

BASELINE ASSESSMENT TO EVALUATE LEARNING GAPS

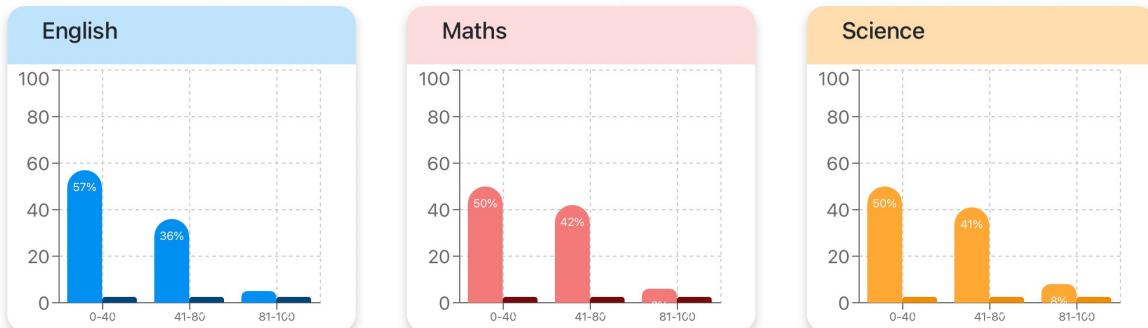
REACH TEACH LEARN MEGHALAYA

INTRODUCTION

In school Education, learning level differs from one student to another student, due to various reasons. Students need support to achieve their requisite learning levels to continue towards further education. As the content that is delivered has a one size fits all approach and therefore unable to meet the differential learning levels of the students, it is essential to provide continuous support to build the competencies and bridge learning gaps so that students can reach their potential and do well in their Examination. Considering the fact that students in class 6 - 9 have learning gaps and require support so that they are able to cope with the syllabus, the Office of the State Project Director, Samagra Shiksha, Shillong has initiated the baseline/diagnostic assessment of the students of classes 6 to 9 for the Subjects: Maths, Science and English.

The Diagnostic Assessment was administered to identify the students' learning levels through a structured standardised assessment. The diagnostic test was conducted by Bhoomi Education Consultancy in April 2023 to identify learning gaps in students and to support the state to reach decisions on the means to attain the student learning outcome.

