

COMPARATIVE ANALYSIS OF SEMESTER - I RESULT USING SPSS 2079



## Introduction

This report provides the results of the comparative analysis of First Semester Evaluation of the academic year 2079 B.S. This report does not provide information regarding the causes of increase or decrease in marks of the term wise evaluations.

Analyses were based on the marks obtained by the students out of 100 marks in each subject, i.e. percentage secured. The total 100 marks comprises Examination (Theory + Practical, or Theory wherever applicable) + Continuous Assessment System (CAS) marks. Evaluation of any subject was adjusted to 100 marks even if it was of less than 100 marks.

## Methods

## Data

The data were obtained from mark sheet ledgers:

- DSS - Marksheet Ledger First Semester Exam - 2079

Referred by the Examination Committee Coordinator: Mrs. Ruby Labh.

## Data Entry and Analysis

Data entry and statistical analyses were performed using the 'Statistical Package for the Social Science' (SPSS) Software (IBM, New York, US). Average marks obtained were compared by a statistical test (t-test). To compare the results, following hypotheses were set and tested:

## Lower School (Grade I - III):

Null Hypothesis $\left(H_{0}\right)$ : There is no significant difference in the performance between First Semester Evaluation and Test Score 80, i.e. $\mu F=\mu S$

Alternate Hypothesis $\left(H_{l}\right):$ There is a significant difference in performance between First Semester Evaluation and Test Score 80, i.e. $\mu F \neq \mu S$

## Middle School (Grade IV - VIII):

Null Hypothesis $\left(H_{0}\right)$ : There is no significant difference in the performance between First Semester Evaluation and Test Score 70, i.e. $\mu F=\mu S$

Alternate Hypothesis $\left(H_{L}\right):$ There is a significant difference in performance between First Semester Evaluation and Test Score 70, i.e. $\mu F \neq \mu S$

## High School (Grade IX - XII):

Null Hypothesis $\left(H_{0}\right)$ : There is no significant difference in the performance between First Semester Evaluation and Test Score 65, i.e. $\mu F=\mu S$

Alternate Hypothesis $\left(H_{l}\right):$ There is a significant difference in performance between First Semester Evaluation and Test Score 65, i.e. $\mu F \neq \mu S$

Level of Significance: The level of significance is defined as the probability (p) of rejecting a null hypothesis by the test when it is really true, which is denoted as $\alpha$. A p-value of $<=0.05$ is widely considered to be a statistically significant result. That is, $p$ (Type I error) $=\alpha$. Type I error is the rejection of a true null hypothesis (also known as a "false positive" finding). Type II error is failing to reject a false null hypothesis (also known as a "false negative" finding).

## Results

Results were provided Grade-wise or section-wise if applicable.

## Grade I-Kanchenjunga

The evaluation was based on 19 students. The table below provides Mean and Median marks obtained by Grade I - Kanchenjunga students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 80 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | $\mathbf{P}$-Value |  |
| Nepali | 80.8 | 80.44 | 0.74 | In the first semester, $50 \%$ of Grade I - Kanchenjunga students scored $>80.44$ in Nepali. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| English | 84.6 | 86.74 | 0.02 | In the first semester, $50 \%$ of Grade I - Kanchenjunga students scored $>86.74$ in English. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Mathematics | 91.1 | 92.7 | 0.00 | In the first semester, $50 \%$ of Grade I - Kanchenjunga students scored $>92.69$ in Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Science | 83.7 | 86.87 | 0.08 | In the first semester, $50 \%$ of Grade I - Kanchenjunga students scored $>86.87$ in Science. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Hamro Serofero | 86.9 | 89.21 | 0.00 | In the first semester, $50 \%$ of Grade I - Kanchenjunga students scored $>89.21$ in Hamro Serofero. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Sanskrit | 80.6 | 79.25 | 0.66 | In the first semester, $50 \%$ of Grade I - Kanchenjunga students scored $>79.25$ in Sanskrit. Since p $>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Coding |  |  |  |  |


|  |  |  |  | In the first semester, $50 \%$ of Grade I - Kanchenjunga <br> students scored $>67.92$ in Reading Book - English. Since <br> Reading Book - <br> English |
| :--- | :--- | :--- | :--- | :--- |
| test we fail to retain null hypothesis and conclude that |  |  |  |  |
| tifferent. There is significant decrease. |  |  |  |  |

## In Semester I

- Average marks significantly increased in English, Mathematics, Hamro Serofero, General Sports, Visual Arts, and Yog and Meditation. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Dance, ITF, Music, Reading Book - Nepali, and Reading Book - English ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade I - Kanchenjunga students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in English, Mathematics, Science, Hamro Serofero, General Sports, Visual Arts and Yoga and Meditation as compared to
test scores. However, the marks have declined noticeably in ITF, Music, Reading Book - Nepali, and Reading Book - English.

## Grade I - Lhotse

The evaluation was based on 18 students. The table below provides Mean and Median marks obtained by Grade I-Lhotse students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 80 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :--- | :---: | :---: | :---: | :--- |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Coding | 76.2 | 76.54 | 0.00 | In the first semester, $50 \%$ of Grade I - Lhotse students <br> scored $>76.54$ in Coding. Since $\mathrm{p}<\alpha$, we fail to retain null <br> hypothesis and conclude that test score and first semester <br> results are significantly different. There is significant <br> decrease. |
| Dance | 79.5 | 79.75 | 0.53 | In the first semester, $50 \%$ of Grade I - Lhotse students <br> scored $>79.75$ in Dance. Since p $>\alpha$, we retain null <br> hypothesis and conclude that test score and first semester <br> results are not significantly different. |
| General Sports | 87.6 | 87.60 | 0.00 | In the first semester, $50 \%$ of Grade I - Lhotse students <br> scored $>87.6$ in General Sports. Since p $<\alpha$, we fail to <br> retain null hypothesis and conclude that test score and first |
| semester results are significantly different. There is |  |  |  |  |
| significant increase. |  |  |  |  |


|  |  |  |  | In the first semester, $50 \%$ of Grade I - Lhotse students <br> scored $>73.42$ in Reading Book - English. Since $\mathrm{p}<\alpha$, we <br> Reading Book - <br> English |
| :--- | :--- | :--- | :--- | :--- |
| fail to retain null hypothesis and conclude that test score |  |  |  |  |
| and first semester results are significantly different. There |  |  |  |  |
| is significant decrease. |  |  |  |  |

## In Semester I

- Average marks significantly increased in English, Mathematics, General Sports, Visual Arts, and Yog and Meditation ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Coding, ITF, Music, Reading Book - Nepali, and Reading Book - English ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade I - Lhotse students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in Nepali, English, Mathematics, General Sports, Visual Arts, and Yog and Meditation as compared to test scores. However, the marks have declined noticeably in Coding, ITF, Music, Reading Book - Nepali, and Reading Book - English.

