

Teacher Training Needs Analysis

Durg & Raipur Districts

April 2020 | Raipur

This teacher Needs Analysis was conducted by Leadership For Equity and Jan Gyanodaya Vikas Samiti with the permission of the District Education Office at Durg and Raipur districts of Chhattisgarh.

Jan Gyanodaya Vikas Samiti

The Jan Gyanodaya Vikas Samiti (JGVS) was registered with the aim to create awareness about quality education, run balwadis, schools, libraries and literacy classes; work on cleanliness, water, health and employment generation activities, particularly for women in rural and urban areas of Chhattisgarh. A library was started on 2nd may 1997 with 1300 books in village Nardaha, Raipur. In 2005 JGVS trained anganwadi workers, developed and supplied teaching-learning materials to 600 anganwadis near Kondagaon. In 2006, JGVS trained 150 women on embroidery with assistance from Chhattisgarh Khadi and Gramodyog Board and another 80 women with the help of Chhattisgarh Handicraft Board. In 2007, again 100 women were trained with the assistance of Khadi and Gramodyog Board in the villages of Arang block, Raipur. The Laxmi women Self Help Group in Nardaha was trained in carpet making and handloom. It bought additional handlooms during its operation from its earnings. JGVS undertook work of uniform stitching for girl children in the schools of Chhattisgarh. Twenty five women got employment in this work and they earned an income of Rs 1.75 lakhs. Similarly, JGVS trained women in Arang block for making file covers, bags and ladies purse with jute as raw materials. In 2007, JGVS embarked on opening of the Vishva Vedanta School at Kumhari, Tehsil Patan , district Durg.

Leadership For Equity

Leadership for Equity (LFE) a non-profit (NGO) - is a systems change and research organization that supports governments with structural and implementational reforms to improve the quality of education at scale. We work on four key work areas with the governments, which include building the capacity of field officers, scaling effective teacher support interventions, advising the governments on academic policies and governance; and undertaking research publications on government school systems. Over the last few years, LFE has worked with over six government bodies and set up 3 Program Management Units (PMUs). Our projects, co-created with the government, have reached 14,550+ teachers, 820+ officers, and more than 8,18,000 students across the state of Maharashtra. On average there is an above 80% satisfaction across programs on the support that LFE has provided to government stakeholders. LFE has also secured multi-year MoUs for capacity building and improving the efficiency of various government bodies including the Department of School Education & Sports, Government of Maharashtra; Maharashtra State Council of Education Research, and Training (MSCERT), Nashik Zilla Parishad and Pimpri Chinchwad Municipal Corporation (PCMC).

PRIMARY AUTHORS

Md Sajid Anwar
Rahul Suvarna

KEY CONTRIBUTORS

Ritika Sebastian
Akash Burlawar
Shilpa Sharma
Madhukar Banuri

FIELD INVESTIGATORS

Md Sajid Anwar
Rahul Suvarna

SPECIAL THANKS

Siddesh Sarma
Anirudh Agarwal
Ashwini Maslekar

Contact for further details:
info@leadershipforequity.org

ACKNOWLEDGMENTS

The 'Teacher Training Needs Analysis: Chhattisgarh' would not have been possible without the efforts and support from many of our team members, collaborators, and stakeholders from Kumhari and Charoda cluster, Chhattisgarh.

We would like to express our immense gratitude to all those who have brought us this far. First and foremost we would like to thank **Mr. G R Chandrakar**, District Education Officer, Raipur and **Mr. Pravas Baghel**, District Education Officer, Durg, who gave us an opportunity to conduct the study on teacher needs in the cluster of Charoda and Kumhari.

Our sincere thanks to **Mr. Madan Sahu**, Cluster Academic Coordinator, Kumhari, Durg, who supported in conducting the study in Kumhari by giving his valuable feedback on questionnaires and guiding us throughout the study. We would like to thank **Mr. Fazal Ahmad**, Cluster Academic Coordinator, who helped in visiting the schools and conducting FGD in Charoda, Raipur.

We are thankful to the Head Masters/Mistress and teachers of both clusters who actively participated in the study and gave their valuable inputs. We are thankful to **Mr. Akshay Kumar**, Director, Vishva Vedanta School, Kumhari, and his entire staff for supporting and helping in conducting this study.

We would also like to express our gratitude to the internal team of Leadership For Equity whose support has been a great help for this study. Specifically thanks to **Shilpa**

Sharma and Akash Burlawar from the LFE-Nashik team for helping with the research tools. Thanks to **Ritika Sabasitan** from the LFE's Research, Monitoring and Evaluation team for guiding us throughout this research study - from the creation of tools to publishing the report. We would like to express our gratitude to **Madhukar Banuri**, CEO of Leadership For Equity for creating this opportunity and guiding with his significant inputs.

This study was conducted in the hopes that it will catalyze action towards long term solutions for getting voice heard about teachers' needs regarding training and it will be conducted as per their demand. This team is grateful for the opportunity to conduct this study. We hope it will be useful and inspire the present and future stakeholders from both clusters who hold the key to providing better education for all.