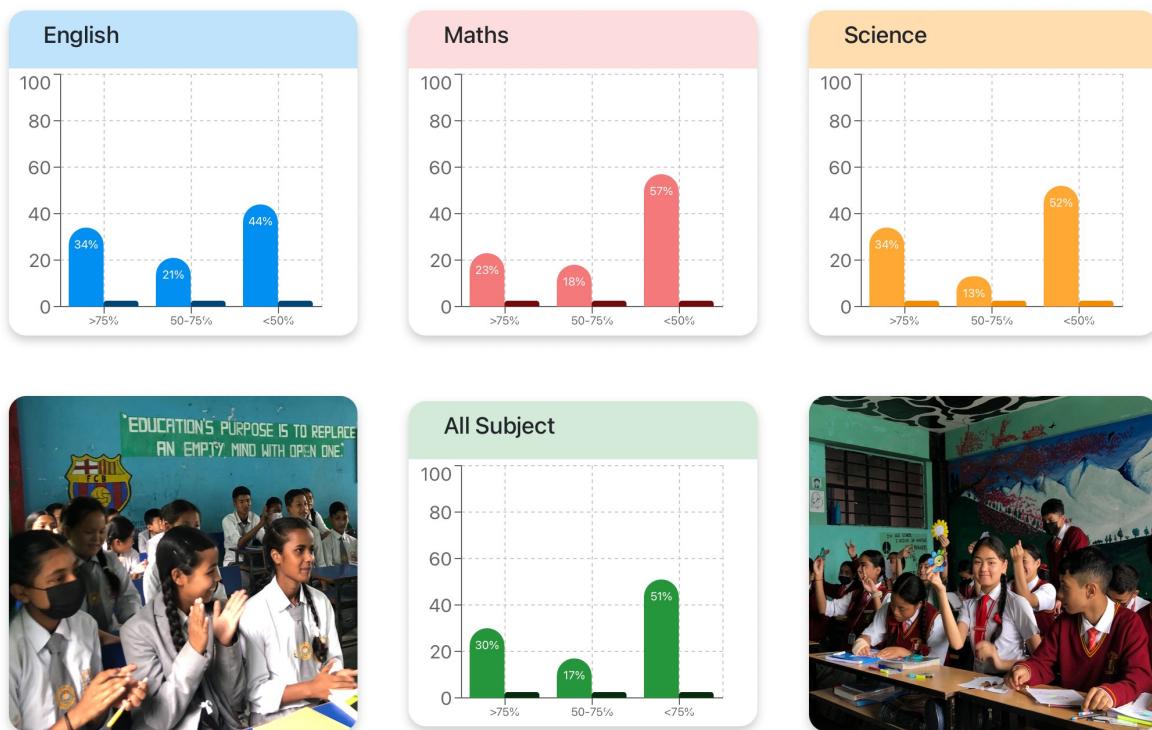
Baseline - Endline Comparison



The key results of the diagnosis phase is as under:

1. Overall performance of students recorded that the highest percentage of students are at the Aspiring level (0-40% marks) (50% in Maths, 50% in Science and 57% in English). This clearly indicates that maximum students who have attended the assessments are below their requisite learning level.
2. All districts require support in all three subjects. English requires most support amongst all the districts.
3. Class 9 has higher number of Aspiring students in all three subjects compared to lower classes.
4. We analysed aspiring students (0-40% marks) in all subjects, if a school has $>75\%$ students at this level, they are termed as aspiring schools. These schools need focussed intervention to alleviate students to the next level.

34% of schools are Aspiring in English, 23% schools are Aspiring in maths, 34% of schools are Aspiring in Science.



After overall implementation of the programme followed by analysis of the Diagnostic assessment shows that a) continuous assessment plan is required to be put in place in order to ensure that students are learning and that any learning gap that exists is being bridged b) structured school turnaround plans need

to be put in place for schools who have very high students at the Aspiring level c) monitoring of data consistently so that decisions may be taken for course correction at regular intervals.

APPROACH AND METHODOLOGY

The assessment paper has been set to evaluate the competency of students from Classes 6-9. The question paper does not attempt to grade students but rather allows them to understand their readiness for their present class. It is also set in a way that it can measure the change in the level of student's knowledge in a particular subject. The assessment questions proceed from the simple to the complex. It covers all important competencies that student should know in previous classes.

The highlights of NAS 2021 were the guiding light for us to build this assessment paper. The learning outcomes laid out by the NCERT was taken into consideration for the respective classes. The learning curve and the learning gaps of students have also considered, especially in light of COVID-19.

Multiple choice questions have been included in the Assessments to evaluate various levels of learning outcomes, from basic recall to application, analysis. They are a more reliable means of assessment. The reliability is enhanced when the number of MC items focused on a single learning objective is increased. In addition, the objective scoring associated with multiple choice test items frees them from problems with scorer inconsistency that can plague the scoring of essay questions. Because students can typically answer a multiple-choice item much more quickly than an essay question, these tests can typically focus on a relatively broad representation of course material, thus increasing the validity of the assessment.

We have tried to build this assessment paper in a structured and closed way, and it includes all the prescribed competencies of Grammar, Reading and Writing in English; Physics, Chemistry, Biology in Science and Algebra, Arithmetic and Geometry in Maths. We had to let go of including a listening test (English) and practical experiments (Science) as it required additional resources and facilities that would lead to burdening the teachers.

The difficulty level of the question paper is such that most of it can be attempted successfully by all students. It is designed in such a way that a student not only passes the test but is able to revisit all important topics in the prescribed syllabus. We believe that it is very important that a student not only understands and covers all prescribed competencies but is also exam ready.

Please refer to (Sample) Competency Framework for English Class 9 Baseline Assessment for English, Maths and Science attached as Annexures.

DATA INTERPRETATION

The graphs here show the scores of all students in the districts who took baseline assessment. All the classes are combined, whereas subjects are shown separately.

Baseline data throws up more insights when it is compared with end line scores. It can indicate the efficacy of the competency based Remedial Programme, gaps in specific areas of subjects as well as can form a basis for intervention strategies for the rest of the year. At the time of writing this report,

competency based Remedial courses were going on. End line assessment is planned after the 6-week Remedial course gets over.