## Grade II - Makalu

The evaluation was based on 24 students. The table below provides Mean and Median marks obtained by Grade II - Makalu students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 80 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | $\mathbf{P}$-Value |  |
| Nepali | 78.3 | 80.47 | 0.41 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>80.47$ in Nepali. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| English | 76.4 | 77.12 | 0.02 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>77.12$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Mathematics | 87.9 | 88.7 | 0.00 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>88.71$ in Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Science | 81.7 | 83.52 | 0.34 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>83.52$ in Science. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Hamro Serofero | 84.4 | 84.18 | 0.00 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>84.18$ in Hamro Serofero. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Sanskrit | 78.7 | 78.93 | 0.44 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>78.93$ in Sanskrit. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Coding | 75.6 | 75.88 | 0.01 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>75.88$ in Coding. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |


| Dance | 78.6 | 78.30 | 0.01 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>78.3$ in Dance. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| :---: | :---: | :---: | :---: | :---: |
| General Sports | 94.7 | 94.50 | 0.00 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>94.5$ in General Sports. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| ITF | 71.8 | 71.30 | 0.00 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>71.3$ in ITF. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Music | 77.0 | 77.00 | 0.08 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>77$ in Music. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Theater | 80.8 | 81.41 | 0.25 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>81.41$ in Theater. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Visual Arts | 82.4 | 83.30 | 0.05 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>83.3$ in Visual Arts. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Yog and Meditation | 93.8 | 94.30 | 0.00 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>94.3$ in Yog and Meditation. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Reading Book - <br> Nepali | 72.3 | 68.30 | 0.01 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>68.3$ in Reading Book - Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Reading Book - <br> English | 71.4 | 70.70 | 0.00 | In the first semester, $50 \%$ of Grade II - Makalu students scored $>70.7$ in Reading Book - English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |

- Average marks significantly increased in Maths, Hamro Serofero, General Sports, Visual Arts, and Yog and Meditation ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in English, Coding, Dance, ITF, Reading Book - Nepali, and Reading Book - English(p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph depicts the average marks of different subjects obtained by Grade II- Makalu students in Semester I. Overall, there is an upward trend in average marks obtained by students in Maths, Hamro Serofero, General Sports, Visual Arts, and Yoga and Meditation However, the marks have declined noticeably in English, Coding, Dance, ITF, Reading Book - Nepali, and Reading Book - English. The Grade II - Makalu students have shown satisfactory performance in Semester I.

## Grade II - Cho Oyo

The evaluation was based on 24 students. The table below provides Mean and Median marks obtained by Grade II - Cho Oyu students in different subjects, including performing arts and reading book tests.

Furthermore, the marks obtained were compared with the test score 80 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :--- | :---: | :---: | :---: | :--- |


| General Sports |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in Maths, Nepali, General Sports, Theater, and Yog and Meditation ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in English, and ITF (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade II - Cho Oyu students in Semester I. Compared to test scores, there is an upward trend in average marks obtained by students in Maths, Nepali, General Sports, Theater, and Yog and Meditation. However, there is a sharp decline in average marks in few subjects such as English, and ITF.

## Grade III - Dhaulagiri

The evaluation was based on 21 students. The table below provides Mean and Median marks obtained by Grade III - Dhaulagiri students in different subjects, including performing arts and reading book tests.
Furthermore, the marks obtained were compared with the test score 80, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | P-Value |  |
| Nepali | 80.2 | 80.40 | 0.95 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>80.4$ in Nepali. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| English | 82.4 | 84.50 | 0.14 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>84.5$ in English. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Mathematics | 91.3 | 90.8 | 0.00 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>90.8$ in Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Science | 80.8 | 80.50 | 0.67 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>80.5$ in Science. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Hamro Serofero | 79.4 | 78.30 | 0.81 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>78.3$ in Hamro Serofero. Since p>a, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Sanskrit | 79.0 | 79.20 | 0.52 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>79.2$ in Sanskrit. Since p $>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Coding | 79.6 | 79.10 | 0.65 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>79.1$ in Coding. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Dance | 80.0 | 80.20 | 0.95 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>80.2$ in Dance. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |


| General Sports | 95.6 | 95.20 | 0.00 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>95.2$ in General Sports. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| :---: | :---: | :---: | :---: | :---: |
| ITF | 63.1 | 62.60 | 0.00 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>62.6$ in ITF. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Music | 79.6 | 78.00 | 0.82 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>78$ in Music. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Theater | 82.2 | 81.80 | 0.02 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>81.8$ in Theater. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Visual Arts | 84.5 | 83.20 | 0.00 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>83.2$ in Visual Arts. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Yog and Meditation | 95.3 | 96.80 | 0.00 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>96.8$ in Yog and Meditation. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Reading Book Nepali | 79.3 | 79.00 | 0.72 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>79$ in Reading Book - Nepali. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Reading Book English | 76.2 | 76.50 | 0.11 | In the first semester, $50 \%$ of Grade III - Dhaulagiri students scored $>76.5$ in Reading Book - English. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |

## In Semester I

- Average marks significantly increased in Mathematics, General Sports, Theater, Visual Arts, Yog and Meditation ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in ITF(p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade III - Dhaulagiri students in Semester I. Overall, there is an increasing trend in average marks obtained by students in Semester I. The average marks substantially increased in Mathematics, General Sports, Theater, Visual Arts, Yog and Meditation except in ITF.

