Paper 3. Paper 1 consists of MCQs while Paper 2 consists of structured questions. Paper 3 is a school-based assessment (field project).

Analysis of Performance

Paper 1

Paper 1 comprises three sections: Section A (Map Reading), Section B (Elements of Physical Geography), and Section C (Elements of World Human Geography).

In Section A, candidates encountered difficulties in reading six-figure grid references accurately, measuring distances of physical features like rivers, and identifying relief features and drainage patterns using contour lines. The average percentage of correct answers in Section A decreased by 3.22 percentage points from 2022 to 2023, with 34.38 percent of candidates answering the questions correctly in 2023.

In Section B, candidates showed improved understanding compared to 2022, with 32.8 percent answering questions correctly, particularly struggling with topics such as the sun and its planets, volcanism, climate, and related geographic areas.

In Section C, challenges arose in answering questions about population and agriculture, especially those involving interpretation of bar graphs, graphs, and maps.

Paper 2

Paper 2 consists of three sections: Section A (topics on Zambia), Section B (The Sub Region), and Section C (Settlement and Population Studies).

In Section A, candidates encountered challenges in identifying features on the map and explaining factors affecting the location of hydro-electric power stations. Questions on agriculture and transport were particularly difficult, with candidates struggling to analyse bad agricultural practices, evaluate their environmental impact, and suggest soil conservation measures.

In Section B, candidates faced difficulties in naming minerals on the map of Zimbabwe, describing mining-related problems and benefits, and explaining factors influencing mine openings. Few candidates attempted the question on petroleum mining in Angola. Section C questions were generally well-attempted, with high-performing candidates providing appropriate responses.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Demonstrated proficiency in identifying and interpreting map features.
- Displayed strong skills in knowledge recall and application.
- Presented organized and well-coordinated work.
- Constructed clear and articulate sentences.
- Showed a deep understanding of the subject matter and articulated concepts effectively.
- Supported points with relevant examples.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Displayed some knowledge but raised few points, indicating inadequate preparation.

- Had poor understanding of questions, lacking merit in ideas and relevant examples.
- Encountered challenges in distinguishing and locating map features.
- Performed well in some questions but provided few relevant responses in others.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Struggled to locate and name features on maps accurately.
- Produced untidy work with numerous cancellations.
- Demonstrated disorganized responses with incoherent ideas.
- Provided incomplete or hanging responses without relevant examples or additional information.
- Provided answers not relevant to the questions asked.

3.2.4. Religious Education (2044)

The Christian Religious Education 2044 examination evaluates spiritual, moral, religious, and cultural values from four main religious traditions in Zambia: Christianity, Hinduism, Indigenous Zambian beliefs, and Islam. The syllabus requires candidates to demonstrate skills in identifying, understanding, applying, analyzing, evaluating, and synthesizing knowledge across various topics.

Analysis of Performance

Overall Performance

In the 2023 examination, candidates' performance slightly declined compared to 2022, with the mean score decreasing from 52.05 percent to 50.36 percent, indicating a reduction of 1.69 points. The pass rate also decreased from 74.89 percent in 2022 to 73.83 percent in 2023.

The RE 2044 examination comprises five themes: Living in a Changing World, Order and Freedom, Life, Man and Woman, and Man's response to God through Faith and Love, which are presented as sections in the paper.

General observations

i. Question 1 of Section A (Living a changing world) saw widespread attempts, notably in Part A (Zambian attitude towards work) and Part B(i) (Biblical protection of weak individuals through work). However, Part B(ii) (guidelines for a successful cooperative society) posed challenges. Questions in Part B required higher cognitive skills (synthesis), whereas those in Part A were at a lower cognitive level (comprehension).
ii. Question 2 of Section A was widely attempted by candidates, with all parts seemingly manageable. Candidates were able to list ways the church creates constructive leisure activities for Zambian youths, discuss life's contradictions based on Ecclesiastes, and show how they would provide advice for individuals blaming others for their misfortune. However, low performers struggled to offer coherent responses.
iii. Section B (Order and Freedom) contained two questions, both well-attempted by many candidates. In Question 3, candidates described Mahatma Gandhi's teachings on 'Satyagraha' and correctly referenced the Bible passage from 1 Kings 21:1-21. In Question 4, candidates listed and explained the Pillars of Islam. Low performers faced challenges with the Bible passage and narration illustrating Jesus as the Good Shepherd in Question 3.
iv. Section C (Life) comprised Questions 5 and 6. Question 5 proved challenging, as candidates struggled with paths leading to Moksha, failing to provide answers promoting societal cohesion. Question 6, however, was well-attempted, with clear explanations on spirits in African Traditional Society and accurately handling the Bible passage on the Teacher of the Lord Jesus Christ.
v. Section D (Man and Woman) included Questions 7 and 8. Candidates listed the six qualities of a good marriage in Question 7 but incorrectly referenced the Bible passage in the situational question. Question 8 received limited attempts, with poor performance, particularly on Bible passages and the situational question.
vi. Question 9 of Section E (Man's Response to God through faith and love) saw few attempts, with even those that attempted failed to narrate and interpret the Bible passage from Psalms 53:1-6.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following strengths:

- Deep subject understanding demonstrated through comprehensive and accurate answers.
- Excellent preparation evident in clear writing and adherence to instructions.
- Ability to generate well-developed points and articulate complex concepts.
- Skilled in narrating and interpreting Bible passages coherently.
- Strong communication skills with proficient English grammar and spelling.

ii. Average Performing Candidates

The candidates in this category demonstrated the following strengths:

- Partial understanding of questions, resulting in incomplete or limited answers.
- Basic knowledge of the subject matter reflected in factual recall.
- Ability to reproduce Bible passages but lacking depth or critical analysis.
- Struggles with applying biblical principles to real-life situations.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Severe difficulties comprehending questions, leading to inaccurate or irrelevant answers.
- Fundamental knowledge gaps evident in limited subject mastery.
- Some candidates reproduced the exact questions as their answers.
- Poor communication skills marked by grammatical errors and unclear structure.
- Inability to present and interpret Bible passages effectively.
- Difficulty applying biblical teachings to practical scenarios.

Recommendations

i. Teachers should use feedback from examinations to enhance their teaching and improve question comprehension and examination techniques among learners.

ii. Teachers should use ensure unbiased teaching of all Bible passages outlined in the syllabus.

iii. Teachers should encourage learners to engage in reading of Bible passages on their own.

iv. Teachers should provide learners with exposure to various real-life situations to enhance their comprehension.

v. The relevant authority should prioritize the provision of teaching and learning materials to enhance the quality of education.

vi. Schools should acquire copies of the updated RE 2044 syllabus and ensure adherence to the current curriculum.

3.2.5. Religious Education (2046)

The 2046 Christian Religious Education syllabus in Zambia focuses on assessing candidates' understanding of spiritual, moral, and cultural values across four major religious traditions: Christianity, Hinduism, Indigenous Zambian beliefs, and Islam.

The various topics within these traditions, including Jesus' teachings and actions, the significance of the Last Supper and crucifixion, the concept of the Kingdom of God, challenges faced by Jesus, and Christian perspectives on work, government, money, and possessions.

Beyond knowledge acquisition, the syllabus emphasizes critical thinking skills: identifying key information, comprehending its meaning, analysing different perspectives, evaluating their merits, and forming their own informed conclusions.

Analysis of Performance

Candidates encountered difficulties in various questions across sections. Notably, they struggled with narrative coherence, application of Bible passages, and differentiation between Christianity and other religions. Sections A and C had fewer popular questions attempted, while Section B questions like the "Good Samaritan" passage were well attempted. Candidates' performance varied widely, with some demonstrating thorough knowledge and others struggling to articulate key concepts, highlighting the need for more comprehensive teaching and preparation in certain topics.

In Section A, candidates encountered challenges in relating stories about Jesus in the temple as a baby, narrating Jewish ceremonies after the birth of a first-born son, and comparing teachings of Christians and Muslims on divine guidance. Additionally, they struggled to outline the main messages of John Baptist during the priesthood of Annas

and Caiaphas, and to narrate Jesus' Triumphal entry into Jerusalem. However, they managed to apply Bible passages to real-life situations and answer situational questions effectively.

In Section B, candidates found Question 5 difficult, failing to provide a coherent Bible narration on the parable of the widow and the unjust Judge and differentiate between Christian and Islamic teachings on prayer. Conversely, they found Question 6 on the Good Samaritan easier to answer. Question 7, concerning the Last Supper and crucifixion, posed challenges as candidates failed to narrate Jesus' prediction of his suffering and death or explain disciples' difficulties in accepting it. They also struggled to identify similarities between Christianity and Zambian Traditional Religion on teachings about suffering and death.

In Section C, Question 9 on The Early Church was poorly answered, with candidates struggling to narrate Barnabas' role in reconciling Saul to the Apostles and describe disagreements in the early church. Additionally, they had difficulty stating differences between Christianity and Zambian Traditional Religions in conflict resolution, except for high-performing candidates.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Accurate interpretation of questions
- Proficient recall and comprehension of Bible passages
- Skilful application of Bible values to daily life and comparison with other religions
- Abundance of subject knowledge leading to correct responses
- Effective language use with well-constructed sentences and correct spelling
- Neat and legible handwriting
- Excellent presentation of work
- Clear understanding and adherence to question paper instructions.
- Well-organized numbering of responses for clarity

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Limited subject knowledge resulting in partial or inadequate responses.
- Partially correct answers with fair language usage
- Mixing up of points in responses
- Some difficulty in narrating Bible passages
- Good presentation of work with neat handwriting, albeit below expected standard.
- Occasional misspellings and limited language usage

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Minimal to no knowledge of subject matter.
- Non-compliance with rubric instructions, including incomplete or missing answers.
- Frequent direct copying of questions onto answer booklet.
- Poor language usage and inability to construct sentences.
- Very poor handwriting and work presentation.
- Incorrect usage and application of language.
- Difficulty in narrating Bible passages and comparing values with other religions.
- Incomplete answers or leaving questions unanswered.

Recommendations

i. Teachers should be using examination feedback to enhance learners' understanding of the examination format and learn how to answer the questions.

ii. Teachers should ensure that the syllabus is well covered.

3.3. Business Studies

Business Studies comprises Commerce (7100) and Principles of Accounts (7110).

3.3.1. Commerce (7100)

The examination in commerce serves to assess learners in academic and entrepreneurship skills, evaluating their proficiency in fundamental commerce knowledge including production vs. the environment, home trade, international

activities, stock exchange, business units, aids to trade, and procedures and documents used in daily business operations.

Analysis of Performance

In 2023, candidates showed improvement compared to 2022, achieving a mean score of 44.08 percent, up from 38.81 percent. The pass rate also increased from 64.21 percent in 2022 to 66.27 percent in 2023. Additionally, the quality pass rate rose from 50.23 percent to 54.57 percent in 2023.

General observations

While top performers excelled in topics like advertising, warehousing, and sole proprietorship, average students struggled with interpreting documents, understanding business units, and utilizing aids to trade. Low-performing students exhibited a fundamental lack of subject knowledge.

Some candidates struggled with the concepts of document filling outcomes, business unit comparisons, and debentures. The banking and insurance questions in section C were also difficult, and only a handful of candidates attempted them.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Understood the questions well and answered them clearly and appropriately.
- Organized their work in a logical, coherent, and cohesive way.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Lacked application and analysis skills in some topics, which hindered their higher-level cognitive performance.
- Failed to provide enough points in listing, stating, and outlining questions.
- Lacked indepth discussion in essay writing in section C.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Performed poorly even in the lower-level questions.
- Left many questions unattempted
- Presented illogical and incoherent work.