The data and analytics shown here is auto generated from school's own Monitoring App. As the teacher enters the scores in the app, the analytics is instantly updated. So, data capture and analysis is almost instant and extremely accurate.

State-wide data is shown in pie charts and district data in bar charts in the following.

State level score shows that the students need most care in English where 53% students have scored lower than 40%. Maths and Science closely following, both at 50% students being low-score.

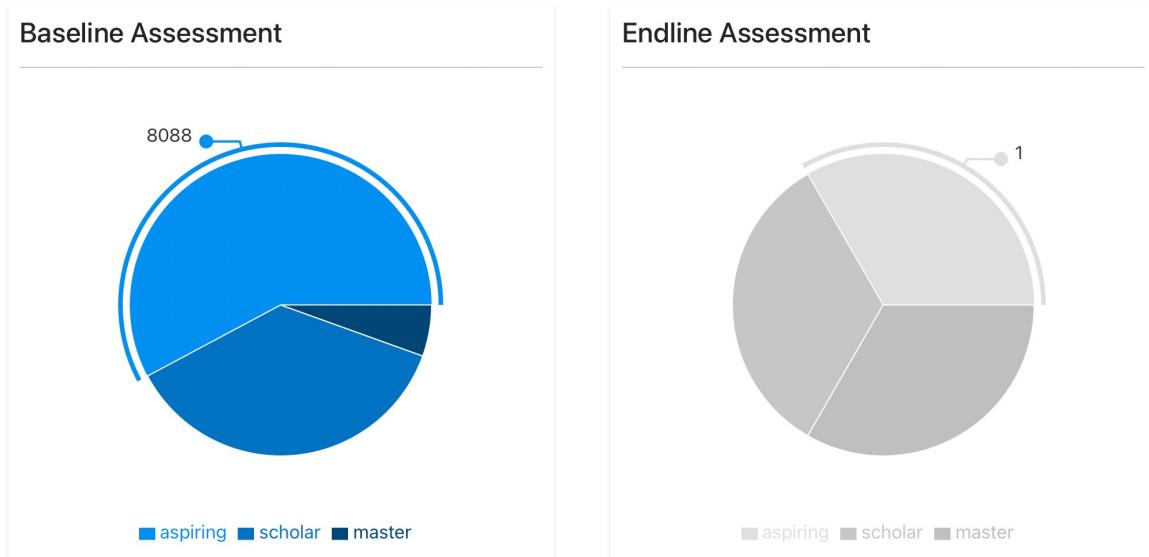
If we analyse the performance of individual districts, there are some points that becomes apparent.

East Garo Hills & North Garo hills show poor overall performance at >90% Aspiring (<40% score) students.

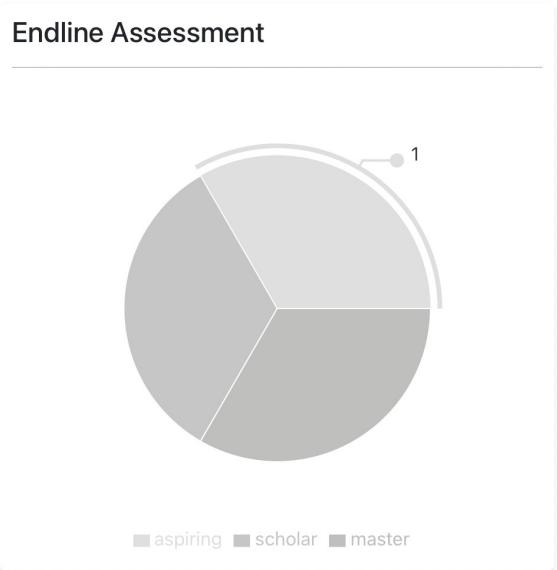
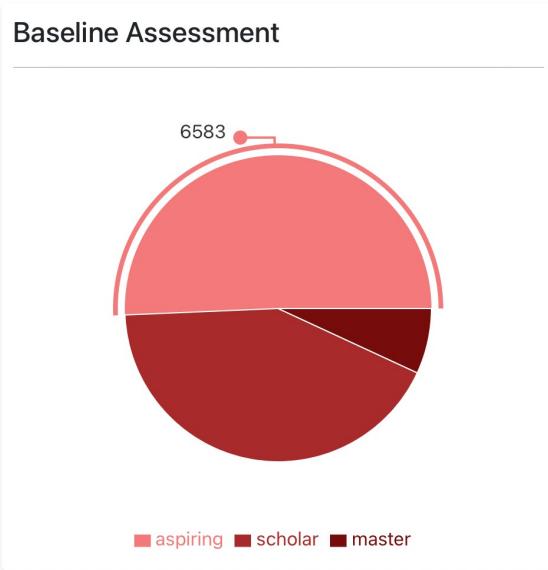
West Garo Hills and East Garo Hills – Maths score is lower than other subjects, which is a strong indicator that is different from state average.