The evaluation was based on 22 students. The table below provides Mean and Median marks obtained by Grade III - Manaslu students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 80 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | P-Value |  |
| Nepali | 74.1 | 75.50 | 0.10 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>75.5$ in Nepali. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| English | 80.2 | 81.20 | 0.94 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>81.2$ in English. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Mathematics | 80.8 | 79.3 | 0.78 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>79.3$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Science | 78.2 | 76.85 | 0.56 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>76.85$ in Science. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Hamro Serofero | 77.0 | 76.95 | 0.38 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>76.95$ in Hamro Serofero. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Sanskrit | 77.8 | 76.20 | 0.28 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>76.2$ in Sanskrit. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Coding | 75.0 | 75.65 | 0.03 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>75.65$ in Coding. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |


| Dance | 77.2 | 80.10 | 0.31 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>80.1$ in Dance. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| :---: | :---: | :---: | :---: | :---: |
| General Sports | 96.5 | 96.20 | 0.00 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>96.2$ in General Sports. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| ITF | 61.4 | 61.50 | 0.00 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>61.5$ in ITF. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Music | 75.8 | 77.80 | 0.06 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>77.8$ in Music. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Theater | 78.4 | 78.65 | 0.19 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>78.65$ in Theater. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Visual Arts | 79.8 | 84.35 | 0.92 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>84.35$ in Visual Arts. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Yog and Meditation | 91.8 | 91.40 | 0.00 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>91.4$ in Yog and Meditation. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Reading Book Nepali | 73.0 | 73.10 | 0.03 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>73.1$ in Reading Book - Nepali. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Reading Book English | 66.6 | 64.45 | 0.00 | In the first semester, $50 \%$ of Grade III - Manaslu students scored $>64.45$ in Reading Book - English. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |

## In Semester I

- Average marks significantly increased in General Sports, and Yog and Meditation ( $p<0.05$ ).
- Average marks significantly decreased in Coding, ITF, Reading Book - Nepali, and Reading Book English (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade III - Manaslu students in Semester I. The average marks substantially increased in General Sports, and Yog and Meditation. However, the marks have declined noticeably in Coding, ITF, Reading Book - Nepali, and Reading Book - English.

## Grade IV - Annapurna

The evaluation was based on 18 students. The table below provides Mean and Median marks obtained by grade IV - Annapurna students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 70, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | P-Value |  |
| Nepali | 83.3 | 84.95 | 0.00 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored $>84.95$ in Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| English | 68.1 | 69.80 | 0.34 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored $>69.8$ in English. Since p $>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Mathematics | 83.4 | 86.6 | 0.00 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored $>86.55$ in Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Science \& Technology | 78.0 | 81.20 | 0.01 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored > 81.2 in Science \& Technology. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Samajik <br> Adhyayan | 73.2 | 74.90 | 0.28 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored $>74.9$ in Samajik Adhyayan. Since p $>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Health Physical \& Creative Arts | 80.9 | 82.90 | 0.00 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored > 82.9 in Health Physical \& Creative Arts. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Sanskrit | 81.0 | 78.00 | 0.00 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored $>78$ in Sanskrit. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Coding | 79.5 | 78.70 | 0.00 | In the first semester, $50 \%$ of Grade IV - Annapurna students scored $>78.7$ in Coding. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Dance |  |  |  |  |

- Average marks significantly increased in Nepali, Mathematics, Science \& Technology, Samajik Adhyayan, Health Physical \& Creative Arts, Sanskrit, Coding, Dance, General Sports, ITF, Music, Theater, Visual Arts, Yog and meditation, Reading Book - Nepali, and Reading Book - English (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade IV - Annapurna students in Semester I. Overall, there is an increasing trend in average marks obtained by students in Semester I. The average marks substantially increased in Nepali, Mathematics, Science \& Technology, Samajik Adhyayan, Health Physical \& Creative Arts, Sanskrit, Coding, Dance, General Sports, ITF, Music, Theater, Visual Arts, Yog and meditation, and Reading Book - Nepali. However, the marks have declined in English and Reading Book - English. Compared to the test scores, the performance of students of Grade IV - Annapurna is praiseworthy in Semester I.

## Grade IV - Himalchuli

The evaluation was based on 18 students. The table below provides Mean and Median marks obtained by Grade IV - Himalchuli students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 70, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | P-Value |  |
| Nepali | 81.5 | 84.15 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>84.15$ in Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| English | 63.5 | 62.55 | 0.02 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>62.55$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Mathematics | 80.2 | 77.7 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>77.7$ in Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Science \& Technology | 74.8 | 75.05 | 0.12 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>75.05$ in Science \& Technology. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Samajik <br> Adhyayan | 67.4 | 69.00 | 0.54 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>69$ in Samajik Adhyayan. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Health Physical \& Creative Arts | 76.8 | 84.20 | 0.07 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored > 84.2 in Health Physical \& Creative Arts. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Sanskrit | 79.2 | 79.00 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>79$ in Sanskrit. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Coding | 74.6 | 76.40 | 0.09 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>76.4$ in Coding. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| :---: | :---: | :---: | :---: | :---: |
| Dance | 76.7 | 81.20 | 0.16 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>81.2$ in Dance. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| General Sports | 89.0 | 87.70 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>87.7$ in General Sports. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| ITF | 61.9 | 63.10 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>63.1$ in ITF. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Music | 75.8 | 77.20 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>77.2$ in Music. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Theater | 85.0 | 84.00 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>84$ in Theater. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Visual Arts | 84.7 | 85.30 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>85.3$ in Visual Arts. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
|  <br> Meditation | 97.8 | 100.00 | 0.00 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>100$ in Yog \& Meditation. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Reading Book - <br> Nepali | 72.7 | 76.10 | 0.57 | In the first semester, $50 \%$ of Grade IV - Himalchuli students scored $>76.1$ in Reading Book - Nepali. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |


| Reading Book - <br> English | 64.5 | 68.30 | 0.16 | In the first semester, $50 \%$ of Grade IV - Himalchuli <br> students scored $>68.3$ in Reading Book - English. Since <br> p $>\alpha$, we retain null hypothesis and conclude that test score <br> and first semester results are not significantly different. |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in Nepali, Mathematics, Science and Technology, Sanskrit, General Sports, Music, Theater, Visual Arts, and Yog and Meditation ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in English, and ITF (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade IV - Himalchuli students in Semester I. Overall, there is an increasing trend in average marks obtained by students in Semester I. The average marks substantially increased in Nepali, Mathematics, Science and Technology, Sanskrit, General Sports, Music, Theater, Visual Arts, and Yog and Meditation. However, the marks have declined in English, Samajik Adhyayan, ITF, and Reading Book - English.