Recommendations

i. Teachers should give candidates more practice in multiple choice questions to improve their analytical skills.

ii. Teachers should make sure candidates attain the syllabus outcomes and demonstrate them by doing calculations, filling in documents, and providing good examples, features, similarities, and differences convincingly.

iii. Teachers should teach the whole syllabus thoroughly and focus on the perceived unpopular topics with more practice and revision. Real life scenarios would help candidates engage more holistically.

3.3.2. Principles of Accounts (7110)

Principles of Accounts aims to assess learners on their fundamental knowledge and practical skills related to financial transactions and management, which are crucial for making economic decisions and generating reports in the business sector, whether for personal or professional purposes.

Analysis of Performance

The principles of accounts subject mean increased from 35.81 percent in 2022 to 39.28 percent in 2023, while the candidature rose from 24118 to 36592. The absenteeism decreased slightly from 5839 to 5642. The pass rate improved marginally from 85.48 percent to 85.59 percent, and the quality pass rate from 41.38 percent to 42.10 percent. The failure rate dropped from 14.52 percent to 14.41 percent.

Performance in paper 2 improved by 5.16 percentage points from 30.59 percent in 2022 to 35.75 percent in 2023, with four candidates scoring 98 percent. However, 74 candidates scored zero (0). Candidates did well in knowledge and comprehension questions but struggled with higher level cognitive questions. They scored high in questions 1 and 4 on introductory topics and final accounts, but had difficulties with adjustments, ledger and suspense accounts, bank reconciliation and accounting ratios.

Candidates' performance in Paper 1 was similarly to 2022, with a slight increase in mean score from 19.44 percent to 19.45 percent. Question 25 on control accounts and

17 on provision for bad debts were the least attempted. Questions 2 on accounting concepts and 20 on trial balance errors were also poorly answered.

General observations

Many candidates faced challenges in analyzing MCQs and chose distractors instead, especially on topics such as concepts, control accounts, single entry and non-profit. They also had problems with treating and interpreting ledger accounts and applying the basic principles correctly. Moreover, they failed to segment and itemize different types of accounts and statements clearly and correctly.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Demonstrated mastery of the principles and concepts with accuracy, orderly and systematic presentation of work.
- Exhibited competence in the treatment of ledger accounts and different types of adjustments in final accounts.
- Exhibited competence in computations and chronological handling of transactions though had difficulties on ratios and disposal account.
- Properly adhered to instructions and attempted almost all the questions accordingly.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Demonstrated limited mastery on expenses and provisions accounts, suspense and bank reconciliation, and some adjustments.
- Presented calculation and computational skills with some deficiency.
- Displayed at least fair logic in the presentation of their work.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Failed to attempt some questions leaving many blanks in the answer spaces.
- Showed poor mastery of the subject matter with illogical flow of transactional entries.

- Poor interpretation of principles in questions with disorderly ledger and final accounts items.
- Presented poorly titled accounts and failed to apply basic principles of double entry and accounting generally.

Recommendations

i. Teachers should ensure that learners distinguish concepts and demonstrate the basic knowledge of the listed problematic aspects.

ii. Teachers should emphasize and ensure that learners clearly demonstrate the progressive and sequential practicality of basic principles.

iii. Teachers should ensure that candidates adhere to the correct accounts' formats and statements` layouts with systematic flow of items and balances therein.

iv. Teachers should strive to complement theory with practical work of real-life accounting scenarios and variety of revision questions with enhanced review of past papers for familiarization purpose.

v. Teachers should cover the syllabus holistically and thoroughly to avoid knowledge gaps learners exhibit in principles of accounts examinations.

vi. CPDs would also remain helpful to acquaint the staff who may not be well versatile in handling examination classes.

3.4. Mathematics and Natural Sciences

The subjects in this category include Mathematics, Additional Mathematics, Computer Studies, Physical Science Subjects (Physics, Chemistry & Science) and Biological Science Subjects (Agricultural Science & Biology).

3.4.1. Mathematics (4024)

The Grade 12 Mathematics assessment tests the candidates on the competencies specified in the O-level Mathematics syllabus Grade 10-12. These competencies are knowledge and understanding, application and problem solving, and analysis and evaluation. The candidates are expected to demonstrate their ability to: recognise, estimate, and use mathematical procedures, language, and symbols; use units, calculations, concepts, and skills in various situations, such as daily life, shapes, word

problems, algorithms, and diagrams; and present, interpret, and use information in different forms, present logical arguments, and form generalisations from patterns and structures.

Analysis of Performance

Candidates' performance in Mathematics dropped slightly from 27.1 percent in 2022 to 26.62 percent in 2023. The mean score for Mathematics Paper 1 dropped from 25.04 percent in 2022 to 14.98 percent in 2023. Mathematics Paper 2 recorded an increase in performance from 29.45 percent in 2022 to 32.99 percent in 2023.

Candidates performed better on topics such as Index notation, Algebra, Probability, Functions and Statistics.

Average performance was record on topics such as Vectors, Matrices, Arithmetic and Geometric progressions, Earth Geometry, Calculus (Differentiation and Integration), Trigonometry, Circle Theorems, Linear Programming, Social and Commercial Arithmetic, Quadratic Functions, Cubic Functions, Travel Graphs, Sets, Mensuration, Bearings, Computer and Quadratic equations.

Low performance was recorded on topics such as Construction and Loci, Coordinate Geometry, Similarity and Congruency, Approximations, Transformations, Variations and Symmetry.

Question 4 in Mathematics Paper 2 on construction and loci was used to demonstrate the performance of candidates according to the three categories. Question 4 was as follows;

4. *(a) Construct a trapezium ABCD in which AB = 10cm, AD = 7cm, angle ABC = 60° and angle BAD is 90°.*

   (b) Measure and write the length of CD.

   (c) Within the trapezium ABCD, draw the locus of points which are

      (i) 2cm from CD,

      (ii) 9cm from B,

      (iii) equidistant from AB and AD.

(d) A point E, within the trapezium ABCD, is such that it is greater than or equal to 2cm from CD, less than or equal to 9cm from B and nearer to AD than AB. Indicate, by shading, the region in which E must lie.

General observations

Candidates faced various challenges in the mathematics assessment, especially in the new topics - calculus and computers. They had difficulties in understanding and applying the concepts of integration and differentiation, as well as drawing and interpreting flowcharts. Some of them used the wrong formulae, symbols, or rules in their calculations and solutions. They also made errors in using the geometrical instruments, scales, axes, and calculators.

Candidates also struggled with the word problems and the questions involving diagrams. They had trouble in interpreting the questions, expressing them in mathematical terms, and finding the correct answers. They also failed to show their working or reasoning in some cases, which affected their marks. They had challenges in topics such as trigonometry, coordinate geometry, variation, and rotational symmetry.

The question on geometrical transformations was the least attempted and the most challenging for the candidates. They did not understand the concepts of rotation, enlargement, shear, stretch, and matrix of a transformation. They also had problems in drawing and identifying the transformed shapes.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Mastery of all the concepts on the topic.
- Understanding and correct interpretation of mathematical terms.
- Correct understanding of how to use mathematical instruments to draw straight lines and angles accurately.
- Correct use of mathematical instruments to construct a trapezium and measure a given side of the trapezium accurately.
- Understanding and correct interpretation of the locus of a point in two dimensions.

- Correct use of mathematical instruments to construct a parallel line which is the locus of a point which are a given length from a given side.
- Correct use of mathematical instruments to construct an arc which is the locus of points which are a given length from a given point on the trapezium.
- Correct use of mathematical instruments to construct an angle bisector of a given angle of a trapezium which is the locus of points equidistant from two adjacent sides of a trapezium.
- Showed all the necessary construction lines and arcs of the trapezium loci.
- Earned all the marks on this question because of constructing an accurate diagram, measuring accurately a given side, interpreting, and drawing loci correctly and shading the correct region of the trapezium where a point satisfying different loci lies.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Mastery of some of the concepts on the topic.
- Understanding and correct interpretation of some mathematical terms on the topic.
- Correct understanding of how to use mathematical instruments to draw straight lines and angles accurately.
- Correct use of mathematical instruments to construct a trapezium and measure a given side of the trapezium accurately.
- Understanding and correct interpretation of the locus of a point in two dimensions.
- Failure to use mathematical instruments to construct a parallel line correctly which is the locus of a point which are a given length from a given side.
- Correct use of mathematical instruments to construct an arc which is the locus of points which are a given length from a given point on the trapezium.
- Correct use of mathematical instruments to construct an angle bisector of a given angle of a trapezium which is the locus of points equidistant from two adjacent sides of a trapezium.
- Did not show all the necessary construction lines and arcs of the locus of points.

- Earned some of the marks on this question because of constructing an accurate diagram, measuring accurately a given side, interpreting and drawing some of the loci correctly.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Did not have mastery of the concepts on the topic.
- Did not have understanding and correct interpretation of most of the mathematical terms on the topic.
- Did not have understand skills of how to use mathematical instruments to draw different angles accurately.
- Correct use of mathematical instruments to construct a trapezium and measure a given side of the trapezium accurately.
- Did not have understanding and correct interpretation of most of the locus of a point in two dimensions.
- Did not have correct interpretation of the locus of a point which are a given length from a given side.
- Correct use of mathematical instruments to construct an arc which is the locus of points which are a given length from a given point on the trapezium.
- Did not have correct understanding of the locus of points equidistant from two adjacent sides of a trapezium.
- Showed some of the necessary construction lines and arcs of the trapezium loci.
- Earned very few of the marks on this question because of constructing an incorrect diagram, incorrect interpretation and drawing some of loci and shading a region of the trapezium that was incorrect.

3.4.2. Additional Mathematics (4030)

The purpose of the Additional Mathematics assessments is to measure learner achievements against the set competencies as outlined in the Additional Mathematics Grade 10 to 12 Syllabus. The subject enables the learners to acquire analytical, problem solving and critical thinking skills.

Analysis of Performance

The candidates' performance in Additional Mathematics improved slightly from 56.20 percent in 2022 to 56.70 percent in 2023. Paper 1's mean score decreased from 51.56 percent to 39.1 percent, while Paper 2's mean score increased from 59.79 percent to 63.09 percent.

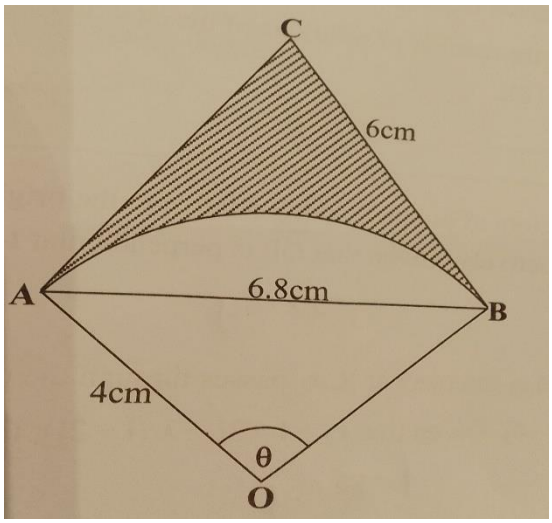
Candidates did well in topics like Coordinate Geometry, Systems of Equations, Quadratic Equations, Trigonometry (identities), Arithmetic and Geometric Progression, Differentiation (stationary points), Vectors (vector equations), Remainder Theorem, Quadratic Inequalities, Permutations and Combinations, and Statistics (standard deviation).

