



ASER Assessment and Evaluation in TAKMIL Schools

2021 Report

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Introduction

Annual Status of Education Report most commonly known as ASER has a simple, easy to use Tools/Tests that measure children's competencies in Language (Urdu/Sindhi/Pashto), English and Arithmetic. The tests are based on Class 1 & 2 curriculum as it is internationally recognized that after two years of schooling, a child should have acquired sufficient reading fluency and comprehension, and have basic numeracy skills. Without acquiring these basic skills children may never be able to learn.

This year TAKMIL planned to test its own students using the tools of ASER available on their website.

Objective

The objective of performing this assessment is to capture the learning status of TAKMIL students who are in the elementary school age group learning via accelerated curriculum. We want to ensure that the literacy and competency level of our students are as per standard. Another objective was to find out whether learning through accelerated curriculum imparts the same literacy skills in students as the traditional education model does.

For this purpose we initially conducted a pilot test in two of TAKMIL schools located in Mirpurkhas Sindh. The aim of this pilot test was to examine the feasibility of ASER Assessment that is intended to be used in a larger scale study.

Pilot

The pilot was conducted in Shaheed Al Asad School and Shaheed Umer Hayat School located in Mirpurkhas, Sindh on 5th December, 2020. Mr. Abdul Majid Tinwari conducted the pilot on the same day in both schools. He tested total 14 students, with seven students from each school. Among these students, five were of Grade 5 Level 3, seven from Grade 5 Level 4 and two students were from Grade 6 Level 2.

The average assessment time for a one student was 20-25 mins.



Final Study

After the pilot, a plan was formed to run ASER assessments in all schools. 15 schools of TAKMIL located across Pakistan were assessed.

Instrument

The instrument was designed as per ASER guidelines. Questions were taken from the samples available on ASER website. An addition was made in English section where a short story and related question were added.

The instrument consisted of questions related to Urdu, English and Mathematics equivalent to the level of Grade 2.

Data Collection

Google Forms were used to collect the data from each school. The regions where internet was not available instrument was sent in Excel File Format and the facilitators had to enter the data.

The data was collected from each school for over a span of two months. Data collection process began at the start of January and went up to 20th February.

Facilitators of the schools were responsible for assessing the students. The facilitators were assigned to assess minimum three students each day as one assessment takes up to 25 minutes.

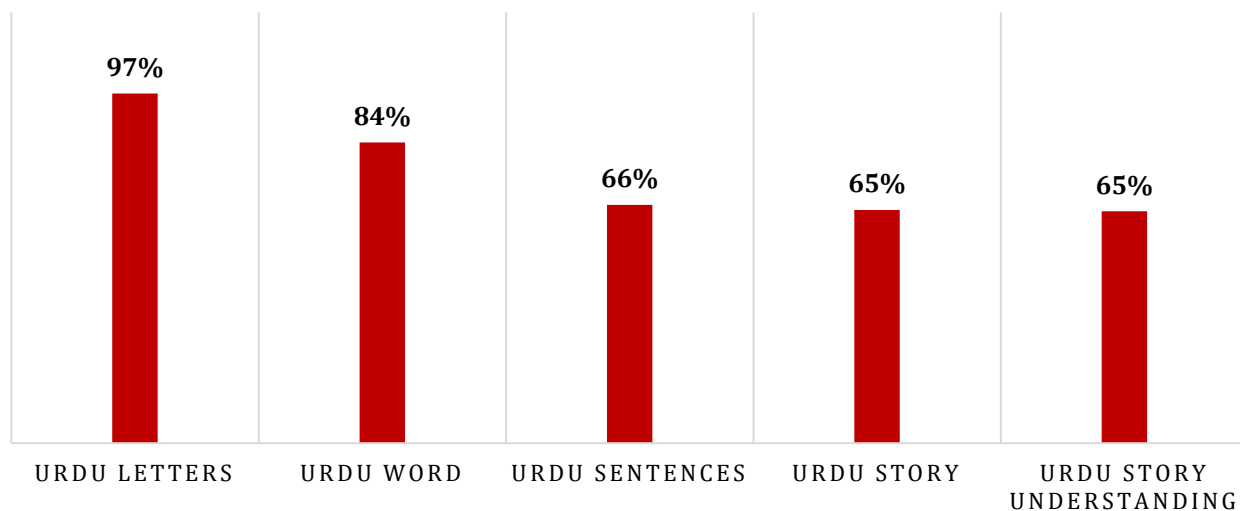
The data was collected from a total number of 541 students, out of which the data of 528 students was useable.

The next section will discuss the results of the ASER Assessment.



OVERALL RESULT AND ANALYSIS

URDU



Finding:

In Urdu, 97% of the students of TAKMIL from all grades can recognize and read Urdu letters. Similarly, 84% and 66% of the students are able to read words and sentences in Urdu, respectively.

In reading Urdu story, 65% of the students are able to read fluently and the same amount of students are also able to understand it well.

The results shows that the students of TAKMIL are above average in grade 2 equivalent Urdu.



ENGLISH



Finding:

In English, the students do not have any problem in recognizing English alphabets. 80% students can easily read words in English and 72% students of grade 5, 6 and 7 are able to read English sentences as well.

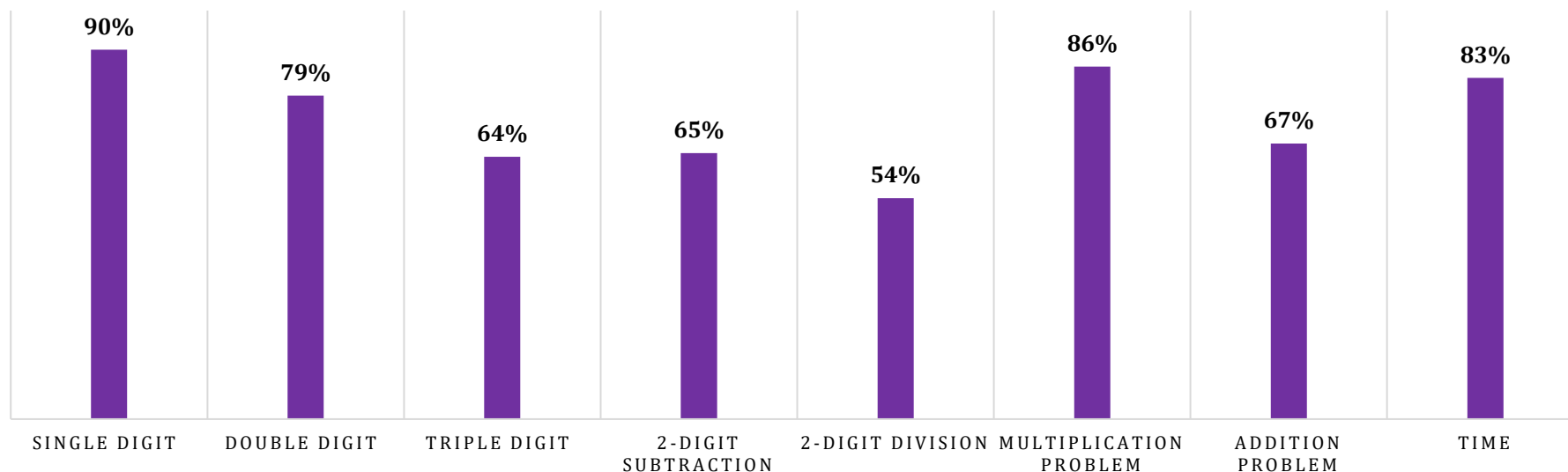
However, when it comes to understanding the sentences, the performance of TAKMIL students is average with only half of the surveyed students able to tell the meanings of the sentences in local languages.

In English story reading, fluency decrease further to 46% with only 26% of the students able to understand the story.

Students are observed facing difficulty in understanding English due to language barrier.



MATHEMATICS



Finding:

In Mathematics, the ability to recognize mathematical numbers lowers with the increase in the number of digits.

In solving arithmetic questions, the performance of the students is above average with 65% students able to solve 2-digit subtraction questions and 54% students able to solve 2-Digit division questions. The results reveal that students find division questions difficult to understand.