## Grade V - Nuptse

The evaluation was based on 24 students. The table below provides Mean and Median marks obtained by grade V- Nuptse students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score of 70, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | $\mathbf{P}$-Value |  |
| Nepali | 68.2 | 65.60 | 0.51 | In the first semester, $50 \%$ of Grade V - Nuptse students scored $>65.6$ in Nepali. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| English | 77.6 | 77.10 | 0.00 | In the first semester, $50 \%$ of Grade V - Nuptse students scored $>77.1$ in English. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Mathematics | 62.8 | 63.7 | 0.08 | In the first semester, $50 \%$ of Grade V - Nuptse students scored $>63.7$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
|  <br> Technology | 75.8 | 74.10 | 0.02 | In the first semester, $50 \%$ of Grade V - Nuptse students scored $>74.1$ in Science \& Technology. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Social Studies | 75.7 | 75.10 | 0.03 | In the first semester, $50 \%$ of Grade V - Nuptse students scored $>75.1$ in Social Studies. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Nepal Vasa | 55.8 | 55.40 | 0.00 | In the first semester, $50 \%$ of Grade V - Nuptse students scored $>55.4$ in Nepal Vasa. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Sanskrit | 76.8 | 77.30 | 0.00 | In the first semester, $50 \%$ of Grade V - Nuptse students scored $>77.3$ in Sanskrit. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Coding |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in English, Science \& Technology, Social Studies, Sanskrit, Performing Club, Sports Club and Reading Book - English. (p<0.05).
- Average marks significantly decreased in Nepal Vasa and Reading Book - Nepali. (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).


## Average Marks of Students in a Subject



The bar graph illustrates the average marks of different subjects obtained by Grade V - Nuptse students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in English, Science \& Technology, Social Studies, Sanskrit, Performing Club, Sports Club and Reading Book - English as compared to test scores. However, the marks have declined noticeably in Nepal Vasa and Reading Book Nepali.

## Grade V - Yangra

The evaluation was based on 25 students. The table below provides Mean and Median marks obtained by grade V - Yangra students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score of 70, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |  |
| :--- | :---: | :---: | :---: | :--- | :---: |
|  | Average | Median | P-Value |  |  |
| Nepali | 70.0 | 70.10 | 0.99 | In the first semester, $50 \%$ of Grade V - Yangra students <br> scored $>70.1$ in Nepali. Since $\mathrm{p}>\alpha$, we retain null <br> hypothesis and conclude that test score and first semester <br> results are not significantly different. |  |


| English | 78.3 | 78.10 | 0.00 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>78.1$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 66.9 | 70.1 | 0.38 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>70.1$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Science \& Technology | 79.5 | 79.10 | 0.00 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>79.1$ in Science \& Technology. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Social Studies | 78.4 | 77.40 | 0.00 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>77.4$ in Social Studies. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Nepal Vasa | 67.3 | 69.80 | 0.27 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>69.8$ in Nepal Vasa. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Sanskrit | 79.4 | 79.00 | 0.00 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>79$ in Sanskrit. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Coding | 74.3 | 82.20 | 0.27 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>82.2$ in Coding. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Performing <br> Club | 77.8 | 77.40 | 0.00 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>77.4$ in Performing Club. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Sports Club | 74.6 | 73.00 | 0.02 | In the first semester, $50 \%$ of Grade V - Yangra students scored $>73$ in Sports Club. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Reading Book - <br> Nepali | 65.2 | 65.80 | 0.07 | In the first semester, $50 \%$ of Grade V - Yangra students <br> scored $>65.8$ in Reading Book - Nepali. Since p $>\alpha$, we <br> retain null hypothesis and conclude that test score and first <br> semester results are not significantly different. |
| :--- | :---: | :---: | :---: | :--- |
| Reading Book - <br> English | 78.9 | 80.60 | 0.00 | In the first semester, $50 \%$ of Grade V - Yangra students <br> scored $>80.6$ in Reading Book - English. Since $\mathrm{p}<\alpha$, we <br> fail to retain null hypothesis and conclude that test score <br> and first semester results are significantly different. There <br> is significant increase. |

## In Semester I

- Average marks significantly increased in English, Science \& Technology, Social Studies, Sanskrit, Performing Club, Sports Club and Reading Book - English. (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade V - Yangra students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in English, Science \& Technology, Social Studies, Sanskrit, Performing Club, Sports Club and Reading Book - English as compared to test scores. The average marks have dropped in subjects like Mathematics, Nepal Vasa, and Reading Book - Nepali.

## Grade VI - Kabru

The evaluation was based on 26 students. The table below provides Mean and Median marks obtained by grade VI- Kabru students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score of 70, and inference and conclusion were drawn.

| Subject | Semester I |  | Inference | Conclusion |
| :--- | :---: | :---: | :---: | :--- |


| Nepal Vasa |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in Science \& Technology, Sanskrit and Performing Arts. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Coding. ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).


## Average Marks of Students in a Subject

Semester I


The bar graph illustrates the average marks of different subjects obtained by Grade VI - Kabru students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in Science \& Technology, Sanskrit and Performing Arts as compared to test scores. However, the marks have declined sharply in Coding. There is a slight decrease in average marks in Nepali, English, Mathematics, Samajik Adhyayan, and Nepal Vasa.

## Grade VI - Chamlang

The evaluation was based on 26 students. The table below provides Mean and Median marks obtained by grade VI- Chamlang students in different subjects, including performing arts and reading book tests.
Furthermore, the marks obtained were compared with the test score of 70, and inference and conclusion were drawn.

| Subject | Semester I |  | Inference | Conclusion |  |
| :--- | :---: | :---: | :---: | :--- | :---: |
|  | Average | Median | P-Value |  |  |
| Nepali | 68.3 | 71.43 | 0.51 | In the first semester, $50 \%$ of Grade VI - Chamlang <br> students scored $>71.43$ in Nepali. Since $\mathrm{p}>\alpha$, we retain <br> null hypothesis and conclude that test score and first <br> semester results are not significantly different. |  |


| English | 70.3 | 70.75 | 0.90 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>70.75$ in English. Since p $>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 63.2 | 63.1 | 0.07 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>63.08$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Science \& Technology | 77.5 | 80.60 | 0.01 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored > 80.6 in Science \& Technology. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Samajik <br> Adhyayan | 66.6 | 64.78 | 0.16 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>64.78$ in Samajik Adhyayan. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Health Physical \& Creative Arts | 72.5 | 74.35 | 0.39 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored > 74.35 in Health Physical \& Creative Arts. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Nepal Vasa | 64.5 | 66.80 | 0.07 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>66.8$ in Nepal Vasa. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Sanskrit | 79.8 | 82.60 | 0.00 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>82.6$ in Sanskrit. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Coding | 57.6 | 52.00 | 0.01 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>52$ in Coding. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Performing Arts | 84.6 | 84.00 | 0.00 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>84$ in Performing Arts. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Sports Club | 71.2 | 70.00 | 0.33 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored $>70$ in Sports Club. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| :---: | :---: | :---: | :---: | :---: |
| Reading Book - <br> Nepali | 74.2 | 73.37 | 0.08 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored > 73.37 in Reading Book - Nepali. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Reading Book English | 69.8 | 71.00 | 0.94 | In the first semester, $50 \%$ of Grade VI - Chamlang students scored > 71 in Reading Book - English. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |

## In Semester I

- Average marks significantly increased in Science \& Technology, Sanskrit and Performing Arts. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Coding. ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade VI - Chamlang students in Semester I. The graph represents that there is an upward trend in average marks obtained by students in Science \& Technology, Sanskrit and Performing Arts as compared to test scores. However, the marks have declined distinctly in Coding, and Mathematics.