ABBREVIATIONS

CAC	Cluster Academic Coordinator
CEO	Chief Executive Officer
CFU	Check for Understanding
CSR	Corporate Social Responsibility
CWSN	Children with special need
DEO	District Education Officer
DIET	District Institute for Education and Training
EVS	Environmental studies
FGD	Focus Group Discussion
Govt	Government
HM	Head Master/Mistress
JGVS	Jan Gyanodaya Vikas Samiti
LFE	Leadership For Equity
NGO	Non-Government Organisation
RTE	Right to Education Act 2009
SCERT	State Council of Educational Research and Training
SMC	School Management Committee
SMDC	School Management and Development Committee
SOP	Standard Operating Process
TLM	Teaching and Learning Material
TNA	Training Need Analysis

EXECUTIVE SUMMARY

The objective of this study is to identify teachers' training needs by considering the opinion of teachers and observation of the classes. Teachers receive multiple training in a year from NGOs, DIET, and SCERT. But the question remains if these training conducted throughout the year truly cater to the needs of the teachers? Secondly, are the training delivered in the manner that the teacher needed most and have these training programs been designed considering the teacher's opinions? To answer these questions and prepare a resource material for designing a training program for teachers, this Teacher Training Need Analysis was conducted. The findings are bucketed into four major thematic areas which are - On ground support, pedagogy, training content, and delivery of the training.

Training Delivery

As per findings from study, 50% of teachers stated they want to attend in-person training and that they find in-person training more comfortable compared to the other formats. 20% of teachers are ready to attend blended training, thus blended training programs can be started on a pilot basis to see the response. The teachers mentioned that conducting training at the beginning of the academic year will be beneficial for the students and the teachers and thus 58% of teachers want most training programs to be conducted in the month of July to September. Additionally, 96% of teachers don't want any kind of training program to be conducted in the month of January to March. 47% of the teachers are willing to spend 2-4 hours on training in a month while 29% of teachers are

ready to give 4-6 hours for training in a month. Also teachers can be separated into two groups and the teachers who want to give more time in a month can be a part of the learning circle/Shikshan Parishad.

Training Content

It was unanimously stated by the teachers during FGD that training around content will help in improving the learning outcomes of the class. While 80% of primary school teachers preferred to get training in Maths and 79% of teachers preferred to get training in English, around 50% of upper primary school teachers preferred to get training in science subjects. Moreover, 50% of the teachers of higher secondary schools preferred to get training in English subjects. Overall, about half of the teachers want to learn the creation and use of TLM, use of technology and improve content/subject-based knowledge.

Pedagogy

Teachers agree with the need to work on pedagogy and have shown interest in learning different skills such as creating and using TLM in class. Teachers want to learn the skill of effectively conducting Check for Understanding to check the progress of a lesson. 68% of teachers also want to learn activity-based teaching to engage the students in the class and create learning opportunities for students.

Support needed by teachers

Through the study, it was found that 65% of teachers want on-ground classroom support after training and 56% of teachers want support through classroom observation to

help improve the learning of the class. 99% of teachers are open to classroom observation and co-work at the classroom level. 67% of teachers believe that Cluster Academic Coordinator can be the most resourceful person for class and school-level support. However, during FGDs, the teachers unanimously stated that subject experts and master trainers from DIET must come for classroom observation and co-work with teachers at the classroom level. For personal development skills, 53% of teachers want to work on their presentation skills. Teachers also feel that support to make a learning environment for CWSN students is required. Teachers want to get training on the active participation of the members of SMC/SMDC. School teachers think support for the preparation of class 10th, class 12th, scholarships and competitive exams is required.

TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	iii
ABBREVIATIONS.....	iv
EXECUTIVE SUMMARY.....	v
INTRODUCTION.....	1
BACKGROUND.....	2
APPROACH.....	4
FINDINGS.....	12
TEACHER TRAININGS IN THE CURRENT CONTEXT.....	13
TRAINING DELIVERY.....	17
SUBJECT SPECIFIC TRAINING CONTENT.....	20
CLASSROOM PRACTICES AND PEDAGOGY.....	25
POST-TRAINING CLASSROOM SUPPORT NEEDS.....	50
ADDITIONAL TRAINING NEEDS.....	54
CONCLUSION.....	60
RECOMMENDATIONS.....	62

INTRODUCTION

BACKGROUND

Teachers are the backbone of the education system. They are the ones who teach in the classroom and directly interact with students on a daily basis. While doing this task in the current world they also need to connect with the updated knowledge and technology. Thus it is highly recommended to provide professional opportunities for teachers to continuously develop themselves. Government bodies from national to local levels have recognized this importance and they are running multiple training processes to support teachers. But to achieve all the objectives of those training, it is very much needed to align this support to teachers' needs. Unfortunately, general observation shows a gap in this process.

Every year teachers from primary, upper primary, and higher secondary school go through multiple training programs either organized by local / state government or by any NGO (with the permission of the govt.). These training sessions take away a good amount of time. Some of the training programs have been found to be productive but many are not. It is the case because the majority of the organized training is done with a top to bottom approach, where plans are created at the top-level and executed at the bottom level. There is minimum or no scope to know what exactly are the needs of the beneficiaries and by what way it is easy and acceptable for them. It is very much necessary to understand the need of a person and then fulfill that need. If the need for a teacher is identified, then it will be helpful in designing training programs to

fulfill that need. This will help in improving the impact of training in the actual field and somewhere directly result in improvement in student learning. Thus, as a starting point, it is important to know the needs of teachers before developing programs in any geographical area. A need-based training program can be easy to implement & execute and may show good results. Need-based training has the potential to make teachers engaged and feel connected.

This training needs analysis report emerges to understand the needs of teachers regarding the content of training and methods of conducting training. For exploring states' practices, LFE decided to conduct training needs analysis at Chhattisgarh. Also, LFE has explored Chhattisgarh with a one-member presence, thus making it possible to manage and conduct the TNA. This report will be published and submitted to the concerned government bodies and hope it can be a secondary resource data for local government bodies and NGOs from Chattisgarh to plan teacher training in the future.