They performed moderately in topics like Quadratic Functions, Trigonometry (equations), Calculus (small increment, area under a curve and volumes of revolution), Graphs of Functions, Exponential and Logarithmic Functions.

They struggled in topics like Binomial Theorem, Circular Measures (perimeter of a shaded region), Functions (composite), Vectors, and Factor Theorem.

Question 5 in Additional Mathematics Paper 1 on Circular Measures was used to demonstrate performance of the candidates in the three categories.

5. In the following diagram, ACBO is a kite with AC = BC = 6cm and AO = OB



= 4cm. The diagonal AB = 6.8cm. AOB is a sector of a circle with centre O, radius 4cm and angle AOB = Θ.

Find the

(a) Angle in radians,

(b) Perimeter of the shaded region.

General observations

Some of the challenges that candidates faced in Additional Mathematics were related to formulae, methods, expressions, calculators, identities, terms, expressions, and accuracy. They had difficulties in stating and applying formulae correctly, using appropriate methods to solve given questions, simplifying expressions correctly, and using a calculator in the right mode for Circular Measures questions. They also had misconceptions on Trigonometric identities, misunderstood some mathematical terms such as factorisation, omitted explicit expressions in their solutions, and rounded off prematurely or inaccurately.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Mastery of the topics.
- Understanding and correct interpretation of the concepts and skills for solving the questions.
- Use of correct formulae and skills in solving the questions.
- Correct use of the calculator to evaluate explicit expressions.
- Applied concepts in Trigonometry and Circular Measures in answering the question.
- Understanding of the concepts and skills of finding perimeter using Circular Measures.
- Presentation of work was very good with high degree of accuracy in the answers.
- Answered part (a) and (b) of the question correctly and earned full marks.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Had partial mastery of the topics.
- Understood and interpreted some of the concepts and skills for solving the questions.

- Understood and interpreted some mathematical terms, symbols, and notation correctly.
- Did not use correct formulae and skills in solving all the questions.
- Used the calculator to evaluate some of the explicit expressions.
- Applied a few of the concepts in Trigonometry and Circular Measures in answering the questions.
- Did not understand most of the concepts and skills of finding perimeter using Circular Measures.
- Essential working was shown in some of the questions.
- There was no accuracy in the presentation of some of the solutions.
- Did not show all the essential working for both part (a) and part (b) of the question.
- Earned some of the method marks on the questions.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Lacked mastery of most of the concepts on the topics.
- Could not interpret most of the mathematical terms, symbols, and notation correctly.
- Word problems were a challenge and were unable to use mathematical concepts and skills to solve the questions.
- Most problems could not be expressed in mathematical terms correctly and failed to use appropriate techniques to solve them.
- Applied incorrect formulae and theorems to solve the questions.
- Could not apply concepts in Trigonometry and Circular Measures in answering the questions.
- Did not understand the concepts and skills of finding perimeter using Circular Measures.
- Presentation of work was not good in some cases, and accuracy was a challenge.
- Both part (a) and part (b) of the question could not be answered correctly.
- Did not earn all the marks on this question.

Recommendations

i. Introduction of topics should incorporate real-life situations where applicable.

ii. Teaching and learning aids should be utilized in order to facilitate meaningful learning.

iii. Mathematics should be taught with reference to its practicality in real-life situations.

iv. Teaching methods that encourage learners to discover concepts from a practical point of view and to be actively involved in the learning process should be used.

v. Feedback on all the assessment tasks should be provided promptly to the learners and it should be meaningful. Teachers should be interested in essential working on class exercise and test and not the final answer only.

vi. Teachers should encourage learners to use mathematical instruments on all topics that require drawing of diagrams.

vii. Teaching and learning of the topic Construction and Loci requires the use of instruments by all learners. Teachers should give enough practice to the learners on how to draw lines, angles, bisecting lines and angles and drawing of different polygons accurately.

viii. The syllabus should be covered adequately in order for topics such as Transformation, Calculus, Construction and Loci, Circular Measures, Computers to record better performance in these topics by candidates.

ix. Teachers should encourage learners to use a calculator on topics that require its use, and the calculator should be used to evaluate explicit expressions in order for candidates not to lose method marks.

x. Continuous Professional Development (CPD) meetings should be enhanced to enable teachers to build capacity in teaching of challenging topics by sharing best practices.

3.4.3. Computer Studies (7010)

The School Certificate Computer Studies Examination aims to assess candidates' competencies as outlined in the Grade 10 to 12 Syllabus. It also aims at cultivating interest and foundational skills in Information Technology Careers such as Computer

Hardware, Embedded Systems, Computer Programming, Database Management, Computer Networks, Mobile Computing, Web Design, Computer Security, and Forensics.

Analysis of Performance

The Computer Studies Paper 1 comprises two sections, A and B, with structured questions. Section B assesses problem-solving skills in Systems Analysis and Programming basics only. While the systems analysis question is mandatory, the other two are optional. Overall, candidates performed better in section A than in section B.

Compared to 2022, candidate performance dropped in 2023, with a mean score of 44.92 percent, down from 51.23 percent in 2022.

Many candidates struggled with some questions. For example, in Question 4(a) (i) of section A, candidates could not identify logic gate symbols or explain their use in logical operations, which required recalling shapes for basic gates. Similarly, Question 4(a) (ii) required candidates to identify Gate M as a NOT gate and describe its purpose as an inverter, but many could not. In Question 4(b), candidates had difficulty determining the output for inputs to gate L (the OR-Gate), despite its straightforward logic.

Section B focuses on practical and problem-solving skills, consisting of two questions. In question 2(a), candidates needed to demonstrate understanding of Pascal programming language syntax and write simple codes.

General observations

Generally, candidates displayed several challenges, including:

i. Limited vocabulary and difficulty in expressing thoughts.
ii. Lack of skill and knowledge in defining terms.
iii. Limited knowledge in algorithms and programming.
iv. Difficulty in explaining concepts and mechanisms of data processing.
v. Challenges in interpreting the SDLC and writing program code.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Defined "Debugging" effectively.
- Explained the uses of data and address buses.
- Differentiated between data and information.
- Outlined the advantages of open-source software and tailor-made programs.
- Interpreted various logic gates accurately.
- Converted algorithms from flowcharts to pseudocode proficiently.
- Applied spreadsheet and database knowledge effectively.
- Employed fact-finding techniques in system analysis scenarios.
- Identified variables, processes, and outputs in Pascal code.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Interpreted some logic gates and algorithms.
- Applied partial knowledge of spreadsheets and databases.
- Demonstrated some understanding of fact-finding techniques.
- Identified variables, processes, and outputs in Pascal code, but struggled to define "Debugging."

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Faced challenges in defining terms like "Debugging."
- Struggled to explain applications like robotics in farming scenarios.
- Had difficulty interpreting logic gates and algorithms accurately.
- Identified functions in spreadsheets inconsistently.
- Struggled with applying fact-finding techniques.
- Found it challenging to identify variables, processes, and outputs in Pascal code.

Recommendations

Teachers should;

- Ensure in-depth teaching and practice of core topics like logic gates, systems analysis, spreadsheets, and databases.

- Train learners to write concise and clear answers using simple, understandable terms.
- Provide basic training in popular programming languages like Pascal, C++, Visual Basic, Java, and Python.
- Emphasize thorough practice in converting algorithms between different forms (e.g., flowchart to pseudocode).
- Focus Continuing Professional Development (CPD) on examination syllabi and curriculum updates to equip teachers with current knowledge and best practices.

3.4.4. Physical Science

Physical Science Subjects comprises Physics (5054), Chemistry (5070), and Science (5090). Each subject consists of three components – Paper 1, Paper 2, and Paper 3. Science combines elements of Physics and Chemistry.

The Grade 12 assessment in Physical Science Subjects aims to assess candidates' knowledge, understanding, information handling, problem-solving abilities, and experimental skills. Paper 3 for each subject constitutes a School-Based Assessment designed to assess outcomes not easily assessed in a single written examination.

3.4.4.1. Analysis of Performance - Physics (5054)

The purpose of the Physics assessment is to measure learners' competencies and achievements as outlined in the Grade 10 to 12 Physics syllabus, CDC 2013. The assessment is also used for certification of learners' achievements as well as entry into tertiary institutions and the engagement in Entrepreneurial activities.

Analysis of Performance

Paper 1

Paper 1 of the examination included 40 compulsory multiple-choice items worth a total of 40 marks. The mean score in 2023 was 54.68 percent, which increased by 10.58 percent compared to the 2022 mean score of 44.10 percent. Topics that were well answered included an item on simple velocity-time graph, simple graph on changing states of matter thermally, and identifying electromagnetic radiation particles released from a decay equation. Questions that posed challenges to candidates included Optics, electricity on some concepts on wiring and calculations involving resistance when the resistors are connected in parallel and reading of half-life from a graph.

Paper 2

Paper 2 of the examination consisted of two sections: Section A with eight compulsory structured questions carrying 50 marks, and Section B with four semi-structured/essay questions, from which candidates must choose three. In 2023, the mean score for Paper 2 decreased by 0.65 percentage points to 44.50 percent compared to 45.15 percent in 2022. Most candidates performed well on Questions 1 (Measurements under general Physics), 2 (Motion), 3 (Work Energy and Power), 9 (Pressure in liquids), 10 (light-refraction) and 11 (Thermal physics).

Candidates struggled with electromagnetism, nuclear physics, and interpreting a challenging circuit diagram in the 2023 exam. Specifically, they faced difficulties with Question 8 on basic electronics and Question 12 on radiation physics. In electronics, they couldn't define capacitance, interpret graphs, or explain capacitor function from the circuit. Regarding radiation physics, they couldn't write decay equations for particle disintegration or understand nuclei disintegration processes.

Paper 3

Paper 3 is school based; administered by teachers with emphasis on experimental skills and investigations. The mean score in 2023 was 89.30 percent compared to 87.80 percent in 2022 giving an increase of 1.5 percent.

General observations

In the Physics assessment, the candidates faced common challenges related to their understanding, skills, and presentation. They did not understand the questions and concepts well, which resulted in incorrect facts or concepts. They also lacked graphing skills and made mistakes in drawing or interpreting graphs. Moreover, they gave incomplete responses and presented their work poorly, especially the low performers. They also failed to apply practical and scientific skills in Physics-related contexts. Furthermore, they confused or misstated the concepts and relationships among quantities and principles.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Ability to understand questions and correctly use terminologies and demonstrate a solid understanding of concepts, which are effectively combined to provide responses.
- Following instructions, logical and organized presentation of work, with minimal omission of essential components.
- Proficiency in mathematical manipulation-substitution, putting correct units, converting units and correct level of significance.
- Competence in data plotting and graphing showing correct titles, labelled axes, correctly plotted points, and smooth graphs or interpreting given graphs.
- Proficiency in drawing.
- Making effective use of scientific language and terms in explaining concepts and processes

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Fairly good ability to understand questions and correctly use terminologies and demonstrate a fairly solid understanding of concepts, which are effectively combined to provide responses.
- Fairly followed instructions, logical and organized presentation of work, with minimal omission of essential components.
- Fairly good mathematical manipulation-substitution, putting correct units, converting units and correct level of significance.
- Exhibited some competence in data plotting and graphing showing mostly correct titles, labelled axes, some correctly plotted points and fairly smooth graphs or interpreting given graphs.
- Satisfactory skills in drawing.
- Some Acceptable effective use of scientific language and terms in explaining concepts and processes.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Inappropriate use of terminologies and inadequate understanding of concepts.