## Grade VII - Pumori

The evaluation was based on 24 students. The table below provides Mean and Median marks obtained by grade VII - Pumori students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score of 70, and inference and conclusion were drawn.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | $P$-Value |  |
| Nepali | 69.9 | 71.44 | 0.98 | In the first semester, $50 \%$ of Grade VII - Pumori students scored $>71.44$ in Nepali. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| English | 76.2 | 77.25 | 0.01 | In the first semester, $50 \%$ of Grade VII - Pumori students scored $>77.25$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Mathematics | 74.1 | 74.8 | 0.17 | In the first semester, 50\% of Grade VII - Pumori students scored $>74.75$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
|  <br> Technology | 79.2 | 81.68 | 0.00 | In the first semester, $50 \%$ of Grade VII - Pumori students scored $>81.68$ in Science \& Technology. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Samajik <br> Adhyayan | 70.1 | 69.50 | 0.97 | In the first semester, $50 \%$ of Grade VII - Pumori students scored $>69.5$ in Samajik Adhyayan. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Health Physical \& Creative Arts | 76.3 | 79.65 | 0.03 | In the first semester, $50 \%$ of Grade VII - Pumori students scored $>79.65$ in Health Physical \& Creative Arts. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Nepal Vasa |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in English, Science \& Technology, Health Physical \& Creative Arts, Sanskrit, Performing Arts, Sports Club and Reading Book - English. (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).


## Average Marks of Students in a Subject



The bar graph illustrates the average marks of different subjects obtained by Grade VII - Pumori students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in English, Science \& Technology, Health Physical \& Creative Arts, Sanskrit, Performing Arts, Sports Club and Reading Book - English as compared to test scores. The average marks have depreciated more in Nepal Vasa, and Reading Book - Nepali.

## Grade VIII - Gaurishankar

The evaluation was based on 28 students. The table below provides Mean and Median marks obtained by grade VIII - Gaurishankar students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score of 70, and inference and conclusion were drawn.

| Subject | Semester I |  | Inference | Conclusion |  |
| :--- | :---: | :---: | :---: | :--- | :---: |
|  | Average | Median | P-Value |  |  |
| Nepali | 68.3 | 66.20 | 0.46 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar <br> students scored $>66.2$ in Nepali. Since $\mathrm{p}>\alpha$, we retain null <br> hypothesis and conclude that test score and first semester <br> results are not significantly different. |  |


| English | 75.9 | 77.30 | 0.00 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>77.3$ in English. Since p< $\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| :---: | :---: | :---: | :---: | :---: |
| Mathematics | 67.5 | 65.7 | 0.15 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>65.7$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Science \& Technology | 75.0 | 74.50 | 0.01 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>74.5$ in Science \& Technology. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Social Studies | 71.0 | 71.40 | 0.54 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>71.4$ in Social Studies. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Health Physical \& Creative Arts | 65.0 | 71.00 | 0.19 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored > 71 in Health Physical \& Creative Arts. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Moral <br> Education | 68.2 | 77.20 | 0.64 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>77.2$ in Moral Education. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| OBTE | 79.9 | 77.70 | 0.00 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>77.7$ in OBTE. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Nepal Vasa | 60.8 | 60.60 | 0.00 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>60.6$ in Nepal Vasa. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Sanskrit | 81.0 | 82.00 | 0.00 | In the first semester, $50 \%$ of Grade VIII - Gaurishankar students scored $>82$ in Sanskrit. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Coding |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in English, Science \& Technology, OBTE, Sanskrit, Performing Club, Reading Book - Nepali and Reading Book - English. (p<0.05).
- Average marks significantly decreased in Nepal Vasa. (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject
Semester I


The bar graph illustrates the average marks of different subjects obtained by Grade VIII - Gaurishankar students in Semester I. From the graph, it is noticeable that the average marks have increased considerably in English, Science \& Technology, OBTE, Sanskrit, Performing Club, Reading Book - Nepali and Reading Book - English. as compared to test scores. However, there is a downward trend in average marks in Nepal Vasa, and Health Physical \& Creative Arts.

## Grade IX - Nilgiri

The evaluation was based on 13 students. The table below provides Mean and Median marks obtained by Grade IX - Nilgiri students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 65 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |  |
| :--- | :---: | :---: | :---: | :--- | :---: |
|  | Average | Median | P-Value |  |  |
| Nepali | 47.7 | 50.30 | 0.00 | In the first semester, $50 \%$ of Grade IX - Nilgiri students <br> scored $>50.3$ in Nepali. Since $p<\alpha$, we fail to retain null <br> hypothesis and conclude that test score and first semester <br> results are significantly different. There is significant <br> decrease. |  |


| English | 66.8 | 68.20 | 0.65 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>68.2$ in English. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| :---: | :---: | :---: | :---: | :---: |
| C. Mathematics | 58.3 | 59.5 | 0.15 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>59.5$ in C. Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
|  <br> Technology | 40.9 | 40.90 | 0.00 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>40.9$ in Science \& Technology. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Samajik <br> Adhyayan | 65.3 | 64.60 | 0.93 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>64.6$ in Samajik Adhyayan. Since p $>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| A. Mathematics | 54.3 | 55.40 | 0.03 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>55.4$ in A. Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Computer <br> Science | 69.3 | 69.40 | 0.25 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>69.4$ in Computer Science. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Coding | 57.1 | 54.80 | 0.09 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>54.8$ in Coding. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Sports Club | 82.1 | 85.00 | 0.00 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>85$ in Sports Club. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Reading Book Nepali | 72.7 | 76.20 | 0.01 | In the first semester, $50 \%$ of Grade IX - Nilgiri students scored $>76.2$ in Reading Book - Nepali. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


|  |  |  |  | In the first semester, $50 \%$ of Grade IX - Nilgiri students <br> Reading Book - <br> English |
| :--- | :--- | :--- | :--- | :--- |
| scored $>63.8$ in Reading Book - English. Since $\mathrm{p}>\alpha$, we |  |  |  |  |
| retain null hypothesis and conclude that test score and first |  |  |  |  |
| semester results are not significantly different. |  |  |  |  |

## In Semester I

- Average marks significantly increased in Sports Club and Reading Book Nepali. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Nepali, Science \& Technology and A. Mathematics. ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).