OBJECTIVES

There are three core objectives for this research: -

1. Understanding the current support¹ system for teachers from Govt & NGOs. Teachers receive support from the DIET, SCERT, and NGOs throughout the year. One of the key objectives of this research is to understand what are the current structures or ways of support teachers are getting regards to training & classroom support from Govt. and NGOs.

1. Support means the training and on-ground help teachers are getting for their school, class and student's learning. 'Support' has been further defined below.

2. Understanding the needs of the teachers. Teachers need regular support for the learning improvement of students. But for proper support, it is required to understand the need. The Needs of a teacher can be classroom support, teaching methodology, assessment creation, content knowledge, creation and use of TLM, use of technology, etc.

3. Providing recommendations. The major objective of this report is not just finding needs and creating detailed reports to keep in the record but also put forward recommendations to the education department of respective districts. Additionally, the aim is to work on some of the recommendations in partnership with the local government.

CONTEXT

This study was conducted in two clusters from two different districts of Chhattisgarh - Kumhari cluster from the Durg district and the Charoda cluster from Raipur district. Charoda in Raipur comes under the Dharsiwa block. It is a completely rural area. There are many industries active in this area. One of the key reasons to select this cluster is that it is a rural area that comes under the capital of Chhattisgarh. Kumhari cluster of the Durg district is a municipal corporation but there are many schools in this cluster from villages. The schools in this cluster are a mixture of a municipal corporation and panchayat run schools. It is near Bhilai, which has been an industrial area for a long time.

	NUMBER OF SCHOOLS	NUMBER OF TEACHERS	NUMBER OF STUDENTS
Kumhari, Durg	19	127	3819
Charoda, Raipur	21	151	3892

Table: School education details of clusters in the study

Source - Teachers number as per the Information given by the CAC of Kunhari and Charoda, Number of students as per the school report card available at <http://www.schoolreportcards.in> as on 30th September 2012

APPROACH

TNA stands for Training Need Analysis. It is a process mainly used by organizations to identify the needs for training among employees and stakeholders. This study is conducted to maximize the outcome of training which directly fulfills teacher needs. It gives a clear picture of the areas of training to be conducted, the preferred method of training and the kind of on-ground support that is required. This teacher training needs analysis is being conducted to identify the training needs of the government teachers of the Kumhari cluster of the Durg district and the Charoda cluster of Raipur district. It determines training needs by comparing explicit teacher demands with teacher behaviors observed in classrooms.

Teacher Training needs analysis includes multiple aspects of teaching and learning. The TNA of Kumhari, and Charoda gives a brief idea about the current learning situation in the classroom, current support structures available for teachers, and the support teachers want for themselves either through training or onsite ahead. This TNA report covers only the needs of the teachers of primary school, upper primary school, and higher secondary school of these two clusters and those teachers are from government schools.

The study has been conducted by taking the teacher's response through online surveys, interview and FGD, and the teacher and classroom evaluation by observing the

classes. This study, in the future, will help local government bodies and NGOs to get knowledge on what areas are needed to be addressed during trainings, how the teachers prefer to get this training, and what kind of support they are looking for to better impact learning in the classroom.

THEMATIC FOCUS AREAS

The scope of this study is limited to four key focus areas i.e. content, pedagogy, support, and delivery. For each of these thematic aspects data was collected keeping in mind teachers' experiences over the past two years. Each of these thematic areas has been further defined below:

Delivery

Delivery of the training is the mechanism for the dissemination of training content. Even if the content of the training is highly effective, ineffective dissemination of the content will defeat the purpose. There are many methods of "in-service teacher professional development" training which include - in-person training, online training, blended training, model school visit, educational conference, and support at the classroom and school level. Effective training delivery ensures the atmosphere is conducive to teacher's learning. Just like it is important to know how students learn, it is also important to focus on how teachers learn the content. Delivery also involves the effectiveness of facilitators who train or coach the teachers. Teacher satisfaction and impact from the training depend a lot on how teachers have received it and hence, the study covers the teacher's views on what kind of delivery process they prefer.

Content

Content of the training comprises the technical expertise - knowledge and skills - provided during training, that are the learnings that teachers are eventually expected to utilize in their classrooms. This includes the subject-specific need of the teachers to teach effectively in the classroom which will help in improving learning outcomes. Content is also one of the major aspects of any training design and teachers spend most of the training time in consuming the content. Therefore, identifying the type of content teachers want was considered significant in the study.

Pedagogy

Pedagogy comprises the support teachers need in the 'how' aspects of teaching or teaching skill. Pedagogy refers to the ways of conducting classes including different methods for conducting class, different strategies to checking understanding of students, use of learning aids, and the use of strategy to teach are covered in pedagogical expertise. The findings relating to pedagogy will enable the design of a training framework where teachers can be trained to take a class efficiently and effectively. Learning the elements of pedagogy will enable the teachers to implement the learning of the training program in a class.