- Poor comprehension of questions and the relevant concept.
- Poorly organized responses, incomplete answers, or lack of responses in most cases.
- Limited to poor mathematical skills, many omission or incorrect use of units.
- Inability to plot graphs, resulting in graphs without a title, unlabelled axes, and poor scales.
- Inadequate drawing skills.

Recommendations

- Comprehensive and thorough coverage of the syllabus, including challenging topics such as basic electronics, to enhance student comprehension.
- Integration of practical work to complement theoretical learning in the teaching/learning process.
- Consistent, adequate, and high-quality school-based assessments.
- Learners must be equipped with the skills necessary to present effective responses that gain marks. Teachers should engage in intensive, reflective, and objective revisions.
- Teachers should aim to cover all learning outcomes of the topics as outlined in the syllabus, rather than focusing solely on certain areas. This can reduce recurring poor performance in some topics such as electronics and radiation physics.

3.4.4.2. **Analysis of Performance - Chemistry (5070)**

Chemistry Paper 1

Paper 1 consisted of 40 compulsory, multiple choice items carrying a total of 40 marks. On average, candidates scored 20.92 marks out of 40 representing 52.5 percent. In comparison to 2022, the performance was identical. On average, candidates scored 21.27 marks out of 40 representing 53.18 percent.

Chemistry Paper 2

Paper 2 of the Chemistry examination comprised of two sections: Section A, consisting of eight compulsory structured questions (50 marks), and Section B, consisting of four semi-structured/essay questions, from which candidates needed to

select three. The mean score in 2023 declined by 2.98 percentage points to 38.95 percent, from 41.93 percent in 2022.

Chemistry Paper 3

Paper 3 is school based; administered by teachers with emphasis on experimental skills and investigations. The mean score in 2023 was 88.75 percent compared to 88.1 in 2022 showing an increase of 0.65 percent.

Overall Performance

The (Subject) average performance fell to 49.63 percent from 50.96 percent in 2022, showing a decrease of 1.33 percentage points. Candidate performance was scrutinized to pinpoint strengths and weaknesses. Detailed item analysis revealed areas of both strong and weak performance.

In paper 1 (MCQs), generally candidates performed well on questions 3, 25, 31, 33, and 35.

- Most candidates exhibited a good understanding of laboratory rules which was a requirement for them to answer question 3.
- Recall of the periodic table facilitated correct responses to question 25.
- Most candidates exhibited a good understanding of the topic "extraction of metals". They correctly answered question 31 on extraction of zinc metal.
- Most candidates had knowledge of non-metals. They accurately recalled relevant information to identify the product of a particular industrial preparation of a paired non-metal and its process of large scale/industrial preparation as demanded by question 33. This understanding likely aided them in Question 35, which focused on chlorine uses.

However, questions 12, 14, 28, 30 and 34 were poorly answered as most candidates could not correctly answer.

- Question 12 tested understanding of acids, bases, and salts. 79 percent of candidates misunderstood the rephrased definition of a base as an electron donor, contrary to an acid, which donates a proton.
- Question 14 focused on oxides which are amphoteric with either bases or acids. 84 percent of candidates erred, possibly forgetting that aluminium hydroxide is amphoteric. Of those, 68 percent incorrectly believed aluminium reacts only with acids and not with bases (alkalis/ basic solution).

- Poor performance on questions 28 (application of electrolysis), 30 (transition metals), and 34 (macromolecules) stemmed from candidates' lack of in-depth in applying principles accurately.

In Paper 2, most candidates performed better in questions A3 and A7, while questions A5 and B12 were poorly answered.

- Question A3 assessed bonding, with sub-questions at varying skill levels. Candidates were expected to identify diagrammatic representations of bonding, write chemical formulas, describe bonding types and accompanying forces that keep the molecules together, and write a balanced chemical equation for complete combustion of the compound. Most candidates demonstrated the required skills, though some failed to identify bonding forces or provide correct chemical equations. Additionally, a few lost marks due to misspellings of "covalent bonding" or inappropriate terms like "molecular bonding."
- Question A7 required candidates to use the Periodic Table to interpret element locations, predict indium and oxygen valencies, and deduce compound formulas. The majority of candidates demonstrated the necessary skills for this question. Furthermore, candidates effectively compared and contrasted indium with graphite as required.
- Question A5 was poorly answered due to candidates' inability to apply basic principles of electrolysis accurately, resulting in incorrect calculations.
- Question B12, focusing on organic chemistry, particularly ester reactions and polymers (But-2-ene), was poorly attempted by the few who chose it. In Part (a), candidates struggled to apply their knowledge to identify substances. Part (b) received satisfactory responses as it necessitated defining familiar terms and illustrating the structure of poly(butane), which is relatively straightforward.

General observations

Generally, candidates at the low performing level struggled to define key terms accurately, hindering their understanding of core concepts. Their attempts to balance chemical equations often contain inaccuracies, illogical and disorderly presentation of work leading to omissions of essential steps and required units, weak mathematical manipulation and calculation skills, inadequate interpretation of concepts and improper

use of scientific terms and language with frequent spelling errors. They mostly skipped compulsory questions.

Characteristics of Candidates

i. High Performing Candidates

- Correct definitions and understanding of terminologies.
- Ability to formulate and balance chemical equations correctly.
- Correct use of terminologies with a good understanding of concepts.
- Systematic presentation of work with minimal omissions and inclusion of required units.
- Good mathematical manipulation and calculation skills.
- Logical interpretation of concepts and good understanding of factors affecting reactions.
- Ability to depict scientific concepts graphically, including energy profiles, organic compound structures, and particle arrangements in liquids.
- Precise use of scientific terms and language, with correct spellings.
- Completion of all compulsory and optional questions without leaving any unanswered.

ii. Average Performing Candidates

- Ability to understand and define key terms reasonably well.
- Correctly formulating and balancing chemical equations though some gave chemical equations even where word equations were required.
- Work was generally organized and logical, with minor missing essential work and occasional omitted required units.
- Demonstrated fair mathematical abilities for calculations and manipulations.
- Interpreted concepts logically, but explaining the effects of factors on reactions presented some challenges.
- Exhibited good abilities in sketching graphs (e.g., energy profiles) and drawing structures (e.g., organic compounds and particle arrangements).
- Use scientific terms and language correctly, including correct spelling.

iii. Low Performing Candidates

- Demonstrated incorrect definitions and limited comprehension of terminologies.

- Struggled with formulating and balancing chemical equations, sometimes providing chemical equations instead of word equations where required.
- Displayed a modest grasp of terminologies and concepts.
- Presented work in a logical and orderly manner but occasionally omitting essential steps, such as leaving out important substitution stages and required units.
- Exhibited poor mathematical manipulation and calculation skills.
- Lacked logical interpretation of concepts and facing challenges in explaining the effects of factors on reactions.
- Exhibited poor sketching of graphs, like energy profile diagrams, and lacking drawing skills, such as failing to accurately display the functional group in organic compound structural formulas and arranging particles in liquids poorly.
- Inadequate use of scientific terms and language, including incorrect spellings.
- Left a lot of questions unanswered including compulsory questions.

Recommendations

- Implement practical tasks regularly to enhance practical understanding.
- Ensure comprehensive coverage of syllabus content to deepen learner understanding.
- Provide high-quality School Based Assessments (SBAs) that assess higher-order thinking skills.
- Thoroughly cover challenging topics like the Mole Concept, Electrolysis, and Organic Chemistry in a timely manner to foster deep understanding.
- Frequently give exercises, homework, and assignments to facilitate acquisition of mathematical manipulation and calculation skills.
- Provide timely feedback to learners and guide them in presenting work logically and orderly, without omitting essential elements and required units.

3.4.4.3. Analysis of Performance - Science (5124)

The Science assessment aims to measure learners' competencies and achievements in accordance with the syllabus and serves as a certification for further education and entrepreneurship.

Analysis of Performance

There was a slight decrease in performance in 2023 of 2.57 percent from 29.81 percent in 2022 to 27.24 percent in 2023. Poor performance was observed more in the Chemistry component compared to the physics component.

Paper 1

Candidates performed well in Section A (multiple choice), followed by Section B and C. They struggled with calculations, explanations, definitions, graphing skills, and comparative language. They failed to apply concepts in Section A on simple machines, thermal physics, electromagnetic radiation, electricity, and magnetism. They made errors in Section B on formulae, symbols, statements, and substitutions. They had difficulties in Section C on measurements, magnetism, and radioactivity, as in 2022. They also showed poor graphing skills in two questions.

Some individual questions were challenging for candidates. Question B9 required them to define beta particles and gamma energy fully. Question B1 tested their practical skills on systematic error and zero error. Question B3 asked them to give results based on experimental evidence but had a diagrammatic error.

Paper 2

Candidates did well on questions about separation techniques, acids, bases and salts, The Periodic Table, and most of organic chemistry. They struggled with questions on mole concept, stoichiometric calculations, concentration and dilution, isotopes, and eutrophication. They answered the three-part questions on balanced chemical equations fairly well in 2023 compared to previous years. More frequent SBA practice in schools could help candidates overcome their challenges.

Paper 3

Science Paper 3 was conducted by teachers and focused on experimental skills and investigations. In 2023, the average score was 80.80 percent, which was a 1.15 percent increase from the previous year's average score of 79.65 percent.

General observations

Candidates faced common challenges in the examination, especially in questions that required calculations, definitions, comparative reasoning, chemical equations, and

explanations. They lacked appropriate concepts, mathematical skills, critical thinking, analysis, and application of knowledge. They also made errors in data handling, graphing, and substitutions.

Candidates also struggled with understanding the questions and their demands. They gave incomplete descriptions and definitions of some questions. They failed to apply the knowledge and skills from the SBA practical questions to the theory examination questions. They did not analyze the cognitive requirements of the questions before answering. They also did not describe some concepts and processes fully.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Use of formulae, symbols, units, definitions, and scientific terms and language correctly and consistently.
- Mathematical manipulation, calculation, and computation skills with accuracy and recall.
- Reading and comprehension of questions effectively.
- Analysis and application of facts and concepts in an orderly manner.
- Data plotting, graphing, and drawing skills with appropriate labelling, scales, joining, and working.
- Application of knowledge and skills from SBA practical questions to theory examination questions.
- Basic principles of chemistry, including structural formulae, chemical equations, and stoichiometric calculations.
- Complex content such as eutrophication in pollution.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Use of formulae, symbols, units, definitions, and scientific terms and language correctly and consistently.
- Mathematical manipulation, calculation, and computation skills with accuracy and recall.
- Reading and comprehension of questions well.

- Analysis and application of facts and concepts in an orderly manner.
- Data plotting, graphing, and drawing skills with appropriate labelling, scales, joining, and working. Some had poor scale use and missing information on graphs.
- Application of knowledge and skills from SBA practical questions to theory examination questions fairly well.
- Basic principles of chemistry, including structural formulae, chemical equations, and stoichiometric calculations.
- Complex content such as eutrophication in pollution, which they explained partially.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Basic concepts in physics, including grade 10 topics.
- Knowledge and skills from practical questions in the theory examination.
- Critical thinking, analysis, and application of knowledge in answering questions.
- Data plotting, graphing, and drawing skills, with inappropriate labelling, scales, joining, working, and accuracy.
- Certain topics, such as electromagnetic radiation.
- Mathematical computation skills, including changing the subject of the formula and using units correctly.
- Basic principles of chemistry, including structural formulae, chemical equations, and stoichiometric calculations.
- Communication skills, including analysis and application of scientific concepts. They only explained parts of the complex content such as eutrophication in pollution.