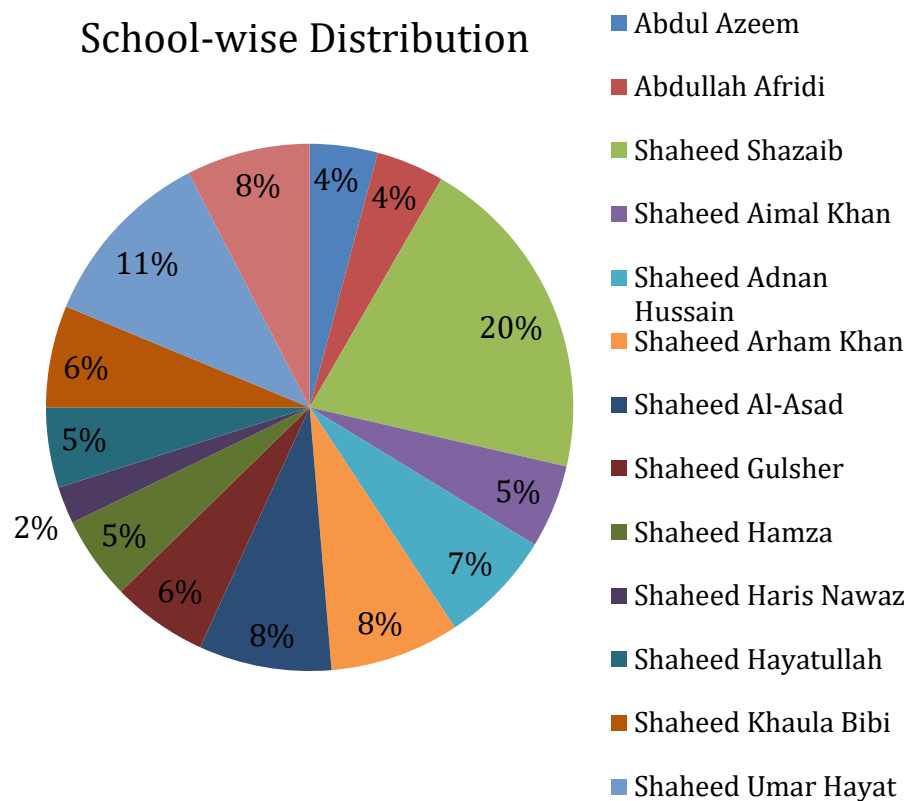
On the other hand, students find multiplication problems easier than addition word problems as 86% students solve multiplication problems against 67% students who solved addition word problems.

Lastly, 83% students can easily tell time



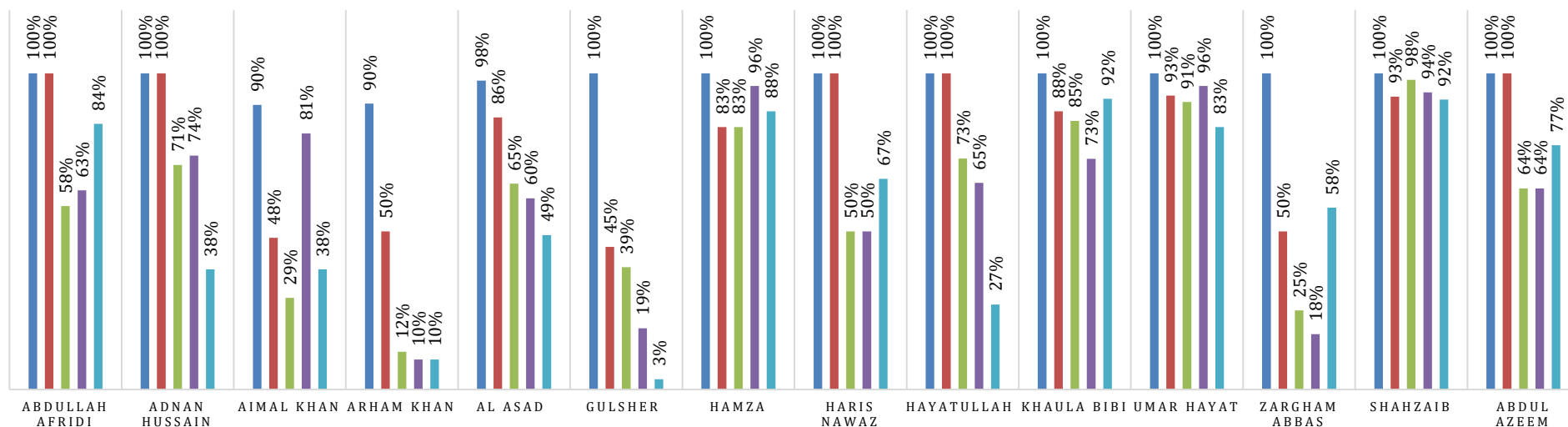
SCHOOL-WISE RESULT AND ANALYSIS

School-wise Distribution



URDU- SCHOOL-WISE RESULT

■ Urdu Letters ■ Urdu Word ■ Urdu Sentences ■ Urdu Story ■ Urdu Story Understanding



Findings

Among schools, the students of all schools recognize Urdu letters. However, majority of the students of Shaheed Gulsher and Shaheed Aimal Khan were not able to read Urdu words.

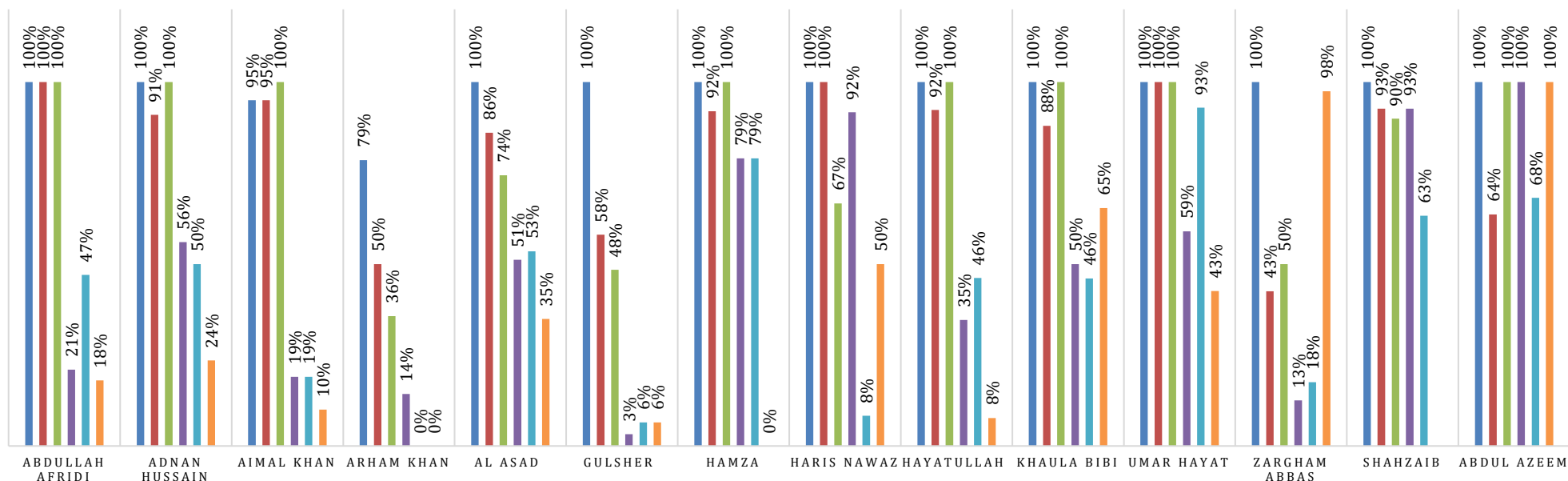
In reading Urdu sentences and story fluently, most schools performed above average. Whereas, majority of the students at Shaheed Aimal Khan and Shaheed Arham Khan were not able to read Urdu sentences and story fluently.

In understanding Urdu story, majority of the schools again performed well except Shaheed Adnan Hussain School, Shaheed Aimal Khan School and Shaheed Arham Khan School where only 38%, 38% and 10% students, respectively, were able to answer questions related to the story.



ENGLISH - SCHOOL WISE RESULTS

■ Letters ■ Words ■ Sentences ■ Sentences Meaning ■ Story Reading ■ Story Understanding



Findings:

In English subject, in the category of recognizing letters all school performed above average.

In the category of reading words 12 out of 14 schools' performance was above average.