Support

This thematic area was selected to understand the type of support teachers need relating to training programs. Here the support includes on-ground support through one-on-one coaching with mentors post-training and additional topics related to SMC/SMDC, class 10th and 12th

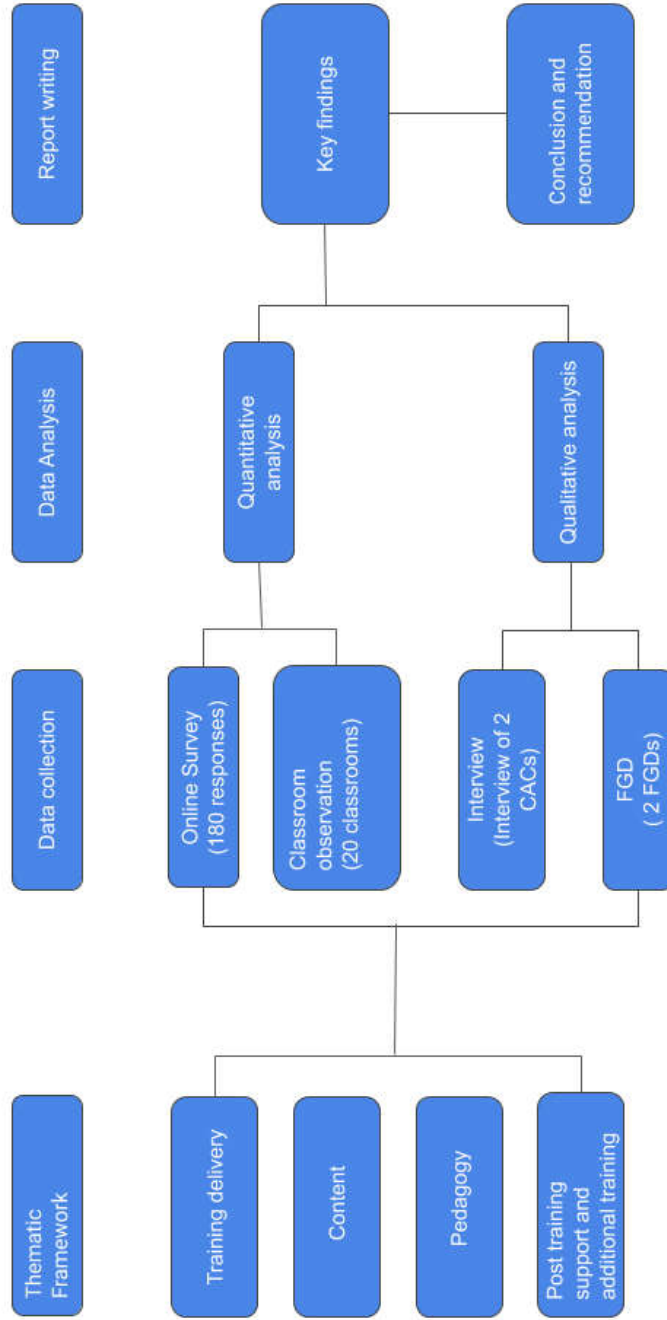
students, scholarship and competition, learning for CWSN students. It also includes support for skill development of teachers to cater to various role needs that as a teacher need to play like supporting students for their scholarship, board and competitive exams, give career guidance to students, working on parent engagement, etc. Even after successful completion of training, teachers might face challenges in the classroom due to which they might not be able to implement the learning. Support provided post-trainings assist teachers in implementing the learnings from the training and provide guidance if they face any classroom specific challenges. It ensures that teachers are able to use teaching-learning practices effectively for a positive impact on the students. If classroom support is provided regularly, teacher's concerns might be resolved and the impact on students can be higher. Given these reasons, the study covers what type of classroom support teachers need and in what manner.

METHODOLOGY

Both qualitative and quantitative methods were used to collect the data for this study. Four major focus areas of the study were defined and these areas were explored using a combination of survey, FGD, interviews, and classroom observations. These multiple methods were used to address the following four broad research questions:

1. What is the current training provided to teachers?
2. What type of content would teachers like to get training on?
3. What form of training delivery would help teachers to improve their skills and knowledge?
4. What type of classroom support do teachers need?

Fig: Process followed to develop this TNA report



The above-mentioned questions were explored using quantitative methods (survey) and qualitative methods (FGDs and interviews). The online survey was used to reach out to all the teachers from both these clusters to get to know their opinion. For more details qualitative data used with FGD and classroom observation methods. The reason to conduct an online survey and FGD was to hear the voice of teachers. In online surveys teachers responded independently and in FGD teachers got a chance to discuss further details in a group and thus, respond as a group. These methods addressed the preferences of the teachers but to understand the needs and validate all the other data, classroom observations were also done. Online surveys helped us to have a larger picture whereas FGD and classroom observation gave us more detail and on-ground understanding. These methods were combined to give more legitimacy to the findings and

to understand teachers' reasoning behind their choices. In total study included 235 participants, details of which are given in the table below.

Tools

Following four tools were used in the study:

I. Survey

A survey is used to collect primary data from the respondents. In a survey, questions related to the field of study are designed. This is the best way to collect responses from the targeted audience. It is a platform that gives the opportunity to the respondent to fill the form independently and freely. It reduces the probability of getting influenced by someone while filling this form.

TOOLS	KUMHARI, DURG	CHARODA, RAIPUR	TOTAL
Survey	96	84	180
FGD	16	17	33
Classroom observed	10	10	20
Interview of the CAC	1	1	2

Table: Participant details

For the survey, an online questionnaire² was created on the basis of the various components of current support, subject specific content in training, training delivery, support after the training, and support for additional topics. This questionnaire included 30 questions apart from demographic details. A google link of the survey was rolled out to the teachers through the cluster WhatsApp group with the help of the CACs. Teachers were asked to fill the survey form through their mobile by clicking on that link. The survey included asking objective and subjective questions to the government teachers of primary school, upper primary school, and higher secondary school. In this survey, teachers were not asked to write their names to encourage a frank response via anonymity. The timeline to fill the survey form was from 16th January to 20th February 2020. The average time taken to fill the survey form for one teacher was approximately 10 to 20 minutes. The language of the questionnaire was Hindi. A total of 180 teachers filled the survey form which is 65% of the 278 total teachers of the Kumhari and Charoda clusters.