South Garo Hills has low scores in all across the subject areas.

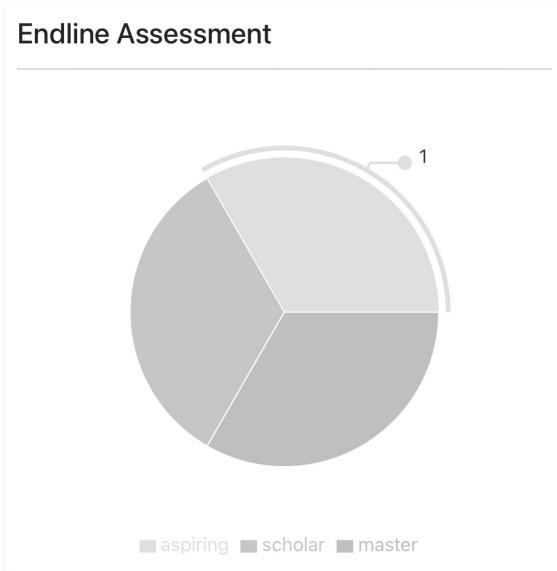
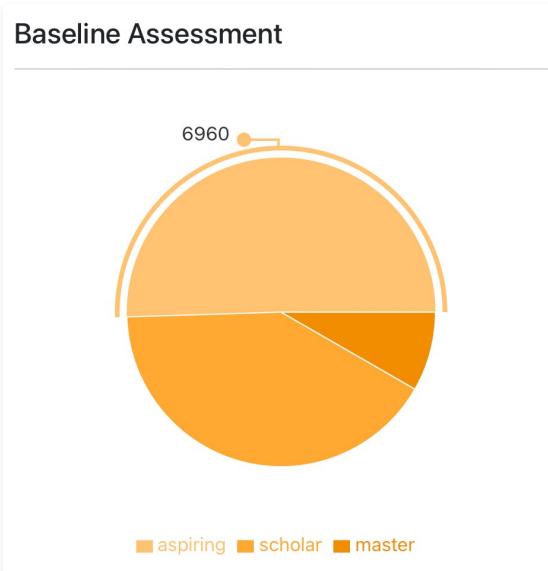
Baseline - Endline Result - English