In the category of reading English sentence, the students of all schools were found be able to read fluently. However, mixed results were found when they were asked the meaning of the read sentences. The students who were able to tell the meaning belonged to Shaheed Abdul Azeem, Shaheed Shahzaib School, and Shaheed Haris Nawaz.



On the contrary, the performance of the students of Shaheed Gulsher, Shaheed Abdullah Afridi, Shaheed Aimal Khan, Shaheed Arham Khan, Shaheed Zargham Abbas and Shaheed Hayatullah were below average.

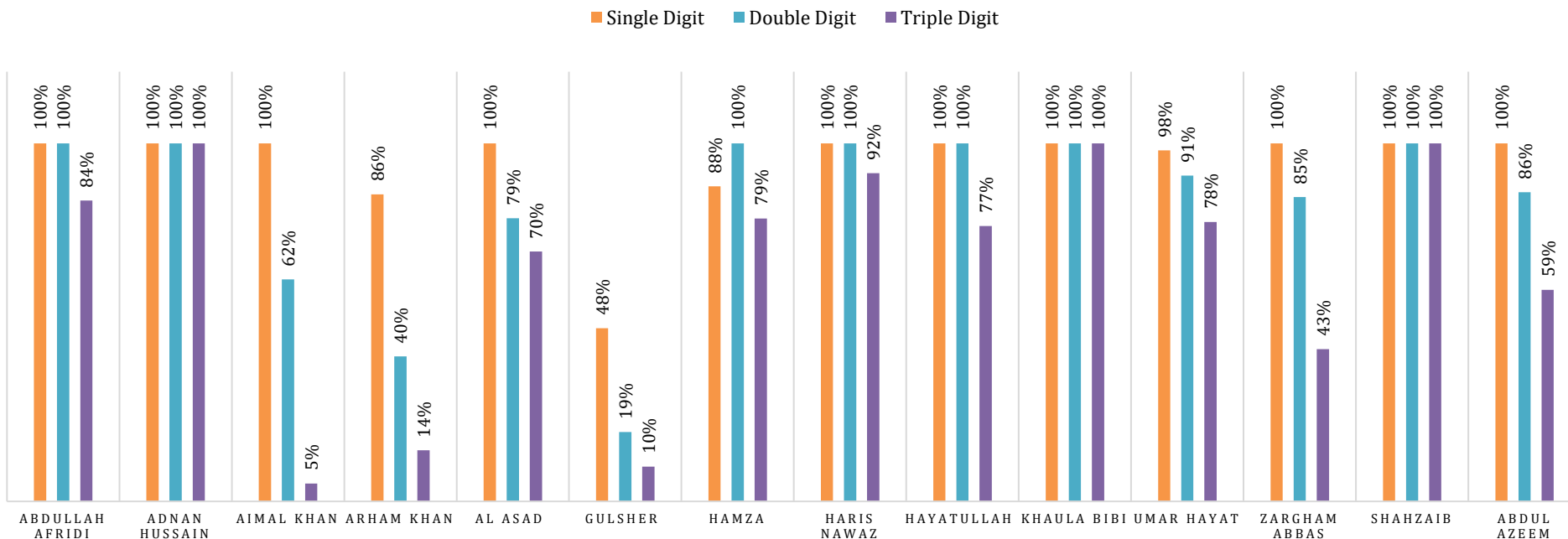
In reading English Story, six out of fourteen schools performed on and above average, and the remaining schools were below average indicating that most of the surveyed students find reading English stories difficult.

In understanding English Story, only four schools performed above average.

Shaheed Zargham Abbas School and Shaheed Abdul Azeem School show different result in this category indicating the students of these schools can understand the story even if they are unable to read fluently.



NUMBER RECOGNITION -SCHOOL WISE RESULTS



Findings:

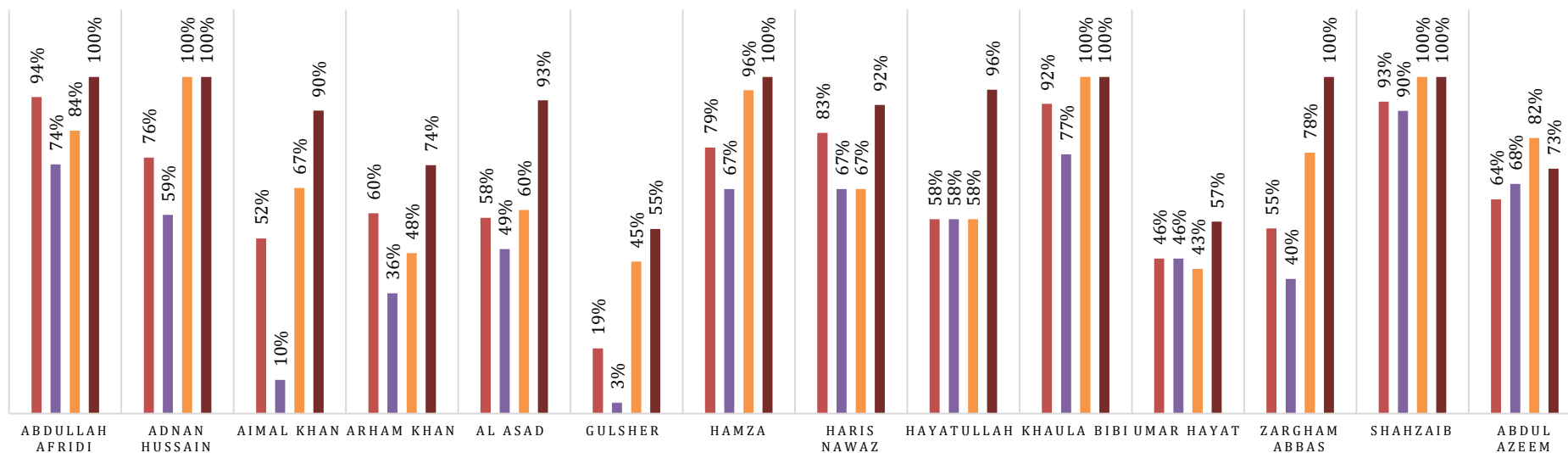
The students of most of the schools can recognize single, double and triple digit numbers. Only in Shaheed Aimal Khan, Shaheed Arham Khan and Shaheed Gulsher Schools, majority of the students were not able to recognize triple digit numbers.

The results show that as the numbers increase in digit, student's ability to recognize them decreases.



ARITHMETIC - SCHOOL WISE RESULTS

■ 2-digit Subtraction ■ 2-digit Division ■ Multiplication problem ■ Addition Problem



Findings:

In solving 2-digit subtraction and division questions, the students of 11 schools performed above average.

In solving multiplication word problem, majority of the students of ALL schools were able to solve correctly.

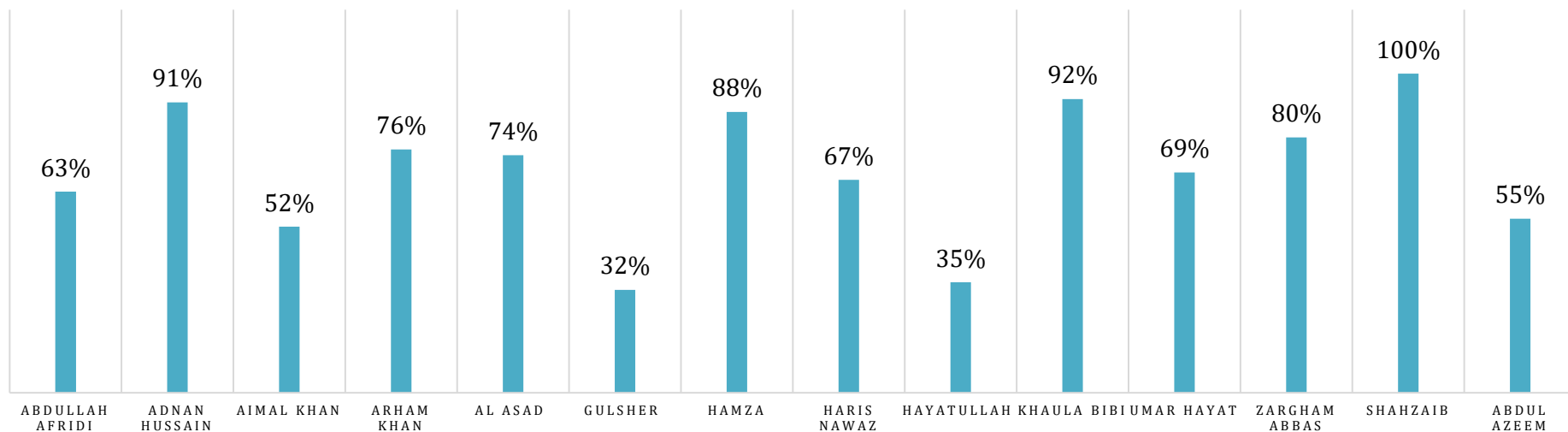
Solving addition problem was the category that most of the students found difficult to solve as compared to other arithmetic operations.