II. Focus Group Discussion

FGD stands for Focus Group Discussion. It is a formal group discussion where participants sit together and the organizer asks questions in the group related to the field of study. Two Focus Group discussions were conducted, first in Kumhari and another in Charoda. The teachers for the FGD were selected considering gender diversity, and the combination of teachers from Primary school, Upper primary school and higher secondary school. Teachers were gathered through cluster academic coordinators (CAC). There were 16 teachers in the FGD conducted in

Kumhari, Durg. There were 6 female teachers and 10 male teachers in this group. The teachers were from primary school and upper primary school. There were 17 teachers in the FGD conducted in Charoda, Raipur. The teachers were from primary school, upper primary school, and higher secondary school. There were 3 female teachers and 14 male teachers in this discussion. In both the FGD, teachers were from many groups of teaching experiences like - less than 5 years, 6 to 10 years, 11 to 15 years, 16 to 20 years, and above 20 years. The FGD was conducted for 1.5 hrs each. A detailed questionnaire for FGD along with a note-taking structure was prepared to conduct the FGD³. Notes were taken during the FGD. The questions in the FGD included the areas of content, pedagogy, support and delivery.

III. Interviews

To collect responses from the key stakeholder one on one interviews were conducted. Two interviews were conducted for this study with the CAC of both clusters. CAC member is the head for cluster from education department. Mr. Madan Sahu is the CAC of Kumhari, Durg cluster, Mr. Fazal Ahmad is the CAC of Charoda, Raipur. The basic reason to conduct the interview of CAC was that CAC regularly visits the school to check the attendance of teachers and students and the learning happening in the school. A detailed questionnaire for an interview with a note-taking structure was prepared and notes were taken during the interview. The topics covered in the interview were the areas of content, pedagogy, support and training delivery for teachers. A one hour interview was conducted with the CAC of Kumhari and Charoda.

2. For the complete questionnaire see: <https://tinyurl.com/y8qxjvqz>

3. For the complete FGD and interview questionnaire see: <https://tinyurl.com/yahx8uvx>

IV. Classroom observation

For this study apart from listening to the teacher's voice through surveys and FGDs, it was also required to observe classrooms and document the status of the learning. Classroom observations were done to observe the teaching practices in the class, teaching style⁴, students' participation, and overall the flow of the class.

For this, a classroom observation tool was created to observe the classes. This observation tool was prepared by going through the "Teach Observation Manual" developed by The World Bank Group⁵. The broader area of observation included - pedagogy, classroom management, use of technology and student learning. The classes were observed to see the teaching practice of a teacher, student's engagement, and the overall status of a class

across the grades. The observer had the printed copy of the observation tool (rubric) to observe the class. In each cluster, 10 classrooms were observed. The classroom for observation was selected to cover the classes from primary school, upper primary school, and higher secondary school based on convenience sampling method, so that the data from all types of classes can be obtained. The subjects were Hindi, English, science, social studies, Maths, and Sanskrit. Classrooms were observed on the basis of three major areas which are given in the table below:

CLASSES OBSERVED AS PER SCHOOL	NUMBER OF CLASSES OBSERVED	AVERAGE NUMBER OF STUDENTS
Primary School	9	29
Upper Primary School	5	29
Higher Secondary School	6	46

Table: Classroom observation details

4. In this study, we have distinguished between the two as teacher practice is more of classroom practice & regular routine which the teacher does in a class. While, the teaching style is more of instruction and how the teacher is delivering a particular lesson.

5. Source: <http://documents.worldbank.org/curated/en/949541542659103528/pdf/Teach-Observer-Manual.pdf>. For complete details of the tool used here see: <https://tinyurl.com/yd88lk7j>

Pedagogy

In simple words, pedagogy is defined as an act of teaching. The way teachers deliver the lessons and teach a topic in the class is considered to be a part of teaching. It covers how apart from the learning, how the teacher teaches in the class. In this observation tool, included strands of pedagogy namely clarity of instruction, checks for understanding, encouraging participation, appreciation of student actions, real-life connections, board as a tool, content clarity, use of learning aids, and opportunity for students practice.

Classroom Management

To run a class smoothly teachers use different skills and techniques to keep the students focused, and engaged with good behavior. This is called classroom management. A strong teacher possesses good classroom management skills and techniques to maximize learning output. Classroom management plays an important role in describing the atmosphere and culture of a class. Culture and atmosphere represents the learning environment of a class. Thus it becomes a significant element to keep in the observation tool. Different strands of effective classroom management included in the observation tool were group activities, individual activities, behavior management, use of physical space, differentiated instruction, and student engagement.

Student Learning

The objective of any class is the achievement of the teaching objective and the achievement of the learning outcome of the students. At the end of the class if all the students have mastered the concept or topic, it can be said that the class has been successful. If not then the

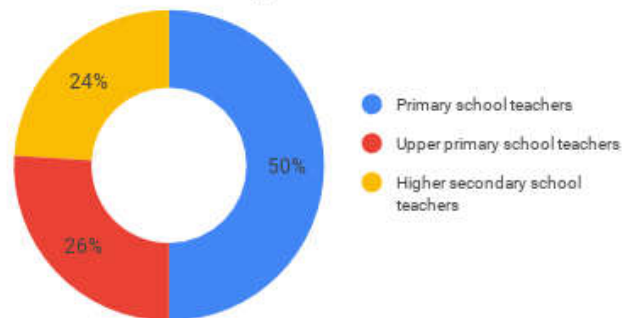
teacher needs to revisit the class, or do the revision. Thus student learning becomes a very significant factor to be kept in the classroom observation tool. Different elements of student learning included in the tool were correct responses of students, learning through peer interaction, following instructions, articulating thoughts, asking doubts and catering to students' needs, and use of technology in the classroom.