## Average Marks of Students in a Subject

Semester I


The bar graph illustrates the average marks of different subjects obtained by Grade IX - Nilgiri students in Semester I. The graph represents that there is an upward trend in average marks obtained by students in Sports Club and Reading Book Nepali as compared to test scores. However, the marks have declined noticeably in Nepali, Science and Technology, A. Mathematics, and Coding.

## Grade X - Machhapuchhre

The evaluation was based on 16 students. The table below provides Mean and Median marks obtained by Grade X - Machhapuchhre students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 65 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | P-Value |  |
| Nepali | 36.8 | 37.10 | 0.00 | In the first semester, $50 \%$ of Grade X - Machhapuchhere students scored $>37.1$ in Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| English | 53.7 | 52.60 | 0.05 | In the first semester, $50 \%$ of Grade X - Machhapuchhere students scored $>52.6$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| C. Mathematics | 58.0 | 55.0 | 0.16 | In the first semester, $50 \%$ of Grade X - Machhapuchhere students scored $>55$ in C. Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Science \& Technology | 42.3 | 38.05 | 0.00 | In the first semester, $50 \%$ of Grade X - Machhapuchhere students scored > 38.05 in Science \& Technology. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Social | 68.5 | 71.25 | 0.42 | In the first semester, $50 \%$ of Grade X - Machhapuchhere students scored $>71.25$ in Social. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| EPH | 73.0 | 78.15 | 0.07 | In the first semester, $50 \%$ of Grade X - Machhapuchhre students scored $>78.15$ in EPH. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| A. Mathematics | 47.9 | 48.85 | 0.00 | In the first semester, $50 \%$ of Grade X - Machhapuchhre students scored $>48.85$ in A. Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |


| Computer <br> Science | 70.8 | 73.65 | 0.23 |  |
| :--- | :---: | :---: | :---: | :--- |
| Computer <br> Programming | 60.1 | 59.80 | 0.30 | In the first semester, $50 \%$ of Grade X - Machhapuchhre <br> students scored $>73.65$ in Computer Science. Since $p>\alpha$, <br> we retain null hypothesis and conclude that test score and <br> first semester results are not significantly different. |
| Sports Club | 69.9 | 67.20 | 0.75 | In the first semester, $50 \%$ of Grade X - Machhapuchhre <br> students scored $>59.8$ in Computer Programming. Since <br> p $>\alpha$, we retain null hypothesis and conclude that test score <br> and first semester results are not significantly different. |
| Reading Book - | 69.3 | 68.80 | 0.06 | In the first semester, $50 \%$ of Grade X - Machhapuchhre <br> students scored $>67.2$ in Sports Club. Since p>a, we <br> retain null hypothesis and conclude that test score and first <br> semester results are not significantly different. |
| Nepali |  |  |  |  |
| 59.3 | 58.30 | 0.31 | In the first semester, $50 \%$ of Grade X - Machhapuchhre <br> students scored $>68.8$ in Reading Book - Nepali. Since <br> $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score <br> and first semester results are not significantly different. |  |
| Reading Book - |  |  |  |  |
| English |  |  |  |  |

## In Semester I

- Average marks significantly increased in none of the subjects. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Nepali, English, Science \& Technology and A.

Mathematics. ( $\mathrm{p}<0.05$ ).

- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).


## Average Marks of Students in a Subject



The bar graph illustrates the average marks of different subjects obtained by Grade X - Machhapuchhre students in Semester I. From the graph, it is noticeable that the average marks have increased in Social, EPH, Computer Science,Sports and Reading Book- Nepali as compared to test scores. However, the marks have declined significantly in Nepali, English, Science \& Technology and A. Mathematics.

## Grade XI - Changla

The evaluation was based on 24 students. The table below provides Mean and Median marks obtained by Grade XI - Changla students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 65, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :--- | :---: | :---: | :---: | :--- |
|  | Average | Median | P-Value |  |
| English | 61.0 | 57.15 | 0.20 | In the first semester, $50 \%$ of Grade XI - Changla students <br> scored $>57.15$ in English. Since $p>\alpha$, we retain null <br> hypothesis and conclude that test score and first semester <br> results are not significantly different. |


| Physics | 66.5 | 63.60 | 0.51 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>63.6$ in Physics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| :---: | :---: | :---: | :---: | :---: |
| Chemistry | 67.7 | 67.2 | 0.32 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>67.15$ in Chemistry. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Mathematics | 65.8 | 70.25 | 0.81 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>70.25$ in Mathematics. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Computer <br> Science | 75.5 | 79.70 | 0.01 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>79.7$ in Computer Science. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Nepali | 49.9 | 58.55 | 0.00 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>58.55$ in Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Basic <br> Programming | 70.4 | 66.90 | 0.11 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>66.9$ in Basic Programming. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Advanced <br> Programming | 62.8 | 63.50 | 0.59 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>63.5$ in Advanced Programming. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Reading Book - <br> Nepali | 81.6 | 81.60 | 0.00 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>81.6$ in Reading Book - Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Reading Book English | 72.3 | 75.13 | 0.00 | In the first semester, $50 \%$ of Grade XI - Changla students scored $>75.13$ in Reading Book - English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |

## In Semester I

- Average marks significantly increased in Computer Science, Reading Book - Nepali and Reading Book - Nepali. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Nepali. ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade XI - Changla students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in Computer Science, Reading Book - Nepali and Reading Book - Nepali. as compared to test scores. However, the marks have declined significantly in Nepali.