Recommendations

- Teachers should give frequent exercises, homework and assignments on challenging topics and mark learners' work with feedback and guidance. This applies to both mathematical and chemical skills.

- Teachers should teach effectively to ensure deep comprehension of all topics by learners.
- Learners should conduct practical experiments in schools to reinforce theoretical knowledge.
- Assessments should test higher order thinking skills.

3.4.5. Biological Sciences

The Biological Science Subjects include Biology (5090) and Agricultural Science (5037), each consisting of three components: Paper 1, Paper 2, and Paper 3. Biology's Paper 1 is multiple choice, whereas Agricultural Science is structured. For Paper 2, Biology is structured, while Agricultural Science is a field project. Paper 3 for both Biology and Agricultural Science is practical.

The Grade 12 assessment in Biological Science Subjects aims to assess candidates' knowledge, skills and values about the living world, their acquisition of skills useful in their daily life.

Both the field project and practical components are school based designed to assess outcomes not easily assessed in a single written examination.

3.4.5.1. Analysis of Performance - Biology (5090)

The general performance in Biology as a subject declined in 2023. In 2023 the mean score was 33.78 percent while in 2022 the mean score was 54.53 percent. This represents a decline in performance of 20.76 percentage points.

Paper 1

In paper 1, comprising 40 multiple choice questions worth 40 marks, the mean score declined from 18.23 in 2022 to 16.96 in 2023. Candidates did well in questions on Sexual Reproduction and Ecology, and lower order thinking skills. They struggled with questions on higher order thinking skills, and topics such as Locomotion, Sense organs, Classification, Genetics, Growth and Nutrients.

Candidates performed very well in Question 32 on contraception methods and Sexually Transmitted Infections. Only 10.03 percent chose the wrong options. They performed poorly in Question 9 on the internal structure of the leaf. Only 18.71 percent identified the cells with chloroplasts. 81.29 percent chose the wrong option with

palisade and lower epidermal cells. They lacked content knowledge. They also performed poorly in Question 23 on the types of joints and the shape of the bones. Only 19.19 percent identified the type of joint. 60.03 percent confused ball and socket joint with hinge joint. They could not apply their knowledge and interpret the diagram.

Paper 2

Biology Paper 2 had 10 structured questions totalling 80 marks. The mean score dropped from 16.72 in 2022 to 12.88 in 2023.

Candidates performed well in Section A on topics like Photosynthesis, Circulatory system, Genetics, Excretion, Homeostasis, The Human ear, and Locomotion, and question that assessed lower order thinking skills. They struggled with higher-order thinking skills and topics like Locomotion, Sense organs, Classification, Genetics, Growth, and Nutrients.

Candidates performed well in Question 2 on Photosynthesis and Question 3 on Blood Circulation in Section A but had some difficulties in interpreting and explaining parts. They performed poorly in Question 1 on Excretion and Homeostasis, Question 1 on Cell Structure and function, and Question 4 on Ecology in Section B, due to misinterpretation or lack of content knowledge. They also performed poorly in Question 2 on Reproduction in Animals and Question 3 on Diseases in Section B, due to deficiencies in Comprehensive Sexuality Education and understanding of diseases like Malaria, Bilharzia, and Cholera. They had trouble with concepts like communicating sexual limits and disease transmission.

Paper 3

Biology Paper 3, a school-based assessment, is marked out of 25 marks. The performance remained consistent between 2023 and 2022, with a slight increase of 0.18 points. The mean score in 2023 was 19.69, compared to 19.51 in 2022.

General observations

Candidates faced some challenges in the examination, especially in section B, which required extended writing and logical arrangement of their thoughts. They also struggled with questions that tested higher order thinking skills, such as application and analysis. Moreover, they had difficulties with questions that involved diagrams or

graphs, especially the average and lower performing candidates. Furthermore, they found some topics, such as Genetics, Classification, Growth and Development, Ecology, very challenging, possibly due to insufficient syllabus coverage. Additionally, some of them wrote section B questions in bullet form instead of paragraphs, as instructed by the question paper.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Present biological facts and definitions correctly.
- Understand and use biological terminologies including symbols.
- Demonstrate knowledge of biological and technological applications
- Use symbols and tables to organize and present information from various sources.
- Translate information from tables and graphs and relate it to biological facts.
- Identify parts and functions of the parts from diagrams and graphs.
- Present reasoned and logical explanation for processes, principles and phenomenon.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Identify labelled parts but had difficulties with attaching functions to the identified parts.
- Recall with understanding cell organization but had difficulties providing specific examples.
- Interpret graphical characteristics of enzymes but had difficulties relating it to their application in the environment.
- Define biological processes but could not logically give reasoned explanation about these processes.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- State biological facts and definitions.
- Understand and use biological vocabulary, terminologies, and symbols.

- Demonstrate knowledge and understanding of biological applications.
- Relate biological information from a table and graph.
- Present reasoned explanation for relationships and biological theories.
- Define terms and give explanations for processes.

Recommendations

i. Candidates should be encouraged to write answers to essay type questions in essay form and avoid the use of bullets.
ii. Teachers should ensure that syllabus coverage is adequate, especially that assessments cover the whole syllabus, not selected topics.
iii. Biology being a practical subject requires that candidates are exposed to more practical work for hands on experience. Teachers should ensure candidates are exposed to hands on activities.

3.4.5.2. Analysis of Performance – Agricultural Science (5037)

In 2023, the overall performance in Agricultural Science experienced a decline. The mean score for the subject in 2023 was 44.31 percent, contrasting with 59.98 percent in 2022, representing a 15.67 percentage points decrease.

Paper 1

The performance of candidates in Agricultural Science Paper 1, which has two sections (100 marks), was generally good in questions that tested lower order thinking skills. Candidates did well in questions on topics such as Pests and diseases, Soil Science, Crop Production, and Agriculture in Zambia, but they faced difficulties in questions on topics like Crop Rotation, Farm Machinery, and Agricultural Management.

The mean score for Agricultural Science Paper 1 in 2023 was 28.61, which was 4.72 marks higher than the mean score of 23.89 in 2022. This shows an improvement in performance by candidates. Candidates answered questions in both sections successfully. For example, in Section A, Question 1 on Crop Production and Question 3 on Livestock Production were answered well, though some aspects were not explained clearly. In Section B, Question 1 on Soil Science and Crop Production, and

Question 2 on Agriculture in Zambia and Livestock Production were also answered well by candidates, demonstrating their grasp of key concepts.

However, some parts of the paper were challenging for candidates. In Section A, questions on Crop Rotation and Farm Management were difficult, especially in understanding the principles and applications of these topics. Likewise, in Section B, Question 2a (ii) on Agriculture in Zambia and Question 5 (b) on Farm Machinery were difficult, with candidates failing to distinguish between types of farming practices and misunderstanding maintenance requirements, respectively. These difficulties were due to gaps in content knowledge and understanding of the subject matter among candidates.

Paper 2

Agricultural Science Paper 2 is a field project that carries 20 marks. The performance in this paper in 2023 was comparable to that of 2022. The mean score in 2023 was 16.61, which showed a slight increase of 0.32 from the mean score of 16.29 in 2022.

Paper 3

Agricultural Science Paper 3 is a practical paper that is administered and marked in schools. It has a total of 25 marks. The performance in this paper in 2023 was similar to that of 2022. The mean score in 2023 was 20.02, which showed a marginal increase of 0.46 from the mean score of 19.56 in 2022.

General observations

The main challenges faced by the candidates were related to section B, higher order thinking skills, and questions with diagrams or graphs. Section B required extended writing and logical arrangement of thoughts, which most candidates struggled with. Higher order thinking skills, such as application and analysis, were also challenging for most candidates.

Candidates in the average and lower performing categories had difficulties with questions that contained diagrams or graphs, which tested their interpretation and problem-solving skills. Additionally, some topics, such as Farm Management, Farm Machinery, Conservation farming and Crop Rotation, were generally difficult for the candidates. This could be due to insufficient syllabus coverage.

Characteristics of Candidates

iv. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Presenting, understanding, and defining scientific facts, phenomena, and terminologies correctly, including symbols.
- Demonstrating knowledge of scientific and technological applications.
- Translating information from diagrams, images, and pictures and relating it to scientific facts.
- Identifying parts and functions of the parts from diagrams, images, and pictures.
- Presenting reasoned and logical explanations for scientific processes, actions, and phenomena.

v. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Attaching the functions to the identified parts from diagrams, images, and pictures.
- Explaining the facts, terminologies, and phenomena logically and clearly.
- Describing the scientific principles and phenomena.

vi. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Presenting, understanding, and defining scientific facts, phenomena, and terminologies correctly, including symbols.
- Demonstrating knowledge of scientific and technological applications.
- Translating information from diagrams, images, and pictures and relating it to scientific facts.
- Identifying parts and functions of the parts from diagrams, images, and pictures.
- Presenting reasoned and logical explanations for scientific processes, actions, and phenomena.

Recommendations

i. Teachers should ensure that syllabus coverage is adequate, especially that assessments cover the whole syllabus, not selected topics.

ii. Agricultural Science being a practical subject requires that candidates are exposed to more practical and fieldwork for hands on experience. Teachers should ensure candidates are exposed to hands-on activities.

3.5. Practical Subjects

This category is made up of seven subjects that include; Art and Design, Musical Arts Education, Design and Technology, Fashion and Fabrics, Food and Nutrition, Home Management and Physical Education.

3.5.1. Art and Design (6010)

Analysis of Performance

The Art and Design examination consists of two papers: Paper 1 (theory, 50 marks) and Paper 2 (SBA, 100 marks). The total raw score is 150, which is weighted to 100 percent. The average score in 2023 was 56.15 percent, which dropped by 8.44 percent from 64.59 percent in 2022. Candidates did better in the SBA (82.87%) than in the theory paper (29.43%).

General observations

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

In Section A, candidates were required to answer using one-word or short phrases, they demonstrated the following abilities:

- They accurately interpreted technical Artistic terms through their responses provided.
- In the responses provided, there was clear knowledge and understanding of the objective and semi-objective questions by this cohort. Questions 1 to 9 demanded responses from a diverse of Art topics, majority candidates in this level brought them out.
- In question 8, these candidates were able to correlate artworks to everyday life applications.
- Questions 10 and 13 demanded responses from candidates who have read Zambian Art History well. Correct responses on these items showed a good cadre of Art researchers.

- Question 15 was demanding a response after a careful study and analyzing the visual piece provided. Candidates who got this correct demonstrated mastery of reading and creating various patterns.

In Section B, which was based on picture study, the candidates exhibited the following abilities:

- Properly aligned their responses to the art figure presented on ceramics.
- Question 3 was not related to the figure provided, this cohort discerned this and provided the correct response required.
- They provided proper technical and scientific details in explaining why water is never used for joining clay pieces in question 4.
- Clearly stated the disadvantages of **not** removing impurities from clay in question 5, demonstrating a solid understanding of fundamental Art concepts.
- On question 6, most of these candidates went even further to artistically outline the process of glazing on ceramics.