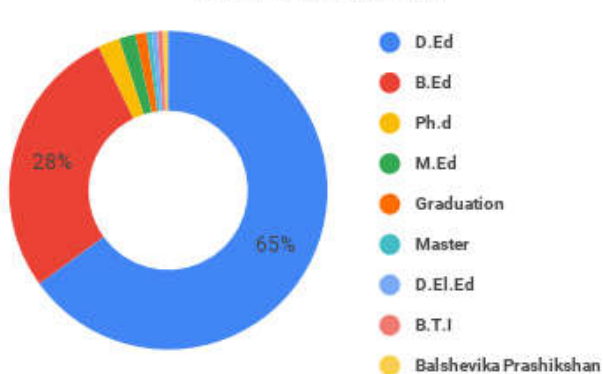
Demographic details of survey respondents

In the online survey out of the 184 total respondents, 89 teachers were from primary school, 47 teachers from upper primary school, and 44 teachers from higher secondary school participated. When it comes to teachers' educational qualification 65% of the teachers have a D.Ed degree and 27.78% of teachers have a B.Ed degree. This shows that more than 92% of teachers have D.Ed or B.Ed degrees. 40% of the teachers have the experience of 11 to 15 years as a teacher. One-third of the teachers have more than 20 years of experience as a teacher. There are less than 3.33% of teachers who have experience of 1 to 5 years as a teacher. This shows almost all the teachers have more than 5 years of experience as a teacher.

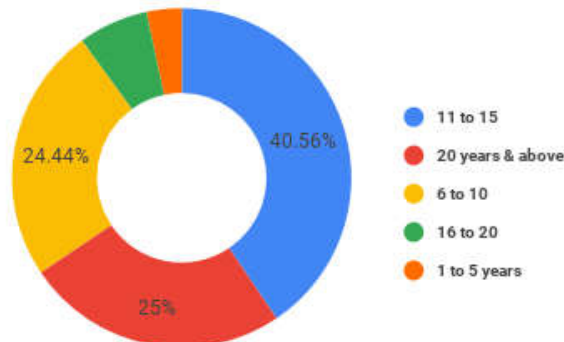
Type of teachers



Teacher's qualification



Teaching experience of teachers



FINDINGS

TEACHER TRAININGS IN THE CURRENT CONTEXT

<p>THEMATIC AREA</p> <p>Teacher training in the current context</p> <hr/>
<p>FOCUS AREA</p> <p>Type of training Training preference Training source Training on SMC/SMDC</p>

As is the case in every state, the majority of the teacher training in Chhattisgarh is the responsibility of the State Council of Educational Research and Training (SCERT) and District Institute for Education and Training (DIET). Both these institutes are responsible for the professional development of teachers which is mainly done through in-service training. These training are carried out throughout

the year and mainly focus on academic content. Also, the NGOs or CSR programmes who work with the education department also carry out teacher training which also focuses mainly on the academic content.

Currently, the most common format of training is face to face training where teachers are required to report at a training center and the training takes place physically. When officers and subject experts support teachers at the classroom and school level it is considered that they will observe the classroom and guide the teachers at the school level. Online training are the ones where teachers are trained through the internet and an online platform. Online training can be attended from home as per teachers' or participants' convenient time and it does not require teachers to go to the training center. In educational conferences, teachers are sent to attend a conference where experts from the education sector share their insights. When a teacher is supported through some degree, course, and program during their service for professional development it is considered as "in-service training & support". At times teachers have been given the opportunity to visit model schools to learn best practices from that school.

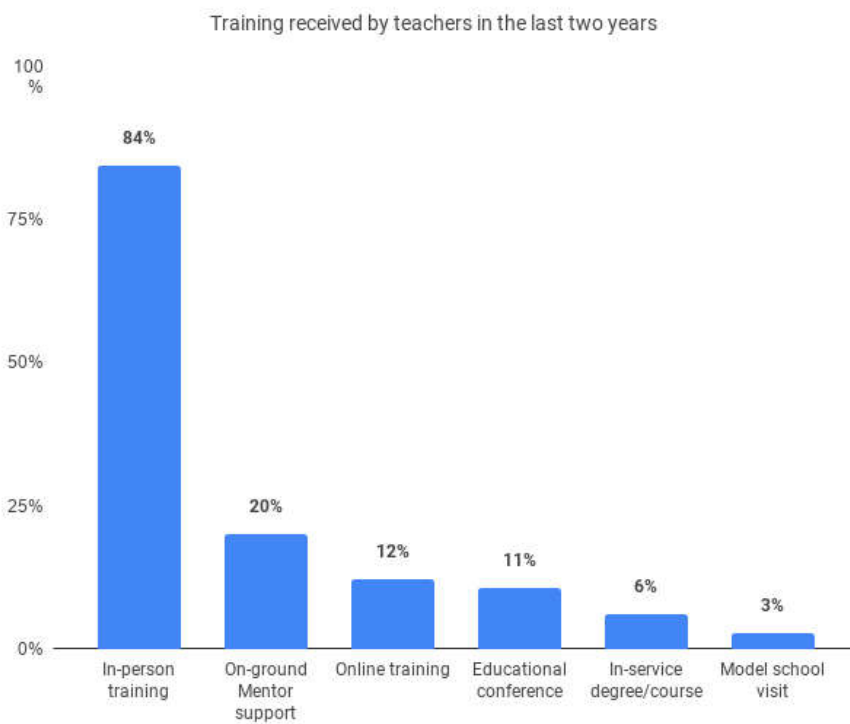
Few questions in the online survey were included to understand the current professional development structures from the government for the teachers including the type of training they have received in the last two years, and the format of the training, classroom support structures etc. We kept the questions limited to the support received in the last two years. It included the types of training conducted in the last two years either by govt or NGO's / Organisations.