## Grade XI - Khumbutse

The evaluation was based on 23 students. The table below provides Mean and Median marks obtained by Grade XI - Khumbutse students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 65, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | P-Value |  |
| English | 58.3 | 59.80 | 0.05 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored $>59.8$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Physics | 63.5 | 61.80 | 0.44 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored $>61.8$ in Physics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Chemistry | 65.7 | 69.9 | 0.81 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored $>69.9$ in Chemistry. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Mathematics | 67.1 | 73.70 | 0.53 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored $>73.7$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Computer <br> Science | 73.4 | 76.20 | 0.01 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored $>76.2$ in Computer Science. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Nepali | 55.3 | 55.70 | 0.01 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored $>55.7$ in Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Basic <br> Programming | 66.5 | 70.10 | 0.73 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored $>70.1$ in Basic Programming. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Advanced <br> Programming | 60.0 | 62.80 | 0.24 | In the first semester, $50 \%$ of Grade XI - Khumbutse students scored > 62.8 in Advanced Programming. Since $\mathrm{p}>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |

$\left.\begin{array}{|l|c|c|c|l|}\hline & & & & \begin{array}{l}\text { In the first semester, 50\% of Grade XI - Khumbutse } \\ \text { students scored }>79.6 \text { in Reading Book - Nepali. Since } \\ \text { peading Book - } \\ \text { Nepali }\end{array} \\ \text { test score and fairst to retain null hypothesis and conclude that } \\ \text { different. There is significant increase. }\end{array}\right]$

## In Semester I

- Average marks significantly increased in Computer Science and Reading Book - Nepali. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Nepali and English. (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade XI - Khumbutse students in Semester I. The graph shows that there is an upward trend in average marks in Computer Science and Reading Book - Nepali. However, the average marks dropped in English, Nepali and Advanced Programming.

## Grade XI - Pangboche

The evaluation was based on 25 students. The table below provides Mean and Median marks obtained by Grade XI - Pangboche students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 65, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | $\mathbf{P}$-Value |  |
| English | 55.0 | 54.80 | 0.00 | In the first semester, $50 \%$ of Grade XI - Pangboche students scored $>54.8$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Physics | 61.7 | 62.20 | 0.04 | In the first semester, $50 \%$ of Grade XI - Pangboche students scored $>62.2$ in Physics. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Chemistry | 61.0 | 60.3 | 0.26 | In the first semester, $50 \%$ of Grade XI - Pangboche students scored $>60.25$ in Chemistry. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Mathematics | 61.1 | 60.70 | 0.21 | In the first semester, $50 \%$ of Grade XI - Pangboche students scored $>60.7$ in Mathematics. Since $p>\alpha$, we retain null hypothesis and conclude that test score and first semester results are not significantly different. |
| Biology | 37.8 | 40.00 | 0.03 | In the first semester, $50 \%$ of Grade XI - Pangboche students scored $>40$ in Biology. Since $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Computer <br> Science | 73.3 | 77.60 | 0.04 | In the first semester, $50 \%$ of Grade XI - Pangboche students scored $>77.6$ in Computer Science. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Nepali |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in Computer Science and Reading Book English. (p<0.05).
- Average marks significantly decreased in English, Physics, Biology, Nepali and Reading Book Nepali. (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).


## Average Marks of Students in a Subject

Semester I


The bar graph illustrates the average marks of different subjects obtained by Grade XI - Pangboche students in Semester I. Comparatively, there is a fluctuating trend in average marks in Term I. The average marks substantially increased in Computer Science and Reading Book English.. However, a downward trend is observed in other subjects such as English, Physics, Chemistry, Mathematics, Biology, Nepali, Advanced Programming and Reading Book - Nepali.

## Grade XI - Taboche

The evaluation was based on 19 students. The table below provides Mean and Median marks obtained by Grade XI - Taboche students in different subjects, including performing arts and reading book tests.
Furthermore, the marks obtained were compared with the test score 65 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |  |
| :--- | :---: | :---: | :---: | :--- | :---: |
|  | Average | Median | P-Value |  |  |
| English | 80.7 | 83.55 | 0.00 | In the first semester, $50 \%$ of Grade XI - Taboche students <br> scored $>83.55$ in English. Since $\mathrm{p}<\alpha$, we fail to retain null <br> hypothesis and conclude that test score and first semester <br> results are significantly different. There is significant <br> increase. |  |


| Physics |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in English and Reading Book English. ( $\mathrm{p}<0.05$ ).
- Average marks significantly decreased in Chemistry, Biology and Nepali. (p<0.05).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade XI - Taboche students in Semester I. Overall, there is a decreasing trend in average marks obtained by students in Semester I. The average marks substantially decreased in Physics, Chemistry, Biology and Nepali. However, the marks have increased appreciably in English and Reading Book English.

## Grade XII - Lobuche

The evaluation was based on 32 students. The table below provides Mean and Median marks obtained by Grade XII - Lobuche students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 65, and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |  |
| :--- | :---: | :---: | :---: | :--- | :---: |
|  | Average | Median | P-Value |  |  |
| English | 69.0 | 69.90 | 0.04 | In the first semester, $50 \%$ of Grade XII - Lobuche students <br> scored $>69.9$ in English. Since $p<\alpha$, we fail to retain null <br> hypothesis and conclude that test score and first semester <br> results are significantly different. There is significant <br> increase. |  |


| Physics |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

## In Semester I

- Average marks significantly increased in English, Computer Science, Basic Programming, Reading Book - Nepali and Reading Book - English. (p $<0.05$ ).
- Average marks significantly decreased in Physics, Chemistry, Mathematics and Nepali. ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject


The bar graph illustrates the average marks of different subjects obtained by Grade XII - Lobuche students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in English, Computer Science, Basic Programming, Reading Book - Nepali and Reading Book - English. Compared to test scores, there is a downward trend in average marks obtained by students in Physics, Chemistry, Mathematics and Nepali.

## Grade XII - Khumbila

The evaluation was based on 31 students. The table below provides Mean and Median marks obtained by Grade XII - Khumbila students in different subjects, including performing arts and reading book tests. Furthermore, the marks obtained were compared with the test score 65 , and inference and conclusion were provided.

| Subject | Semester I |  | Inference | Conclusion |
| :---: | :---: | :---: | :---: | :---: |
|  | Average | Median | $\mathbf{P}$-Value |  |
| English | 71.2 | 72.80 | 0.01 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>72.8$ in English. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Physics | 59.9 | 58.20 | 0.02 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>58.2$ in Physics. Since p $<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Chemistry | 56.1 | 51.5 | 0.00 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>51.5$ in Chemistry. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Mathematics | 58.8 | 54.70 | 0.01 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>54.7$ in Mathematics. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Biology | 47.8 | 46.20 | 0.00 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>46.2$ in Biology. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Computer <br> Science | 81.1 | 85.60 | 0.00 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>85.6$ in Computer Science. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |
| Nepali | 45.1 | 45.90 | 0.00 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>45.9$ in Nepali. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant decrease. |
| Basic <br> Programming | 72.1 | 75.50 | 0.04 | In the first semester, $50 \%$ of Grade XII - Khumbila students scored $>75.5$ in Basic Programming. Since $p<\alpha$, we fail to retain null hypothesis and conclude that test score and first semester results are significantly different. There is significant increase. |