The schools that performed well in all categories of mathematics were Shaheed Abdullah Afridi, Shaheed Adnan Hussain, Shaheed Hamza, Shaheed Haris Nawaz, Shaheed Khaula Bibi and Shaheed Shahzaib School.

The overall performance of Shaheed Gulsher School in Mathematics is lowest.



TELLING TIME - SCHOOL WISE RESULTS



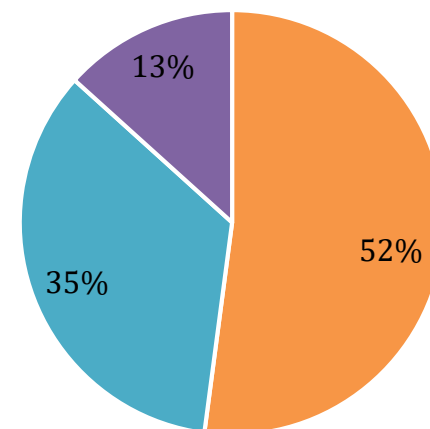
Findings:

Majority of the students were able to tell time in all schools except Shaheed Gulsher and Shaheed Hayatullah Schools where only 32% and 35% students were able to tell the time, respectively.



GRADE-WISE RESULT AND ANALYSIS

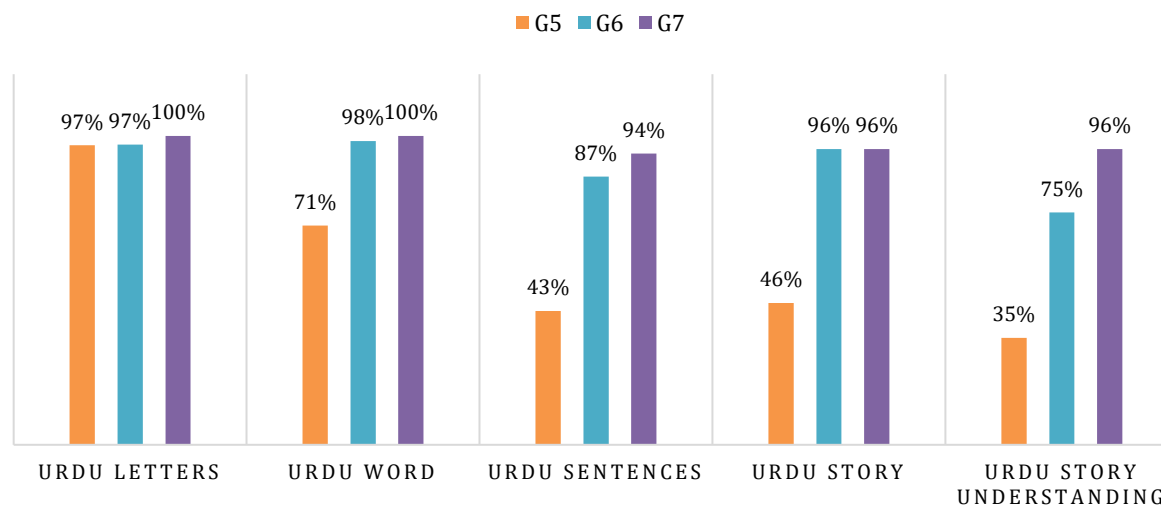
GRADE WISE
DISTRIBUTION



GRADE 5 GRADE 6 GRADE 7



URDU GRADE-WISE RESULT



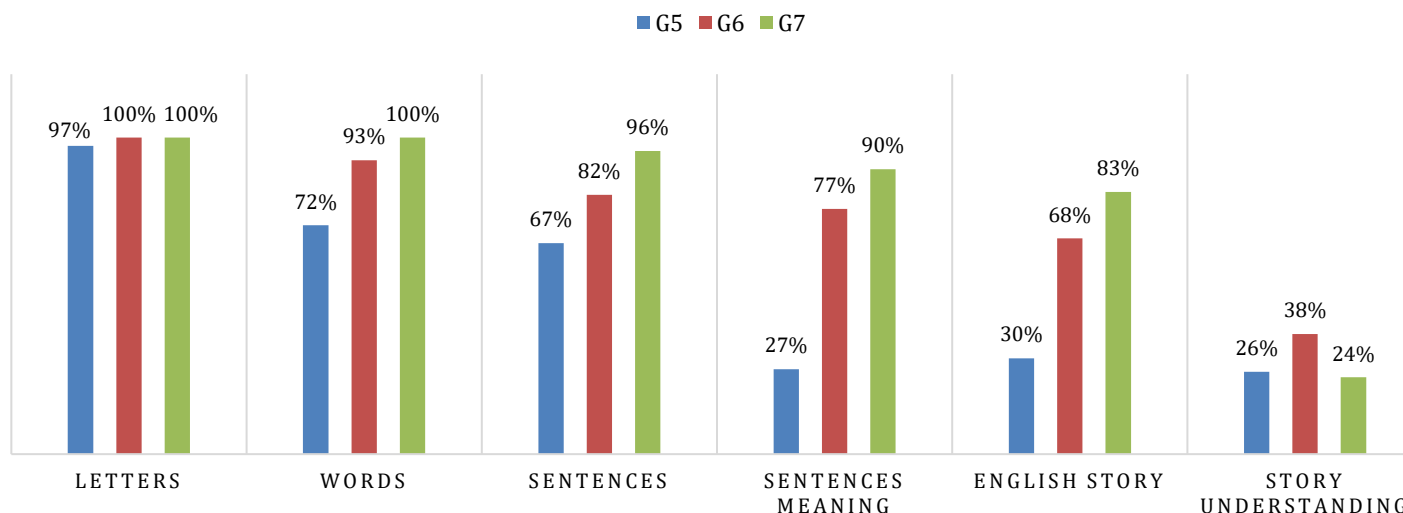
Findings:

The students of all grades can recognize Urdu letters and majority of them can read Urdu words as well. However, majority of the students of Grade 5 were not able to read Urdu sentences fluently as compared to Grade 6 and 7. Similar results were found in the category of reading Urdu Story as well.

In understanding Urdu Story only 35% Students of Grade 5 and 49% students of Grade 6 were able to answer questions related to the story. On the other hand, Grade 7 students performed well in this category.



ENGLISH GRADE-WISE RESULT



Findings:

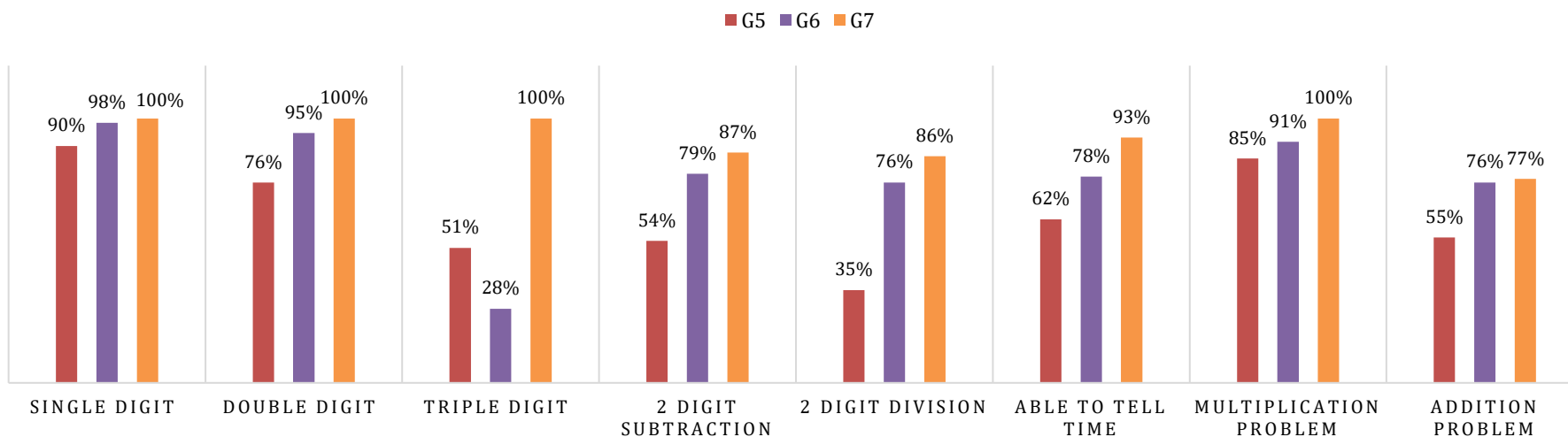
Majority of the students of Grade 5, 6 and 7 were able to recognize and read English letters and words.