Type of Training

The majority of teachers (84%) have attended face to face training in the past two years. This shows the training conducted for teachers in the last two years has largely been in-person training. During FGD and interviews also, teachers said they mostly get face to face training.

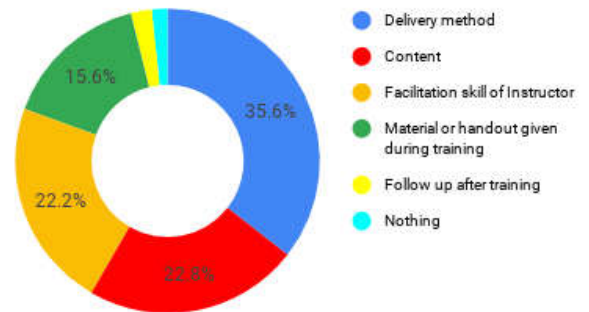
Teachers also preferred face to face training over other forms of training, as it gives more clarity of the content and keeps them engaged throughout the training session compared to online training. They said face to face training gives them a chance to clear their doubts at that very moment itself, as well as provides a chance for peer learning.



Training Preference

In online surveys and FGD, we asked teachers about what they like the most in the training that they have received in the last two years. The options included the content of the session, material or handout given to teachers at or after training, ways of conducting training such as face to face or online and facilitation skills of the instructor. From the survey data we see that there are a few elements of the training that are liked by teachers most. One-third of the teachers stated they found the delivery method of training most interesting. The delivery method signifies the flow of the session and type of props used in the session which includes visual aid and audio clip. One-fourth of the teachers found the content and the facilitation skill of the instructor most interesting. This reflects that in face to face training, the delivery method of training, facilitation skill, and content of a training training are mostly recognized elements by teachers.

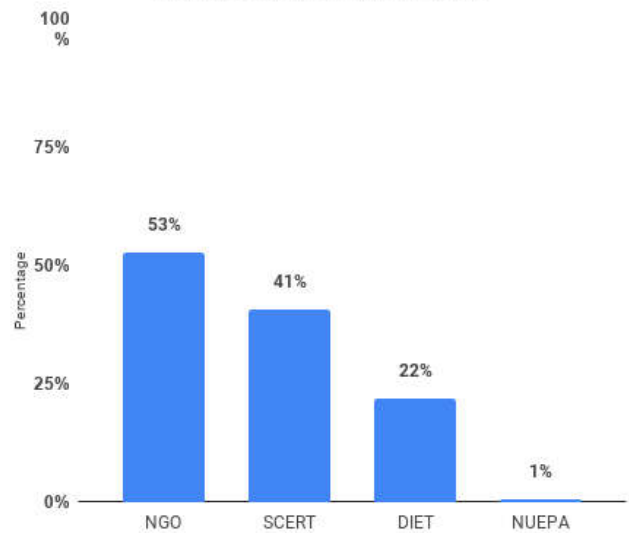
Training Preference of teachers



Training Source

53% of the teachers attended the training conducted by NGOs from the last two years. This signifies training by NGOs is most frequent among our respondents. From the table, it can be seen that SCERT has also conducted training sessions for the teachers of these clusters. This data set shows it is important to work with NGOs which are related to teacher training in these two clusters.

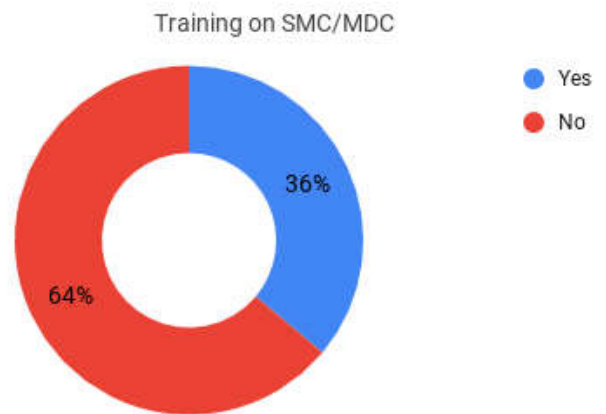
Training source in the past two years



Training on SMC/SMDC

School Management Committee (SMC) is a form of community interaction and involvement in school functioning. The idea behind the formulation of SMC is to involve communities to take an active role in planning, implementation, and monitoring of the development of the school. Formation of SMC in schools is a mandatory requirement for all schools as per the Right to Education Act, 2009. SMC's are in schools of std 1 to 8th. It includes representation of parents, teachers, students, and local corporator. School Management and Development Committee (SMDC) is a slightly same role but it is formed under Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and it includes alumni students along with other members which are mentioned under SMC.

Even though SMC/SDMC is necessary for schools, the data set from below shows that 64% of teachers stated they did not receive any kind of training to run the SMC/SMDC committee effectively especially from the last two years. It strongly reflects that SMC/SMDC is not a much-highlighted topic for teachers' support currently but in the future, it is much needed.



TRAINING DELIVERY

THEMATIC AREA

Training Delivery

FOCUS AREA

Mode of training

Internet connectivity- in school

Training period

Training hours in a month

Training delivery includes mode of training, training period and training hours. Teachers were asked about their choice of training sessions they want to attend from the different modes of training options. Teachers were asked about their preference of the months for the training sessions to be organised and the amount of time they want to give for training in a month. These questions were asked for the purpose to customize the training programs as per the choice of teachers.