Baseline - Endline Result - Maths

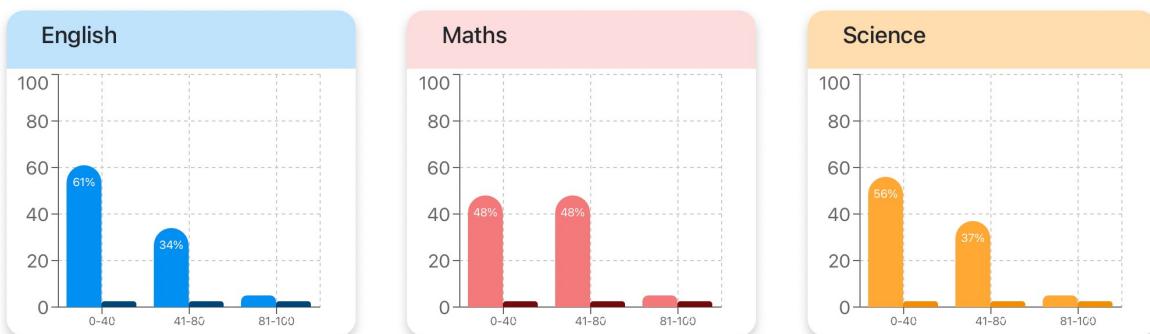


Baseline - Endline Result - Science

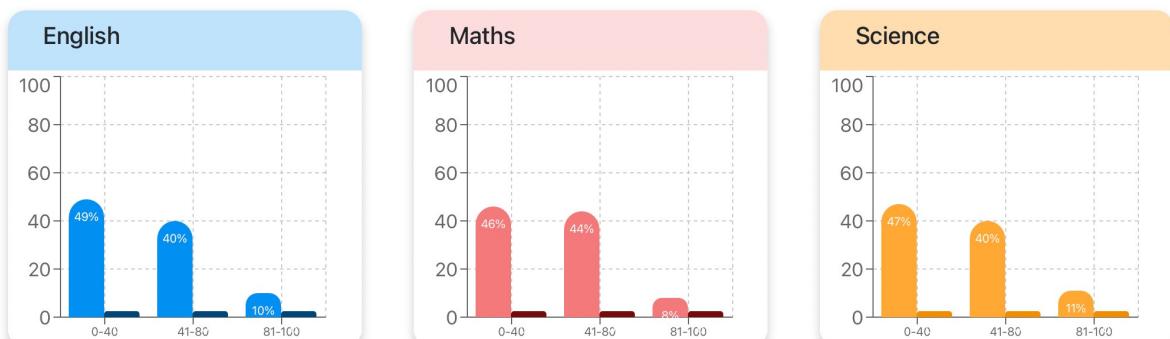


BASELINE SCORE ANALYSIS – DISTRICTS

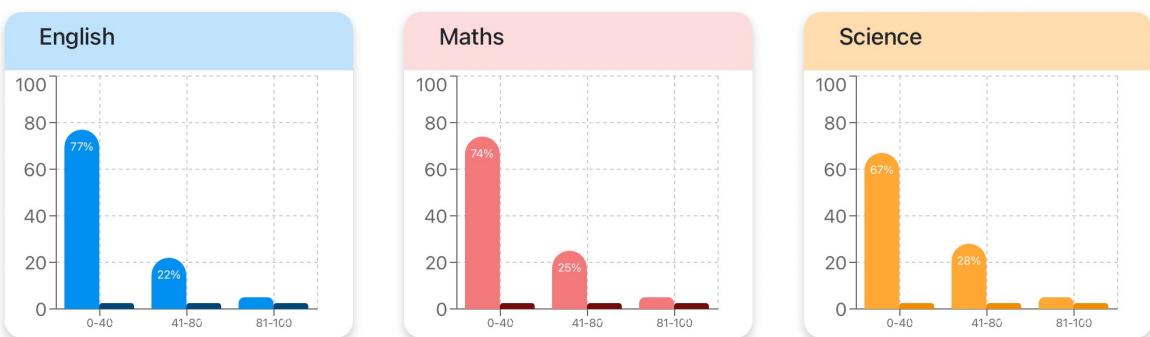
West Jaintia Hills



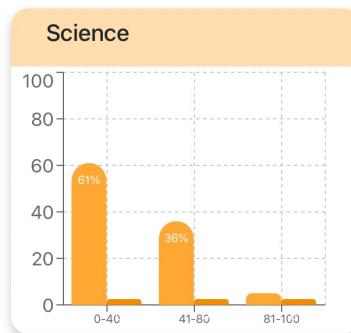
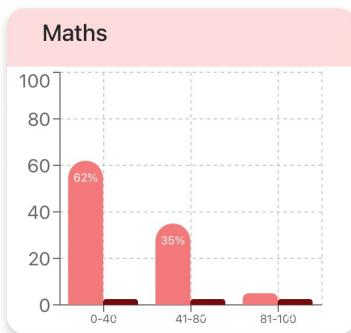
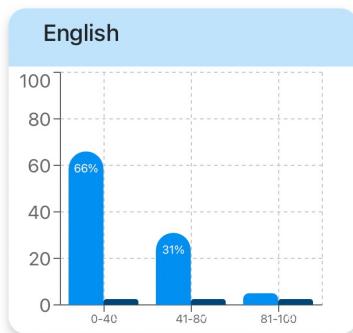
Ri bhoi