In Section C, whose objective is to test candidates' ability to explain art concepts and applications through short essays, the candidates exhibited the following abilities:

- These candidates were able to use art language to argue their points with typical examples in many instances on colours used in Art and Design in question 1.
- On question 2 (a) and (b), these candidates exhibited proper entrepreneurial skills in their write-ups, clearly explaining the correct marketing methods as demanded by the question.
- However, a few out of this level had challenges to bring out the challenges upcoming entrepreneur could face under question 2 (e).
- The topic on book binding in question 3 has little practice in schools in general. However, this cohort did well by mentioning detailed terms and identifying actual tools as used during book binding.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

In Section A, this group of candidates were required to answer using one-word or short phrases, they demonstrated the following:

- Despite understanding what was required in the questions, this cohort struggled to express themselves correctly using artistic terms. They were using lay-man terms, sometimes even vernacular words in their responses.
- In question 8, these candidates were able to correlate artworks to everyday life applications, but a few failed to even remember any type of poster required.
  - This cohort's level of knowledge retention was low. On Questions 1 to 6 that basically are on the low order skills thus demanded responses from recalling and comprehension of Art facts, majority failed to provide correct responses.
  - On question 15 that demanded a response after a careful study and analyzing an artwork provided, these candidates could not analyse the pattern provided.

In Section B, which was based on picture study, this group of candidates exhibited the following abilities:

- This group could not properly align their responses to the art figure presented on ceramics. They could not realize that the responses were picture based.
- Question 3 was not related to the figure provided, but this cohort failed to discern this fact and ended up giving wrong responses.
- They provided responses, except these lacked proper technical and scientific details in explaining why water is never used for joining clay pieces in question 4.
- This group missed understanding of question 5. Could not state the disadvantages of **not** removing impurities from clay.

In Section C, whose objective is to test candidates' ability to explain art concepts and applications through short essays, the candidates exhibited the following abilities:

- While some candidates provided definitions of colours used in Art and design, they struggled to explain using art language in arguing their points with no typical examples on question 1.

- On question 2 (a) and (b), these candidates exhibited proper entrepreneurial skills in their write-ups, but were lacking when explaining the correct marketing methods as demanded by the question.
- Their knowledge and understanding of bookcraft and the different types of binding were limited, highlighting areas where further instruction and practice may be needed.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

In general, this group of candidates exhibited similar characteristics in all the 3 sections of the paper. These included the following:

- These candidates were unable to comprehend the questions and, in some cases, simply copied them without attempting to answer.
- They struggled with spelling, indicating potential gaps in their foundational knowledge of language and vocabulary.
- They lacked knowledge of Zambian art history, which negatively impacted their performance in the subject.
- They failed to explain techniques or provide proper procedures, demonstrating an inadequate understanding of the subject matter.
- They lacked adequate knowledge of bookcraft and the different types of binding, indicating a need for further instruction and practice in these areas.

Recommendations

i. Learners be exposed to Zambian Art History, including knowledge of prominent Zambian artists and their works.

ii. Correct spelling should be emphasized in all areas of study.

iii. Design concepts and terminologies should be taught in detail to ensure a thorough understanding of the subject matter.

iv. A range of technical terms in art and design, including those on book binding, should be taught in detail.

3.5.2. Design and Technology (6045)

Analysis of Performance

The Design and Technology examination has two papers: Paper 1 (theory, 110 marks) and Paper 2 (SBA, 110 marks). The total raw score is 220 marks, which is scaled to 100 percentage. The average score in 2023 was 71.84 percent, which rose by 5.45 points from 66.42 percent in 2022. Candidates performed better in the SBA (86.95%) than in the theory paper (56.73%).

General observations

Characteristics of Candidates

i. *High Performing Candidates*

The candidates in this category demonstrated the following characteristics:

In Section A, the following traits were observed among candidates in this category:

Questions 1 to 5 of this section focuses on testing learners' abilities to state basic principles, identifying tools and materials and common processes. The following were observed in this cohort;

- Candidates demonstrated knowledge by correctly naming materials, identifying electrical components and stating functions or use of tools components.
- They exhibited an understanding of heat treatment processes on various workshop tools.
- They brought out various factors considered during logo designing under design and communication.
- They reasonably explained technological processes, indicating strong analytical and problem-solving skills.
- They accurately interpreted the parts shown in the drawing, highlighting their ability to analyse and comprehend visual information.

In Section B Part I, the following traits were observed among candidates in this category:

- Candidates highlighted their ability to apply their acquired knowledge to real-life situations on compulsory question 6.

- They applied proper annotation skills to their well drawn and rendered sketches in question 6 (b) (i)
- They accurately presented their written situation related to the visuals on the design question, indicating a strong understanding of the problem at hand.
- Derived design briefs included the location and problem to be solved as required in the marking scheme.
- Annotations were effectively incorporated into the solutions in accordance with the question's requirements.
- The correct drawing methods were utilized in the working drawings, indicating a high level of graphic communication skills.
- Safety considerations for the artefacts were adequately addressed, in line with the requirements of the question.

In Section B Part II, the following traits were observed among candidates in this category:

The compulsory question tests candidates in their problem-solving skills and graphic communication through sketches.

- On question 6 (a) (i) Candidates provided required information on the basic requirements expected when stating a *Situation*, thus; Place, Concern and Activity.
- However, some candidates in this cohort could not give a clear description of the problem as expected.
- Question 6 (b) (i) on design brief, candidates were expected to include; Function, User and Place. Only a few managed to state all the three.
- On possible solution, sketches were well presented by this cohort, however most of them were not rendered. They could have used crayons to enhance their sketches or drawing solutions.
- Electric symbol identification in question 7 was well responded to. Candidates in this cohort managed to identify the output correctly in the connection as the ‘bell’
- And generally, most candidates in this cohort managed to draw correctly the circuit diagram using standard symbols for all the components.
- They favourably answered question 7 (b) (i) and (ii). They brought out the correct uses of and advantages of manufactured boards.

- Candidates who chose question 8 did not perform well on properties of materials on tools in relation to their uses. Question 8 (a) (i) expected candidates to give the property which enables a blade to be suitable for its use, however most candidates were giving general properties of steel.
- Question 9 did not favour a few who chose it from this cohort. Very few candidates managed to give the correct two suitable materials for making the workbench. Instead, they gave general answers as Wood or Metal. The question expected candidates to analyse material and their specific applications.

In Section B Part III, the following traits were observed among candidates in this category:

Graphic Communication section of the paper tests candidates' proficiency in presenting and interpreting geometric drawings.

- Question 10 was not commonly picked by this cohort. For the few candidates who attempted it, most of the sketches were poorly done and lacked rendering.
- Question 11 (a) (i) (ii) was popular with this cohort. Majority managed to draw the surface development of a truncated hexagonal pyramid and thus ended up drawing a truncated cone.
- Designing of a sign to reinforce hygiene regulations was applied well by the candidates, indicating a high level of technical proficiency.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

In Section A, the following traits were observed among candidates in this category:

Questions 1 to 5 of this section focuses on testing learners' abilities to state basic principles, identifying tools and materials and common processes. The following were observed in this cohort;

- Candidates managed to state the risks associated with personal safety very well. However, a good number of candidates failed to bring out the marking out tools that could be used to draw parallel lines to a true edge.

- The question on identifying electronic symbols from the given diagram was not well answered. This cohort of candidates failed to identify basic electronic symbols and later on state their uses in an electronic circuit.
- The question on glue application to surfaces was well handled by this cohort. These candidates were able to specify the type of glue suitable for joining the two given materials.
- Candidates were able to identify more than even the three sources of business ideas needed.
- However, these candidates could not understand the underlying changes brought by heat treatment processes of hardening and tempering. Question 3 sought candidates to explain the changes in case of a material being hardened only without tempering and also giving a reason for tempering.
- They also failed to mention tools that can be hardened and tempered. But they were able to mention tools which are only hardened.
- In question 4, very few candidates identified the given tool as a wire brush, file card or file brush. The question expected candidates to give specific or technical names of the tools and not general names
- Generally, this cohort stated correctly the purpose of a hole on the tool.
- This cohort answered question 5 (a) very well as expected however, for part (b) (i) they could not identify correctly the given tool as a Pincer. The majority identified it as a pair of Tongs and Pliers. They nevertheless managed to classify correctly the class of levers it belongs to - first class.

In Section B Part I, the following traits were observed among candidates in this category:

- They struggled to properly formulate the Situation and problem in the Design question, which affected the design brief in some cases.
- Some candidates only mentioned the location or place in their design brief.
- They sketched the design but failed to include necessary annotations, which affected interpretation. In some cases, the annotations were placed separately from the drawing.
- The sketches were not clear and were not proportionally drawn, making it difficult to understand the design.

- Most of them focused on outlining the personal safety attire to be considered instead of the safety of the artefact to the user.

In Section B Part II, the following traits were observed among candidates in this category:

- The candidates demonstrated limited knowledge on electric circuit diagrams and wrongly named the component asked.
- On average, most candidates managed to draw the circuit diagrams, but failed correctly arrange and present positive and negative terminals in relation to the switch.
- A significant number of candidates failed to identify the hacksaw correctly but mistook the dovetail saw for the tenon saw.
- This cohort could not identify the TEE-hinge and there could not give the correct material it is made from.
- They also failed to match the striking tools given with their specific uses, which was a key aspect of the question.

In Section B Part III, the following traits were observed among candidates in this category:

- Designing containers that could hold salt and spices had specifics that included not being cylinders. Candidates who attempted question 10 among this cohort wasted time drawing the title block and but drew sketches without maintaining proportionality or enhancing the figure with rendering.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

In Section A, the following traits were observed among candidates in this category:

- Candidates displayed limited knowledge on the tools used in the workshop, as they were unable to name them correctly, left blanks, or provided wrong answers.
- Most candidates were unable to provide satisfactory responses on naming of electrical components resulting in leaving a lot of blank pages.

- Candidates had no knowledge or lacked understanding on contact adhesives as evidenced by a lack of responses on question 2.
- Many blank pages were left on questions on drill bits and electronic circuit diagram.
- Candidates failed to identify factors to consider when designing a logo. Furthermore, those who attempted identify the Pincer could not correctly identify it and often confused it with a pair of pliers.

In Section B Part I, the following traits were observed among candidates in this category:

- The problem situation was not properly formulated.
- Candidates failed to identify the correct problem and provide an appropriate design brief to address the problem in part 6. (a) (ii)
- Most candidates did not sketch a possible solution. For those who did, their sketches were poorly presented and lacking annotations.
- Sketches were not presented in 3 dimension or pictorial form as expected.

In Section B Part II, the following traits were observed among candidates in this category:

- A significant number of candidates showed poor performance in the Design and Technology assessment, as most parts of the questions were either partially answered or answered incorrectly.
- Many of the candidates demonstrated limited or no knowledge of electrical components, leading to incorrect responses.
- Candidates struggled to correctly identify the different types of saws used in workrooms and failed to relate layout diagrams and circuit drawings.
- Candidates lacked application of materials and their properties in their responses.

In Section B Part III, the following traits were observed among candidates in this category:

- Some candidates incorrectly drew the development of the lamp shade by using parallel development instead of the radial method.

- Poor drawing skills were exhibited, with sketches being of poor quality and lacking proper rendering.

Recommendations

i. Candidates should be encouraged to annotate and enhance their sketches, even for exercises given in class, to improve their presentation and clarity.

ii. The full range of tools and material processes should be covered, emphasizing correct sequences. This will give candidates a wider choice of questions to select from.

iii. Regular sketching practice exercises should be included to improve candidates' sketching skills.

iv. Application-based questions should be encouraged in topics such as development to help candidates develop problem-solving skills.

v. Candidates should be given orientation on how to answer design questions, including how to develop an appropriate design brief.