| Advanced <br> Programming | 84.9 | 88.90 | 0.00 | In the first semester, $50 \%$ of Grade XII - Khumbila <br> students scored $>88.9$ in Advanced Programming. Since <br> $\mathrm{p}<\alpha$, we fail to retain null hypothesis and conclude that <br> test score and first semester results are significantly <br> different. There is significant increase. |
| :--- | :---: | :---: | :---: | :--- |
| Reading Book - <br> Nepali | 79.9 | 80.20 | 0.00 | In the first semester, $50 \%$ of Grade XII - Khumbila <br> students scored $>80.2$ in Reading Book - Nepali. Since <br> p $<\alpha$, we fail to retain null hypothesis and conclude that <br> test score and first semester results are significantly <br> different. There is significant increase. |
| Reading Book - <br> English | 64.8 | 68.00 | 0.94 | In the first semester, $50 \%$ of Grade XII - Khumbila <br> students scored $>68$ in Reading Book - English. Since <br> p $>\alpha$, we retain null hypothesis and conclude that test score <br> and first semester results are not significantly different. |

## In Semester I

- Average marks significantly increased in English, Computer Science, Basic Programming, Advanced Programming and Reading Book - Nepali. ( $p<0.05$ ).
- Average marks significantly decreased in Physics, Chemistry, Mathematics, Biology and Nepali. ( $\mathrm{p}<0.05$ ).
- Increase or decrease in average marks obtained in the rest of the subjects were not statistically significant. ( $\mathrm{p}>0.05$ ).

Average Marks of Students in a Subject
Semester I


The bar graph illustrates the average marks of different subjects obtained by Grade XII - Khumbila students in Semester I. From the graph, it is noticeable that the average marks have increased appreciably in English, Computer Science, Basic Programming, Advanced Programming and Reading Book - Nepali. as compared to test scores. However, the marks have declined noticeably in Physics, Chemistry, Mathematics, Biology and Nepali.

## Overall Result

In overall analysis, mean and median were calculated based on the marks obtained (all subjects combined including performing arts and reading book tests) in a grade by 'all' students. Furthermore, the marks obtained in the first semester evaluations are compared with test scores, and inference and conclusion are provided. The data provides the overall impression of results in each grade.

| Grade | Semester I Central Values |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Test Score | Average | Median | Maximum | Minimum |
| Grade I - Lhotse | 80.00 | 81.71 | 82.71 | 98.47 | 41.40 |
| Grade I - Kanchenjunga | 80.00 | 79.83 | 80.94 | 99.56 | 47.40 |
| Grade II - Makalu | 80.00 | 80.36 | 81.10 | 99.20 | 47.20 |
| Grade II - Cho Oyo | 80.00 | 81.97 | 82.60 | 100.00 | 7.00 |
| Grade III - Dhaulagiri | 80.00 | 81.80 | 81.60 | 99.40 | 56.20 |
| Grade III - Manaslu | 80.00 | 77.72 | 78.50 | 98.60 | 20.70 |
| Grade IV - Annapurna | 70.00 | 79.78 | 80.70 | 100.00 | 46.20 |
| Grade IV - Himalchuli | 70.00 | 77.07 | 80.00 | 100.00 | 30.00 |
| Grade V - Nuptse | 70.00 | 70.89 | 72.30 | 99.00 | 21.50 |
| Grade V - Yangra | 70.00 | 74.22 | 75.10 | 96.40 | 33.60 |
| Grade VI - Kabru | 70.00 | 70.59 | 74.00 | 95.00 | 22.00 |
| Grade VI - Chamlang | 70.00 | 70.78 | 72.43 | 100.00 | 23.47 |
| Grade VII - Pumori | 70.00 | 73.89 | 76.40 | 98.40 | 33.27 |
| Grade VIII - Gaurishankar | 70.00 | 72.52 | 75.10 | 98.00 | 31.90 |
| Grade IX - Nilgiri | 65.00 | 61.35 | 62.70 | 92.00 | 17.60 |
| Grade X - Machhapuchhere | 65.00 | 59.01 | 59.20 | 98.70 | 8.70 |
| Grade XI - Changla | 65.00 | 67.34 | 69.35 | 98.90 | 14.10 |
| Grade XI - Khumbutse | 65.00 | 65.96 | 67.85 | 93.60 | 9.00 |
| Grade XI - Pangboche | 65.00 | 61.43 | 61.15 | 95.90 | 11.30 |
| Grade XI - Taboche | 65.00 | 64.20 | 65.50 | 95.00 | 14.00 |
| Grade XII - Lobuche | 65.00 | 63.34 | 65.60 | 96.00 | 9.00 |
| Grade XII - Khumbila | 65.00 | 64.79 | 65.10 | 98.30 | 21.60 |
|  |  |  |  |  |  |

## Trend of Average Marks of All Students in a Grade / Section



The line graph depicts the trend of average marks of different grades obtained by all students in Semester I and Test score. There is a gradual rise in average marks obtained by Grade-I Lhotse, Grade-II Makalu, Grade-II Cho-Oyu, Grade-III Dhaulagiri, Grade-V Nuptse, Grade-V Yangra, Grade-VI Kabru, Grade-VI Chamlang, Grade-VII Pumori, Grade-VIII Gaurishankar, Grade-XI Changla, and Grade-XI Khumbutse in Semester I.

The average marks have substantially increased for Grade-IV Annapurna, and Grade-IV Himalchuli. The average marks have noticeably decreased in Grade-IX Nilgiri and Grade-X Machhapuchhre. In the rest of the grades, the trend of average marks fluctuates, often dipping down.

## Appendix

Examination Team

| Tasks | Name |
| :--- | :--- |
| Question Preparation/Examination/Answer Sheet <br> Evaluation/Marks Entry | Subject / Class Teachers |
| Online Handbook | Santosh Shah |
| Marksheet Ledger | Ruby Labh, Rasmita Timalsina |
| Marksheet Preparation/Distribution | Class Teachers / HOS / Principal |
| Language \& Data Entry | Chanda Pandey, Sarina Maharjan, Hangkeng Rai, <br> Sabina Rai, Nemjala Bajracharya, Sabina Maharjan, <br> Sunita Maharjan, Suresh Chandyo, Rasmita <br> Timalsina and Science Department Team |
| Analysis Report by: | Madhu Sudhan Bhusal <br> Sagina Maharjan |