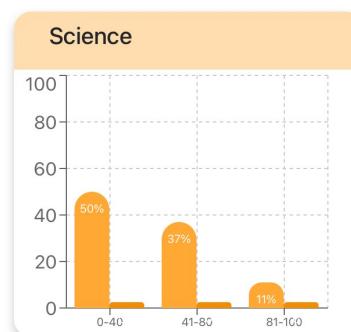
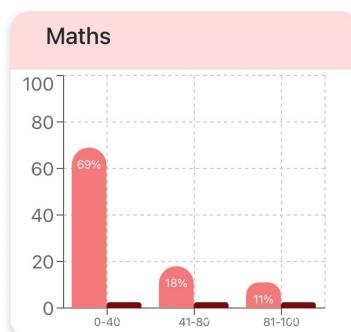
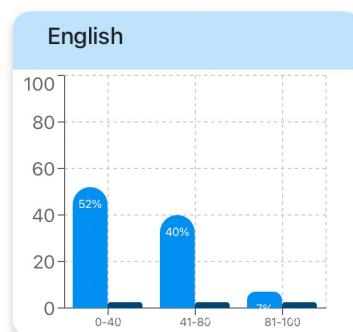
South Garo Hills



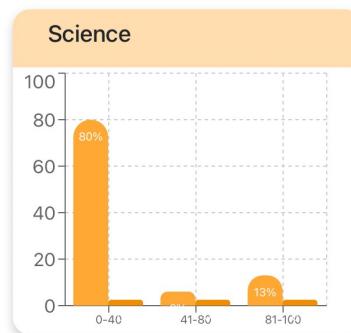
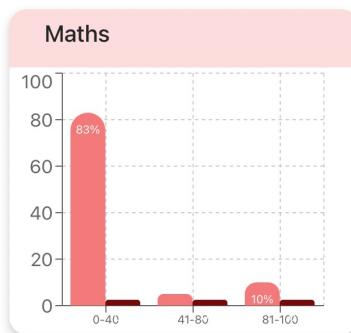
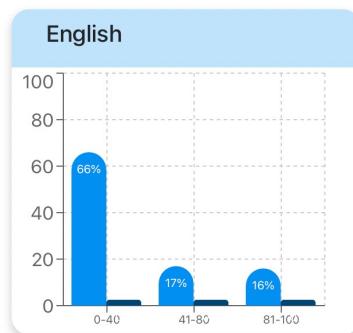
East Jaintia Hills