3.5.3. Fashion and Fabrics (6050)

The Grade 12 Fashion and Fabrics assessment is designed to evaluate candidates' comprehension, proficiency, and values in alignment with the syllabus. It specifically assesses candidates' knowledge and understanding of tools, equipment, sewing machines, stitches, and design processes in Fashion and Fabrics. Furthermore, it evaluates candidates' ability to apply skills in principles, practices, handling, care, construction, and specification of various fabrics, along with utilizing knowledge, resources, and skills to generate income and execute entrepreneurship projects.

Analysis of Performance

Fashion and Fabrics has two papers: Paper 1 (theory, 100 marks) and Paper 2 (SBA, 100 marks). The total raw score is 200, which is scaled to 100 percent. The average score in 2023 was 67.5 percent, which rose by 5.3 percent from 62.18 percent in 2022. Candidates did better in the SBA (85.29%) than in the theory paper (49.78%). The performance in 2023 was better than in 2022.

General observations

In Question 1, Section B, candidates were tasked with drafting a pattern for a boy's 'Jac' shirt based on provided measurements and plotting five pattern markings. However, many candidates struggled to integrate the measurements into the draft, and some couldn't conceptualize the 'Jac' shirt design. Furthermore, candidates faced challenges aligning measurements with the sketch and producing the expected draft, with only a few presenting sketches, albeit inaccurately aligned with the given measurements. Additionally, pattern markings were often incorrectly plotted or drawn separately from the draft.

In Question 4 (b & c), Section C, candidates were asked to outline the production of linen from raw materials to fabric and draw and label features of woven fabrics. However, this question was unpopular, and those who attempted it failed to logically outline the linen production process or accurately draw woven fabric features. Many diagrams presented were unclear and did not meet question requirements, with most candidates leaving part 4 (c) unanswered.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Presented responses legibly with minimal spelling errors.
- Demonstrated a deep understanding of Fashion and Fabrics terminology.
- Organized responses logically, particularly evident in questions like 4(b) regarding Linen production.
- Provided concise and relevant responses tailored to question requirements.
- Selected questions in Section C that matched their expertise.
- Explained responses clearly and understandably.
- Interpreted drafting instructions accurately in Section B, producing neat sketches with correct pattern markings.
- Presented responses neatly and comprehensively, addressing all questions without omission.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Presented work with fair neatness but with some untidy handwriting and cancellations.
- Demonstrated limited vocabulary, especially evident in explanations required in Section C.
- Handled questions in Section A better than those in Section C.
- Struggled with diagram-based questions, such as Section B Question 1 and Section C Question 4(c).
- Faced challenges in translating acquired knowledge into practical applications, exemplified in Section B Question 1.
- Failed to align and plot given measurements onto sketches accurately.
- Left blank spaces, especially in multi-part questions in Section C, lacking comprehensive responses.
- Had difficulties with questions requiring procedural outlines.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Provided incomplete responses, leaving some questions unanswered.
- Encountered vocabulary limitations, particularly in Section C.
- Did not meet the required number of option questions in Section C.
- Offered answers out of context, indicating a lack of subject knowledge.
- Copied questions from the paper and presented them as responses.
- Provided insufficiently detailed responses.
- Performed poorly in Section B, failing to interpret instructions for paper pattern drafting and produce expected 'Jac' shirt sketches with pattern markings.

Recommendations

3.5.4. Food and Nutrition (6065)

The purpose of Grade 12 Food and Nutrition assessment is to measure candidates' level of knowledge and understanding, application of skills and problem solving acquired in the study of Food and Nutrition, in order to promote a self-sustained livelihood.

The quality of the 2023 Food and Nutrition question paper was at the same level of difficulty as the previous year, 2022. The level of difficulty was spread across all the levels of Bloom's Taxonomy and guided by the Assessment objectives as outlined in the Examination syllabus.

Analysis of Performance

Food and Nutrition consists of Papers 1 (theory) marked out 100 and Paper 2 (School-Based Assessment) marked out of 150. The two papers are marked at a total raw score of 250, which is weighted at 100 percent. The mean score in 2023 was 66.16 percent, which showed a slight drop of 3.85 percentage points from the previous year's mean score of 70 percent. Candidates performed better in the School-Based Assessment, with an average score of 88.74 percent, compared to 43.69 percent in the theory paper. Overall candidates' performance dropped in 2023 compared to 2022.

General observations

In Question 11, Section A, candidates struggled with identifying symptoms of milk intolerance, including some high performers. Many candidates were unable to distinguish between symptoms and signs, resulting in interchange of the terms and providing responses for signs instead of symptoms.

Question 4(d) in Section B, which required an explanation of the principle behind osmosis in food preservation, was unpopular among average and low performers. Those who attempted it failed to provide the detailed explanation necessary to earn marks.

Question 2(a & b) asked candidates to identify macro nutrients and explain the main function of Vitamin K. Despite being recall questions, some candidates couldn't name macro nutrients, and most struggled to explain Vitamin K's main function.

In Question 3(c) of Section A, candidates were asked to explain the role of hydrochloric acid in digestion. However, many candidates didn't grasp the term or its role in digestion, leading them to skip this part of the question

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Candidates presented the responses neatly with good command of English as they communicated their responses clearly on questions that required explanation and the subject matter which made it easier to understand their responses.
- Ability to distinguish terminologies comprehensively with examples, a good sign of profound comprehension of the subject matter as opposed to memorisation.
- Appropriate interpretation of questions and precise responses in accordance to question requirements.
- Well thought-out explanations on questions of scientific concepts gave candidates high marks. Questions such as 3 (c) in Section A on the role of hydrochloric acid during digestion, question 1 in section A, on definitions of malnutrition and nutrients were well presented to the point.
- Candidates exhibited critical thinking skills on questions that required proper analysis to arrive at the required response. Question 5(b) in section A for example, required candidates to plan a mid-day meal for a toddler. Despite diverse responses, candidates planned well balanced meals suitable for a toddler.
- Candidates also displayed analytical skills as they analysed the dietary needs of a toddler, then synthesising the choice of dishes by balancing the whole meal in aspects of colour, texture and nutritional value.
- Overall, candidates in this category had good mastery of the subject and applied theory leant to suit the needs of the question.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Candidates performed better in section A that required definitions and short answer responses than in section B which had 'build-on' questions.
- Candidates had challenges answering questions that were derived from topics in Grade 10. Questions such as, 3 in section B on meal planning, heat transfer during roasting and baking and first aid were poorly answered.
- Difficulties in explaining science–related questions, the case of question 2 in section A on macro nutrients, functions of vitamin K and question 3 on

functions of the stomach and the role of hydrochloric acid in digestion. Most candidates skipped these questions altogether.

- Candidates managed to differentiate terms such as consumer and producer; soup and stock but lacked the skill of using contrasting words or phrases (e.g. while… whereas…. On the other hand…).
- Candidates availed scanty responses without detail of full information required to award full marks. For example, question 4(d) in section B which required candidates to explain the principle behind osmosis in food preservation was poorly answered because candidates' responses did not get to detail.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Inability to understand the requirements of the question due to poor command of English as was the case with question 11, section A where candidates gave signs of milk intolerance instead of symptoms.
- Failure to express themselves fully due to limited vocabulary and knowledge of the subject matter. Most candidates left blank spaces, unanswered questions.
- Failure to construct meaningful sentences where questions required explanations of concepts such as in section A, question 19 on the definition of self-reliance.
- Candidates failed to respond to question that required analytical reasoning to justify given facts. Questions such as 5 (e) on the importance of sweets and puddings in a diet; question 4 (b) on the reasons why meat is easily contaminated.
- Failure to attempt the required number of questions in section B and also failing to complete all parts of the question. Candidates answered questions in parts for example, two out of five parts would be answered, and the three parts would be left blank leading to loss of marks.

Recommendations

3.5.5. Home Management (6075)

The purpose of Grade 12 Home Management assessment is to measure candidates' knowledge and understanding and application of skills in both home setup and hospitality industry.

The quality of the 2023 Home Management question paper was similar that of the 2022 examination paper. The level of difficulty was spread across all the levels of Bloom's Taxonomy and guided by the Assessment objectives as outlined in the Examination syllabus.

Analysis of Performance

Home Management consists of Papers 1 and 2. Paper 1, which covers theory, is centrally set by ECZ, while Paper 2, which is the School-Based Assessment, is set and graded by teachers within their respective schools. In 2023, the overall mean performance in Home Management dropped from 66.42 percent in 2022 to 57.8 percent in 2023 indicating a drop of 8.62 percent.

Candidates performed better in School-Based Assessment, with an average score of 82.5 percent, compared to 33.6 percent in the theory paper. Overall candidates' performance dropped in 2023 compared to 2022.

General observations

In Section A, Question 5 asked candidates to mention two ways of caring for curtains. However, many candidates responded with uses of curtains instead of care methods, likely due to misunderstanding or non-syllabus coverage.

In Section A, Question 19 tasked candidates with identifying facilities found in the hospitality industry. Despite the clarity of the question, candidates listed facilities related to hospitals, indicating a lack of understanding or non-syllabus coverage.

In Section B, Question 5 (a) required candidates to explain terms like supermarket, hypermarket, and open market in line with comparative shopping. Candidates from rural schools found the question challenging, resulting in low marks. They struggled to define market types and highlight characteristics of hypermarkets or disadvantages of supermarkets, reflecting limited knowledge possibly due to non-syllabus coverage or

lack of exposure to such markets. Additionally, failure to relate theory to local markets might have contributed to the difficulties faced.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Candidates had a good coverage of responses in both Sections A and B.
- They thoroughly addressed all parts of the selected questions in section B without leaving blank spaces.
- The work was neatly presented, correctly numbered with corresponding number of points required for each question.
- Candidates exhibited the ability to interpret questions with accuracy and relevance to the question requirements.
- Candidates presented their responses in well-constructed sentences, with clear explanations that were easy to understand.
- Questions that required an application level of understanding were well handled with sufficient option responses that fitted well in the question requirements. A good example was question 3 (d) that required candidates to plan a lacto-vegetarian dinner for two. Despite the variety of responses presented, the responses fitted in the needs of lacto-vegetarians.
- Candidates presented clear and straight-to-the point responses.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Candidates failed to answer the expected number of questions. For example, out of the expected three, some candidates answered only two or left a lot of blank spaces.
- The responses lacked detail or understanding of the subject matter. This was exhibited by limited explanations of some concepts and definitions such as question 8 and 17 in Section A on Biological detergents and Consumer studies respectively.

- Candidates were unable to attempt all parts of the selected questions, a common case in Section B. low order questions were well handled than the higher order questions that required detailed explanations.
- Candidates lacked organization and clarity in response presented. This was exhibited in questions that required logical ordering or sequencing of responses (e.g. question 4 (a) in Section A which required a step-by-step response on how to remove a blood stain on a white shirt). Responses were jumbled up or skipped altogether.
- Candidates performed better on topics that bordered on activities that candidates are usually engaged in. Questions such as 3 and 4 in Section A, on the importance of daily cleaning and types of toilets respectively were correctly answered in comparison to question 5 in Section B which asked about supermarkets, hypermarkets and open market.
- Despite being exposed to the same syllabus, candidates from rural schools did not perform well as did their urban counterparts on questions that bordered on labour-saving devices and hospitality, likely due to limited physical exposure.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Candidates had challenges in expressing themselves comprehensibly, likely due to limited vocabulary and grammatical skills.
- Candidates in this category left a lot of blank spaces and, hanging sentences and incomplete part-questions, the case in Section B.
- Candidates presented irrelevant responses that had no link to the needs of the question.
- Some candidates presented questions copied from the question paper as responses.
- Candidates missed the meaning of the question requirements and gave wayward responses, a sign of lack of comprehension and interpretation of questions.
- Bad handwriting and a lot of cancellations on the work was also commonly exhibited.