In the category of reading English sentences and the ability to tell the meaning, the performance is increasing with the grade. But the majority of the students of Grade are unable to tell the meaning even if they can read English sentences.

Similar results are found in the category of reading English story. However, in the category of understanding, majority of the students of all grades were unable to understand the story.



MATHEMATICS GRADE-WISE RESULT



Findings:

All grades students were able to recognize single and double digit numbers. But only half of the students of grade 5 were able to recognize triple digit numbers.

In solving subtraction and division questions, the performance of the students is seen to be increasing with the grade. However, majority of the students of grade 5 are unable to solve 2-digit division questions.

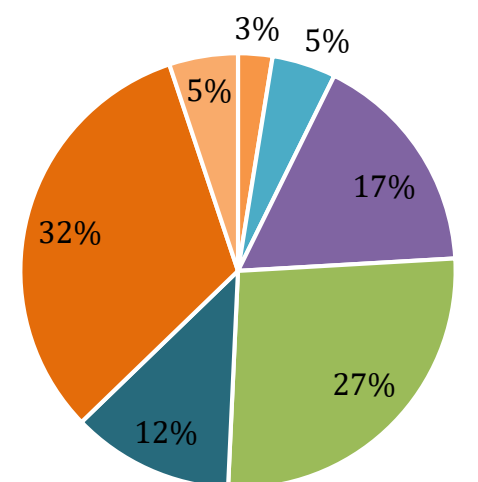
Majority of the students of all grades were able to solve multiplication word problems but when it comes to solving addition word problems the performance of the students of Grade 6 is lowest.

An increasing trend with grades is found in the ability to tell time as well.



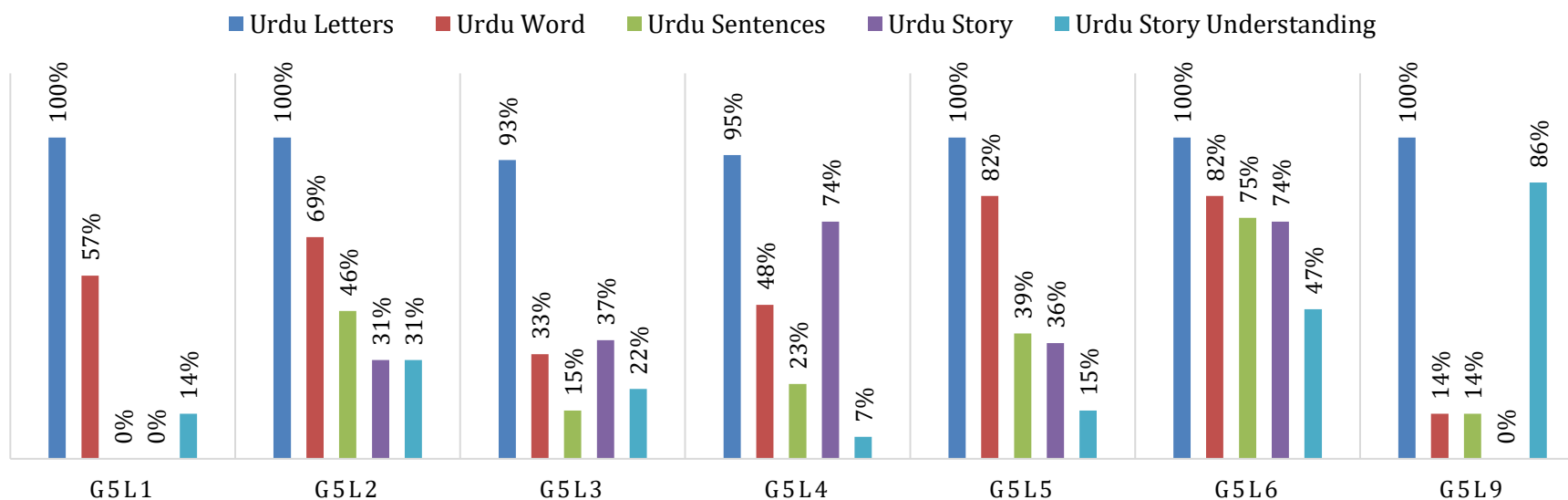
GRADE 5 LEVEL-WISE RESULT AND ANALYSIS

Level-wise Distribution



■ G5L1 ■ G5L2 ■ G5L3 ■ G5L4
■ G5L5 ■ G5L6 ■ G5L9

GRADE 5 LEVELWISE - URDU RESULTS



Findings

Grade 5 level-wise analysis shows that students of all levels can recognize Urdu letters.

Majority of the students of Level 2, Level 5 and Level 6 were able to read Urdu words. The performance of the students of remaining levels was below average.

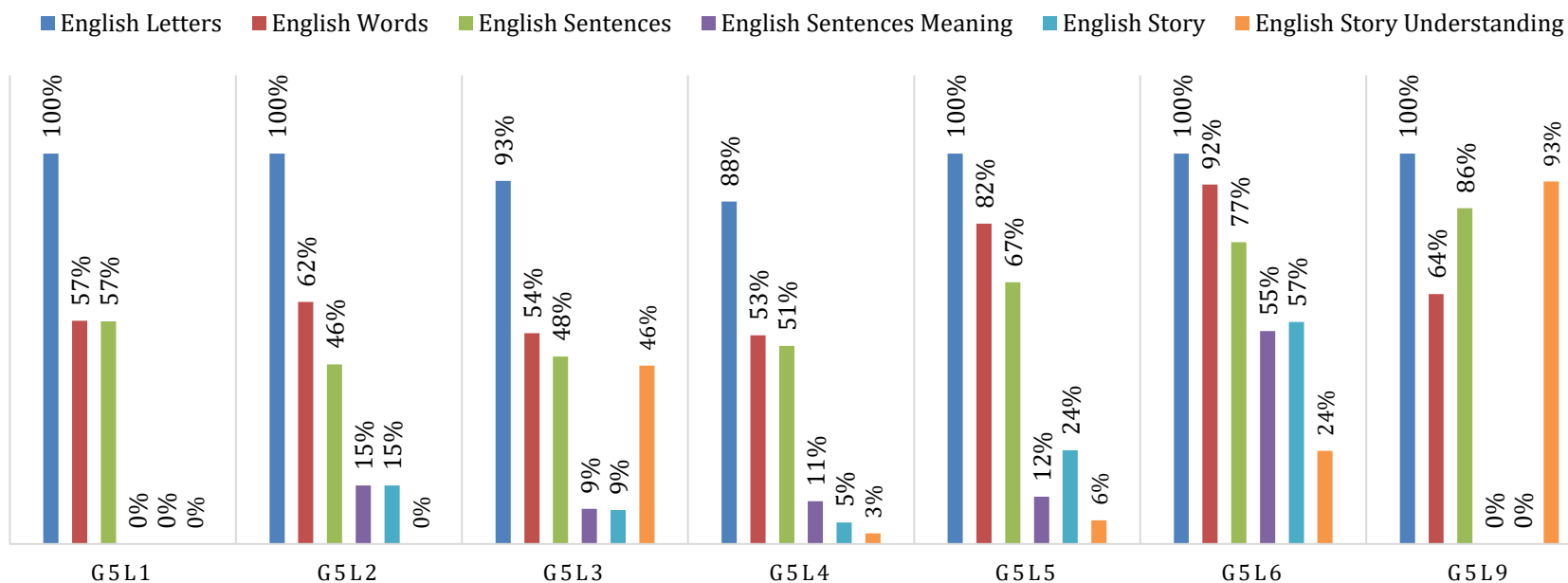
In the category of reading Urdu sentences, only majority of the students of Level 6 were able to read fluently.