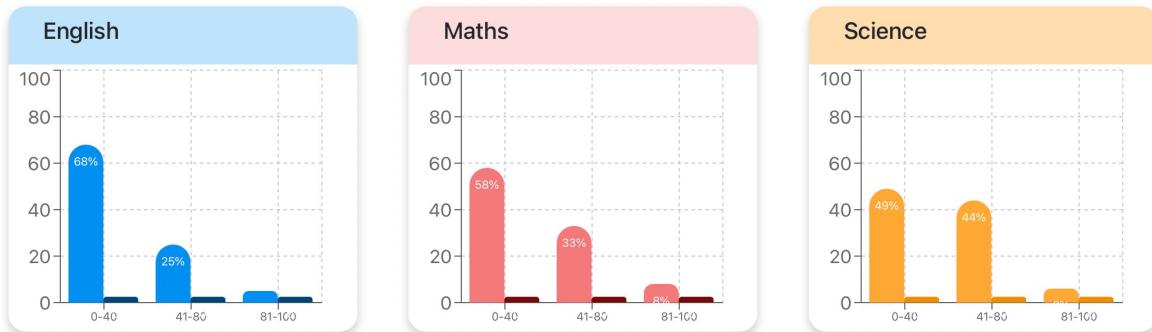
West Garo Hills



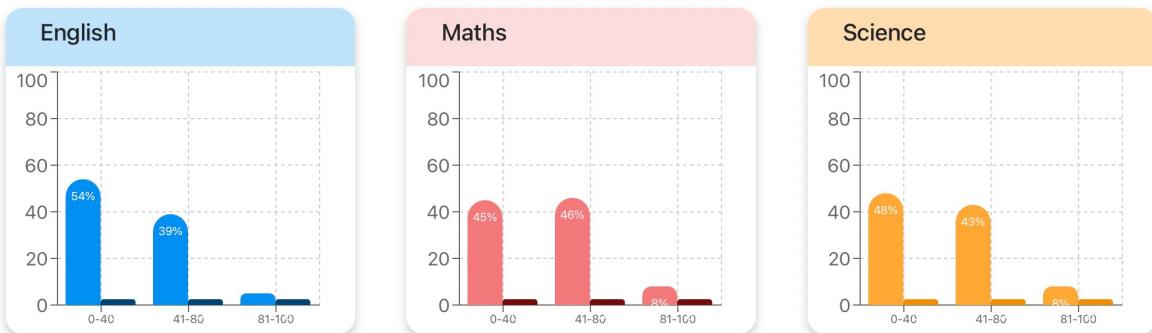
East Garo Hills



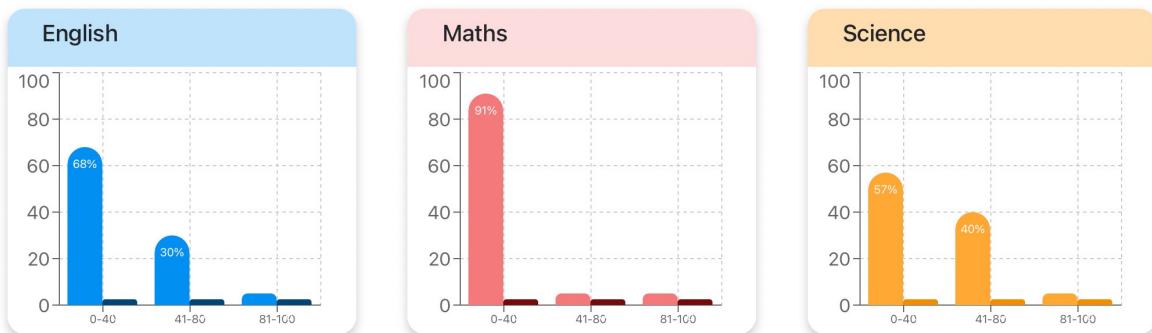
South West Garo Hills



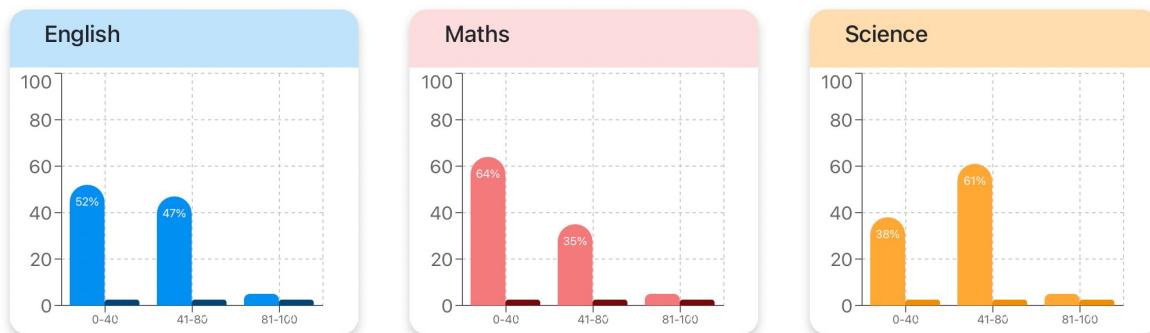
East Khasi Hills



North Garo Hills



South West Khasi Hills



CONCLUSION

In the post-Covid world, student support will be key to ensuring that learning gaps that had been created for disrupted academic session are filled and students continue to learn new things. Classroom education along with supplementary support at home will go a long way to ensure that a complete learning ecosystem is available for the students.

While Remedial Education bridges the learning gaps, Student Enrichment Programme ensures that support received by students is cohesive, integrated, and continuous. Active Learning integrates 21st Century Skills to a competency-based curriculum, which is recommended in NEP.

The teachers are supported by a series of programmes and resources to build capacity to embrace the change.

Finally, feedback, sharing good practices and data-based analysis of student's performance complete the full circle of the programme ensuring that State has the capacity to course correct as desired.

Annexure 1 – Sample Competency Framework for English Class 9 Baseline Assessment

Annexure 2 – Sample Competency Framework for Maths Class 9 Baseline Assessment

Annexure 3 – Sample Competency Framework for Science Class 9 Baseline Assessment