- Some candidates presented repetitive responses across various questions that did not even apply to the question, likely due to insufficient knowledge.

Recommendations

1. Failure to answer all parts of questions, leaving blank spaces:

    - Provide guidance on time management during examinations to prevent candidates from running out of time.
    - Offer proper guidance on selecting option questions to ensure candidates choose questions they are most familiar with. Encourage candidates to analyse all part-questions before deciding.
    - Encourage candidates to attempt all parts of questions to minimize loss of marks. Ensure coverage of all learning outcomes outlined in the syllabus, rather than focusing on specific areas of interest.
    - Make lessons more learner-cantered by engaging students in practical aspects of topics, fostering ownership and mastery of the subject rather than memorization.

2. Poor interpretation of instructions and questions:

    - Encourage candidates not to rush through questions but to take time to understand requirements to avoid missing the point.
    - Emphasize the importance of following instructions in each section of the examination, including selecting the correct number of questions and addressing all parts.
    - Teachers of Fashion and Fabrics should enhance skills in drafting pattern pieces to improve candidates' performance in Section B, preventing loss of marks due to misinterpretation and failure to follow instructions.

3. Failure to respond to science-oriented questions:

    - Leverage science-oriented topics covered in subjects like Biology to advantage candidates.
    - Adopt teaching methods that aid candidates in retaining information.

- Present topics such as Digestion, Absorption, Metabolism, and the chemistry of food in Food and Nutrition with simplicity and clarity aligned with syllabus learning outcomes.

3.5.6. Musical Arts Education (6020)

The assessment of candidates in Musical Arts Education aims to emphasize critical listening skills while also focusing on compositional skills, generating musical ideas, and arranging and harmonizing music.

Analysis of Performance

In 2023, there was a noticeable decline in candidates' performance compared to 2022, with a 3.89 percentage point decrease in the mean score from 50.77 percent to 46.88 percent. Male candidates outperformed female candidates by 0.22 points. Candidates demonstrated stronger understanding in topics such as Texture, Melodic organization, Harmony, Pitch, and Musical Arts and society. However, average performance was observed in Voice, Musical instruments, Musical Arts and Entrepreneurship, and Modulation. Topics like Analysis and Melodic organization showed lower performance levels.

General observations

The candidates' work had several challenges, such as: inaccurate and untidy presentation, spelling errors, difficulty in composing with lyrics, and poor interpretation of musical terms. These challenges reflected their low quality, clarity, attention, language, creativity, musical skills, and knowledge.

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Displayed clear understanding of different musical terms.
- Displayed correctness of answers.
- Displayed neatness and preciseness in their presentation of work.
- Applied good composition skills.
- Were able to analyse the musical scores.
- Described intervals correctly.
- Composed melodies of about 8 to 12 bars; and

- Translated written melodies into audio presentations.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- They were able to describe "meter" but not fully. In the analysis of music score, they left some questions unanswered. Although some could identify tone colors, the majority in this category could not.
- They were able to interpret some parts of the musical score.
- They were able to identify "modulation" but failed to state its relative minor.
- They applied the prerequisites to some topics correctly, but not to all.
- Demonstrated skills in condensing the excerpt in some instruments.
- They identified chords correctly but not accurately placing them.
- The presentation of the work was not very good.
- Lack of mastery of all the concepts in test 3 was observed.
- Could not interpret the musical score in test 11 correctly.
- Could apply two-part harmony principles but had problems with four-part harmony.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Difficulties in composing, for example in test 8 where candidates failed to place notes with correct syllables.
- Difficulty in transcribing a melody.
- Failure to analyze the given musical score.
- Failed to compose a music piece.
- Failed to translate audio into written music.
- Presentation of work was not clear; and

Difficulties in matching the audio music and the one on the script.

Recommendations

- Teachers should prepare candidates adequately in transcribing melody.
- Teachers should teach note syllable matching adequately in composing.

- Teachers in schools should avoid sending plagiarized composition as projects for their candidates; and
- Practical tasks should be given to learners frequently to enhance their understanding of practical work.

3.5.7. Physical Education (6080)

The purpose of assessing candidates in Physical Education is to measure Physical Education and Spot knowledge skills and values. The assessment will also serve the purpose of certification and placement.

Analysis of Performance

The candidate's performance in 2023 (51.06%) dropped by 4.6 points from 55.66 percent in 2022. Candidates did better in School Based Assessment than in practical. They performed well on topics like recreational games and activities, Entrepreneurship in sports, Physical fitness, First Aid, Swimming, Nutrition, Gymnastics, and Orienteering. They performed averagely on topics like Anatomy and Physiology, and Biomechanics. They performed poorly on topics like Sports Skills Development, Organization and Management of games and sports events.

General observations

Characteristics of Candidates

i. High Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Strong understanding of the questions, resulting in clear and concise language.
- Adequate and thorough answering of all questions in all sections, with a logical presentation of work and good language expression.
- Correctly answered most of the questions in **section A**.
- Wrote the answers neatly; and
- Followed instructions and exhibited thoughtfulness.

ii. Average Performing Candidates

The candidates in this category demonstrated the following characteristics:

- Some candidates were unable to analyze the table in **question 5** in **section** C, which required the candidates to analyze the FAZ tournament table.
- Candidates failed to answer some of the questions correctly which they attempted, for example in question **6, section B,** where some wrote examples of traditional games, instead of the categories of traditional games.

iii. Low Performing Candidates

The candidates in this category demonstrated the following characteristics:

- The candidates in this group failed to answer any question in Section B.
- Candidates failed to come out on how skills acquired from participating in games have helped in understanding crosscutting issues.
- In question 2 of section C, candidates failed to come out on the events that occur at the onset of puberty.
- Candidates wrote examples of traditional games instead of writing the categories of traditional games.
- Candidates had Incomplete work in sections B and C.

Recommendations

- Teachers should prepare candidates adequately in ball games activities.
- Practical tasks should be given to learners frequently to enhance understanding of practical work.
- Practical work should be incorporated into the teaching in a way that complements theoretical learning.
- Teachers are advised to discourage learners from writing in bullet form; and
- Learners should be encouraged to explain key concepts clearly and in full.

4.0. Candidates with Special Educational Needs

4.1. Candidature by Category of Special Educational Needs

4.1.1. In 2023, a total of 335 candidates with special educational needs (SEN) registered for the School Certificate examination. Among them, 149 (44.48%) were girls, while 186 (55.52%) were boys.

4.1.2. Of the 335 registered candidates, 331 (98.80%) sat for the examination, with 4 candidates, comprising 2 girls and 2 boys, being absent.

4.1.3. Among the candidates who sat for the exam, 6 (1.81%) were autistic, 154 (46.53%) had hearing impairment, 26 (7.85%) had intellectual impairment, 69 (20.85%) had visual impairment, and 76 (22.96%) had physical challenges.

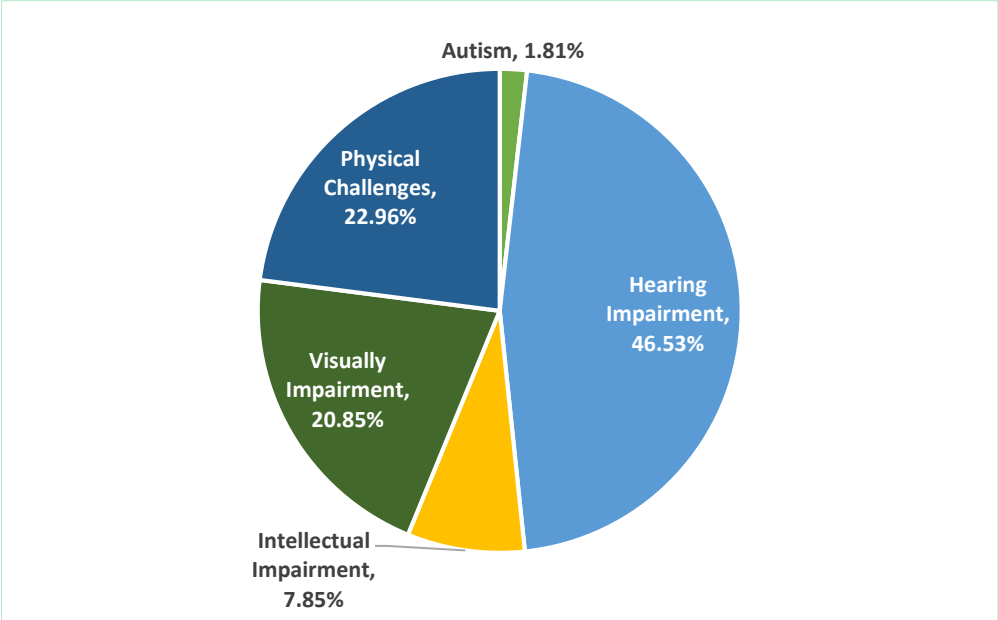


Figure 8: Candidature by Category of Special Educational Needs

4.1.4. Among those who sat for the examination, 179 candidates (54.08%) obtained a School Certificate.

4.2. Performance Analysis by Subject

4.3. Characteristics of Candidates with Special Educational Needs

i. High Performing Candidates

- The learners had a good understanding of examination questions and interpretation.
- learners were able to follow instruction.
- Produced sufficient points for the demands of the questions.

ii. Average/Low Performing Candidates

- Learners displayed poor writing skills.
- Learners displayed failure to logically present work.
- Learners spelt words inaccurately.
- The majority of the learners failed to follow question instructions.
- Illegible handwriting though caused by the impairments.
- Answers written in Sign Language English

- Struggle to understand questions.
- Failure to complete work

4.4. Recommendations

- Teach appropriate examination tactics.
- learners should be taught how to write essays in the correct manner.
- Investigate why some candidates were not able to finish their work.
- ECZ to modify questions according to the needs of candidates.
- The syllabus needs be covered widely in all taught subjects.
- Advise candidates to take appropriate subjects compatible to their needs.
- Ministry of Education needs to allow Candidates with educational impairments to write examinations only when they are ready to do so in order to reduce failure rate and encourage repeating.

5.0. Conclusion

The 2023 School Certificate examination saw a 30.88 percent increase in registered candidates compared to 2022. Despite a slight rise in absenteeism to 1.86 percent, there was a 1.26 percentage point decrease in the proportion of candidates obtaining a school certificate. Understanding the reasons behind this decline is crucial for developing effective solutions, especially considering the lingering effects of the 2021 COVID-19 pandemic and subsequent school closures. Addressing challenges faced by average and low-performing candidates across subjects requires proactive mitigation measures.

While there has been a significant reduction in the variety of malpractice cases across all levels in the 2023 examinations, instances of assistance, particularly at whole centres, are rising. Heightened vigilance is necessary to address smuggling and cell phone usage during examinations. The Examinations Council of Zambia urges all stakeholders to engage in combating malpractice through learner, parent, teacher, and public sensitization. Suspected cases should be reported promptly to the Council or the Ministry of Education, with criminal cases reported to the nearest police station. The new ECZ Act of 2023, with stringent penalties for malpractice, aims to significantly reduce such incidents.