In the category of reading Urdu Story, majority of the students of Level 4 and Level 6 were able to read fluently. On the contrary, where majority of the students of all levels were unable to understand Urdu Story, the students of Level 9 did not find it difficult to understand.

The performance of the students of Level 6 is comparatively better.



GRADE 5 LEVELWISE - ENGLISH RESULTS



Findings:

Majority of the students of all levels are able to recognize English Letters.

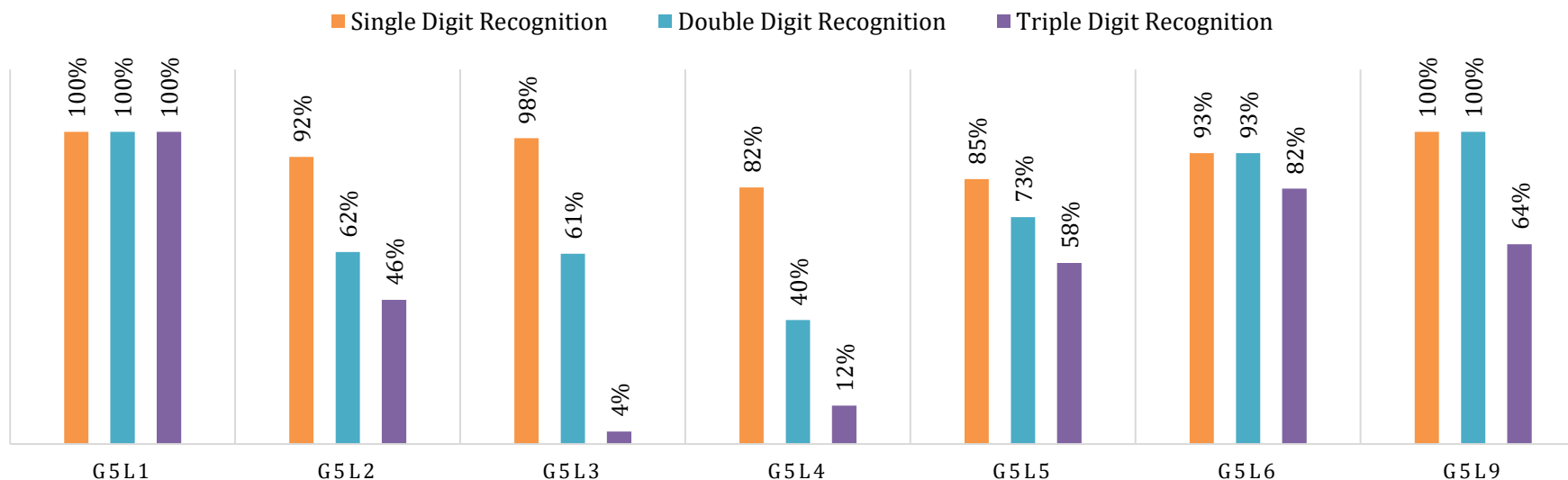
In recognizing English Words and reading English Sentences, the performances of Level 5, 6 and 7 is comparatively better. However, majority of the students of all levels are unable to tell the meaning of the read sentences.

In the category of reading and understanding story, majority of the students of all levels are unable to read fluently and answer the related questions with the exception of the students of Level 9. Almost all students of Level were able to answer the question correctly despite of being unable to read fluently.

The performances of the students of Level 6 is comparatively better.



GRADE 5 LEVEWSIE - MATHEMATICS - NUMBER RECOGNITION



Findings:

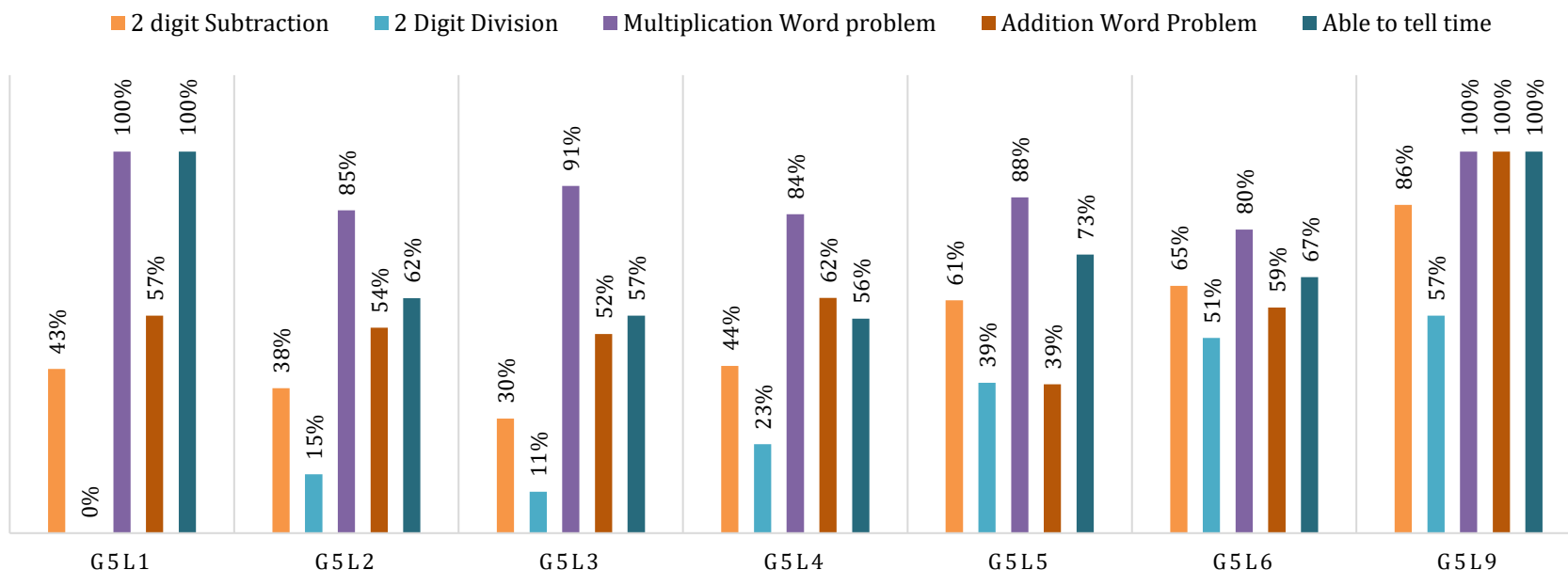
The performance of the students of Level 1 has been best in recognizing various digit numbers as they were able to recognize all compared to the students of other levels.

The students of Level 6 and Level 9 were also able to recognize numbers except that only 64% of the Level 9 were able to recognize three digit numbers.

Majority of the students of Level 4 were not able to recognize two digit and three digit numbers.



GRADE 5 LEVELWISE - MATHEMATICS RESULTS



Findings:

In subtraction questions, performance of the students is improving as Level increases. The results are similar for division questions.

In the category of multiplication, majority of the students of all levels are able to solve single digit multiplication problems.

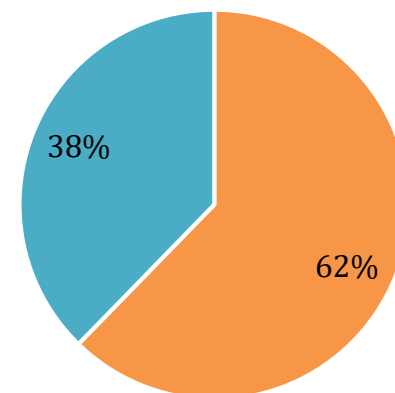
The performances of the students of all Levels are more or less similar in being able to solve Addition problem with the exception of the students Level 9. All students of Level 9 are able to solve 2-digit addition problem.

Lastly, most of the students of all levels are able to tell time.

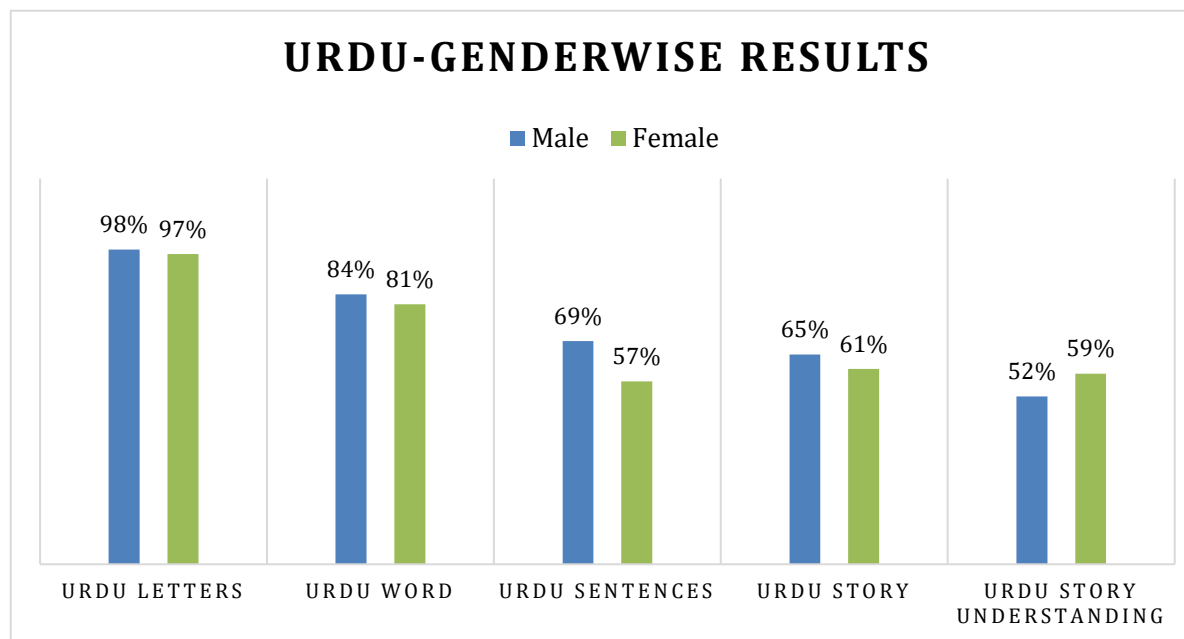


GENDER-WISE RESULT AND ANALYSIS

Gender Distribution



■ Male ■ Female



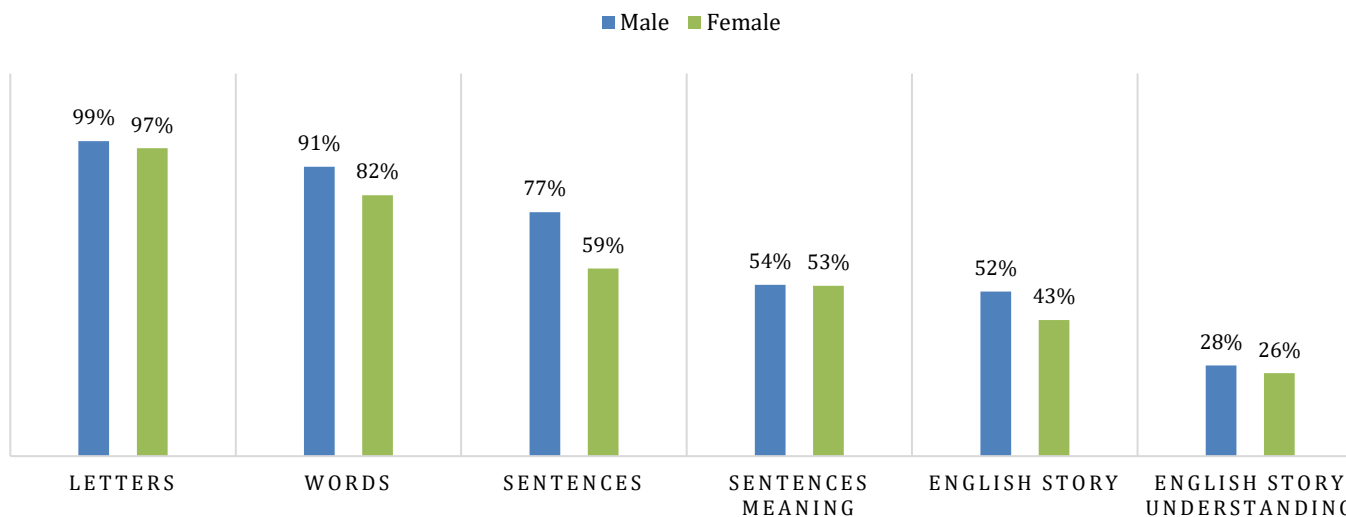
Findings:

The performance of the male and female students was almost same in recognizing Urdu letters and reading Urdu words.

However, even though less female students are able to read Urdu sentences and story fluently than male students but, when it comes to understanding the story, the performance of the female students is better than male students.



ENGLISH - GENDER WISE RESULTS



Findings:

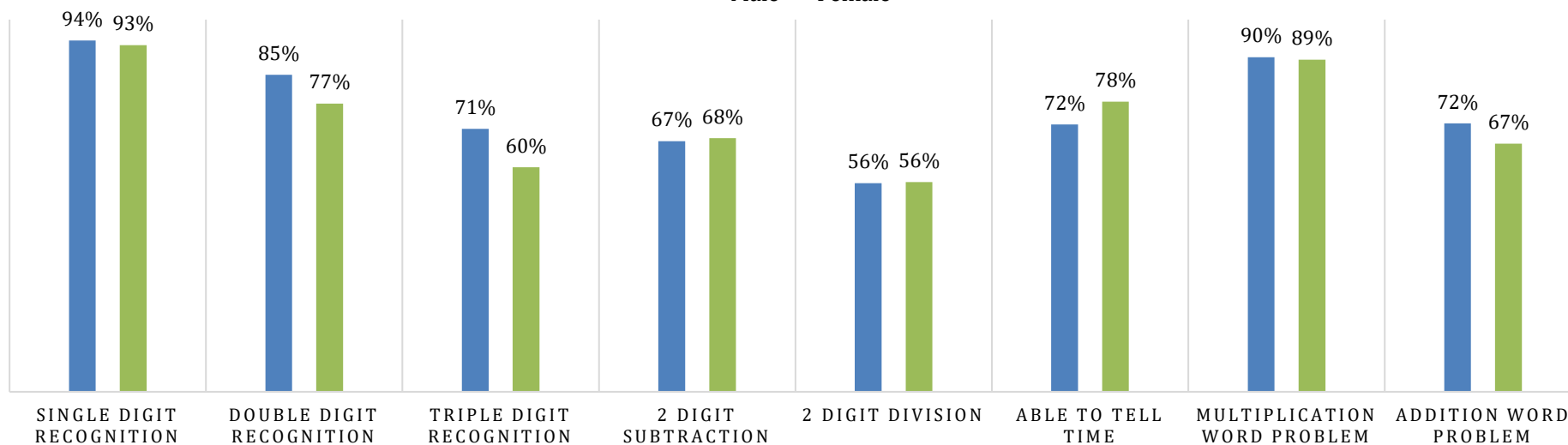
There is not significant difference in the performances of the male and female students across all categories.

As the difficulty level is increasing, performance of both male and female students is decreasing.



MATHEMATICS - GENDER WISE RESULTS

■ Male ■ Female



Findings:

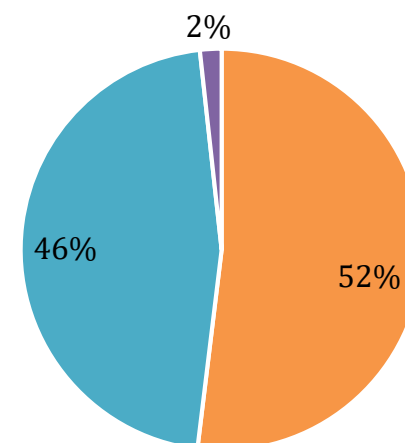
The performance of both male and female students is almost similar in recognizing single digits, solving 2-digit subtraction and division questions and multiplication word problems.

In recognizing double and triple digit numbers and addition word problems female students lag slightly behind male students. However, the ability to tell time is found to be slightly higher among female students.



AGE-WISE RESULT AND ANALYSIS

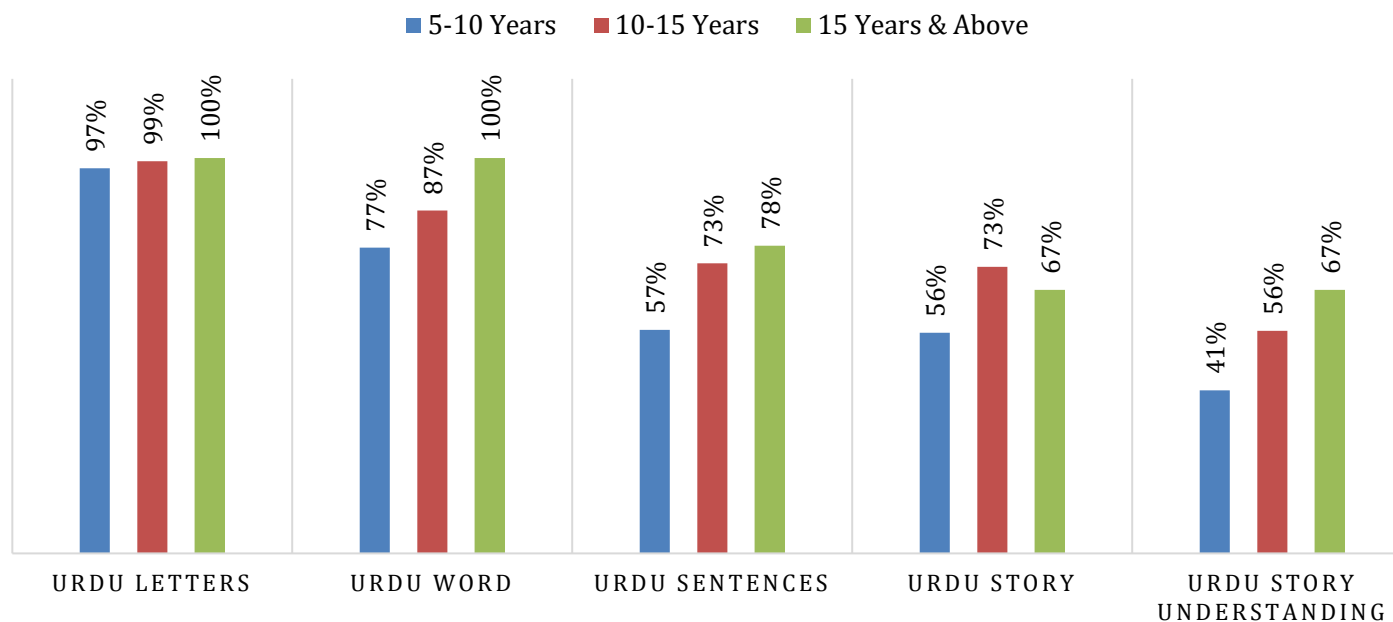
Agewise Distribution



- 5-10 Years
- 10-15 Years
- 15 Years & Above



AGEWISE - URDU RESULT



Findings:

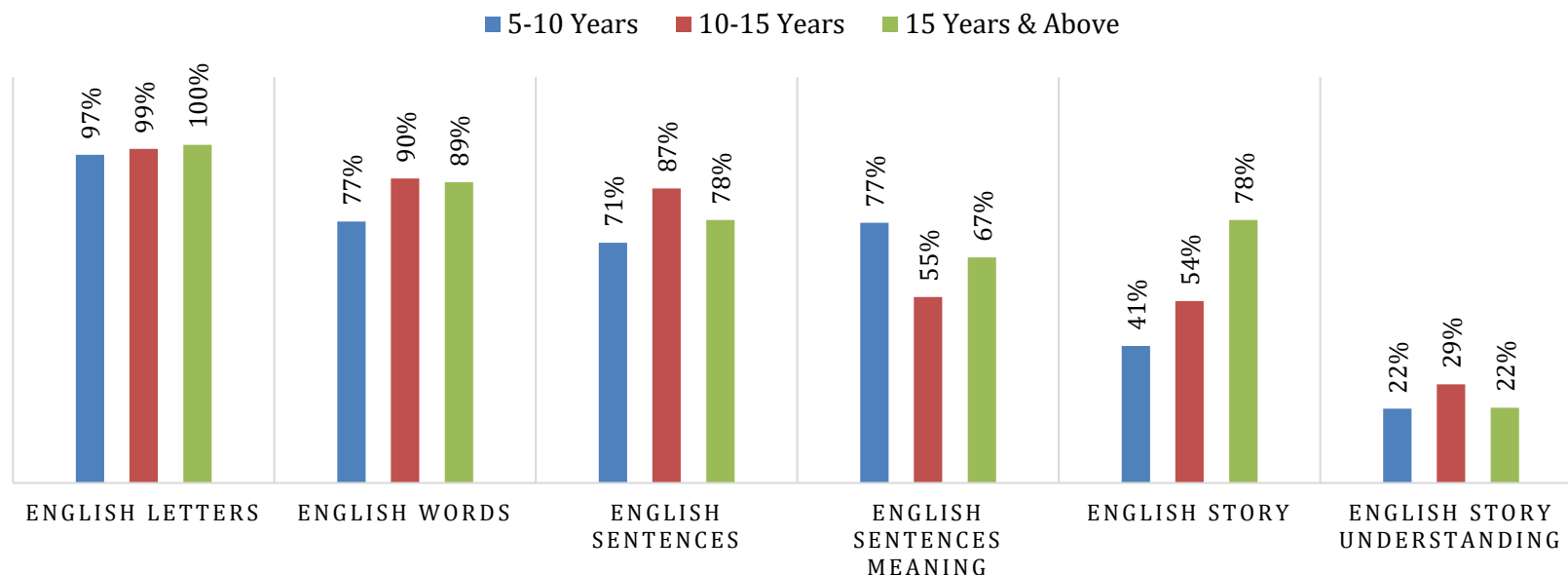
In Urdu, the students of all age groups can easily recognize Urdu letters.

The performances of the age group is improving in the category of recognizing Urdu Words, reading Urdu sentences fluently and Understanding Urdu Story is increasing as age is increasing.

In the category to read Urdu Story fluently, the students of 10-15 years age group performed well comparatively.



AGEWISE - ENGLISH RESULTS



Findings

Majority of the students of all age group can easily recognize alphabets and words.

Most of the students of all age groups are also able to read English sentences fluently. However, the students of the age group of 5-10 years are more comparatively proficient in telling the meaning of the sentences.

In the category of reading English story, the ability to read fluently is increasing with age. However, majority of the students of all age groups are unable to understand English story as they were unable to answer the related question correctly.



AGEWISE - MATHEMATICS RESULTS



Findings

Most of the students of all age group can easily recognize single digit and double digit numbers. However, the performances of all age groups decrease when recognizing triple digit numbers.

The ability to perform two digit subtraction and 2 division question increases with age as most of the students of age group 15 Years & above have performed comparatively better. Similar results are visible single digit multiplication category.

In contrast, the performance of all age groups is almost similar when solving 2 digit addition problems with majority of the students being able to solve correctly.

The ability to tell time correctly is also increasing with age.



Conclusion

The objective of this study was to test the learning outcomes of the students of TAKMIL on the standards defined by ASER. The results and detailed analysis reveal that most of the students of TAKMIL performed well in Urdu and Mathematics. In English the performance of the students has been above average till reading sentences fluently. This indicate that the learning outcomes of the majority of TAKMIL students are above average as per defined by ASER criteria.

Grade-wise results reveal that across most of the categories in Urdu, English and Mathematics, the performance is increasing with Grade such that the performances of Grade 7 students is comparatively better than Grade 6 and similarly the performances of Grade 6 students is comparatively better than Grade 5.

Gender-wise results indicated that there is no significant difference in the performance of male and female students in all subjects.

Lastly, age-wise results reveled that with increasing age, the performances of the students are improving in all subjects.

At the end, it can be concluded that majority of the students of TAKMIL are able to solve Urdu, English and Mathematics questions equivalent to that of Grade 2. The learning outcomes of TAKMIL students are up to the standards defined by ASER indicating that TAKMIL's accelerated and technology integrated literacy model is efficiently providing quality education.