Mode of Training

Currently, there are different modes of training through which teachers' training programs are being delivered. The

most commonly used method is in-person training. However more recently the reach of technology is resulting in online training programs as well. For example, blended training is the mixture of online and in-person training, where teachers are called at the training center as well as they consume the content online individually. Another example is Shikshan Parishad, which is a professional learning community where teachers meet once a month and share their experiences. It helps in learning from each other. Support at school & class level is also considered as one kind of training.

During the survey teachers were asked regarding the mode of training that they prefer. Half of the teachers stated they want to attend in-person training. In the FGD also most teachers said that in-person training gives them more clarity about the training program and keeps them engaged in the program.

One-fifth of the teachers stated they want to attend blended training. In FGD teachers expressed their feeling to explore the blended training method as it is a new concept for them. This shows that in the future the majority of the training program should be organized in-person mode and blended training can be tried as it is a new model of training.

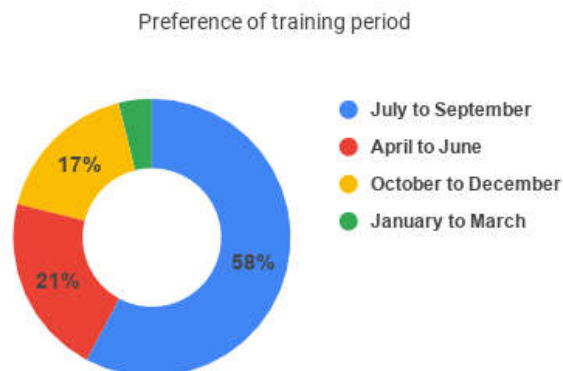
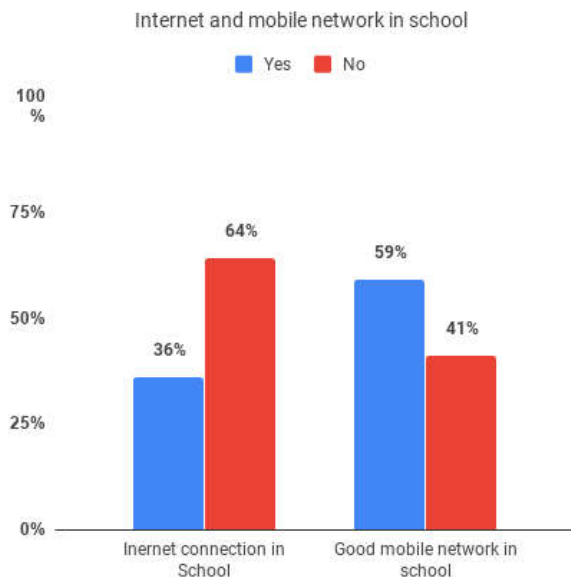


Internet Connectivity in school

To understand the availability of net connection in schools a question related to the availability of the internet and a good mobile network was asked to the teachers in the online survey. It was found that 64% of schools don't have an internet connection and in 41% of schools, there is no good mobile network. For the creation of an online program which can be conducted in school for the teachers, and students it is required to have an internet connection and a good mobile network in the school.

Training Period

In an academic year, there are four quarters - April to June, July to September, October to December, and January to March. The question was asked to teachers to know which quarter is best suitable for conducting most of the training. This will help in designing the training program and allocating the months for the training programs. More than half of the teachers want the training to be conducted in the month of July to September. 96% of teachers don't want the training to be conducted in the month of January to March. The month of January to March is the period where teachers revise the lessons, teachers, and students both spend most of their time in learning and assessment. Maybe this is one of the reasons where teachers don't want any training sessions to be conducted in the month of January to March. Organizing training programs in the month of July to September will help in the follow up of the implementation of the programs also. In the FGD also teachers said that they want to attend the training programs in the beginning of the year so that they can

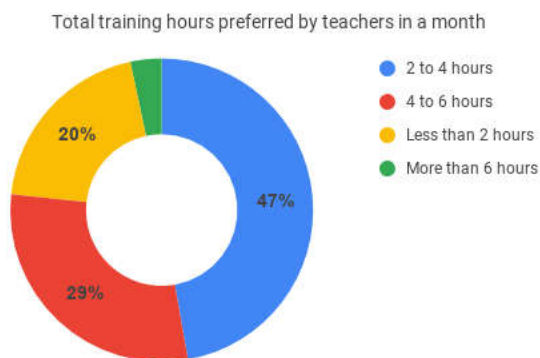


implement the learning in the class and can see the progress.

Training hours in a month

In a year teachers attend multiple hours of training, this includes all types of training including academic and non-academic. This question was asked to understand how much time teachers are willingly ready to give for training in a month. This will help in designing the program with the time of the program in a month.

Almost half of the teachers are willing to give 2 to 4 hours a month for training. This shows for 2 to 4 hours of training in a month teachers will come happily in the sessions and it will help in improving the outcome of a training program. One-third of teachers are ready to give 4 to 6 hours for training. The time given by these teachers can be utilized for seeding a professional learning community (PLC) where teachers meet once in a month and share their experience.



SUBJECT SPECIFIC TRAINING CONTENT

THEMATIC AREA

Content

FOCUS AREA

Areas of training which teachers want to receive

Teacher’s perspective on subject knowledge

- Primary school teachers
- Upper primary school teachers
- Higher secondary school teachers

In one academic year, teachers receive multiple training sessions. This part was included in the questionnaire to understand what are the curriculum specific subjects on which teachers want to get training in the future. In this

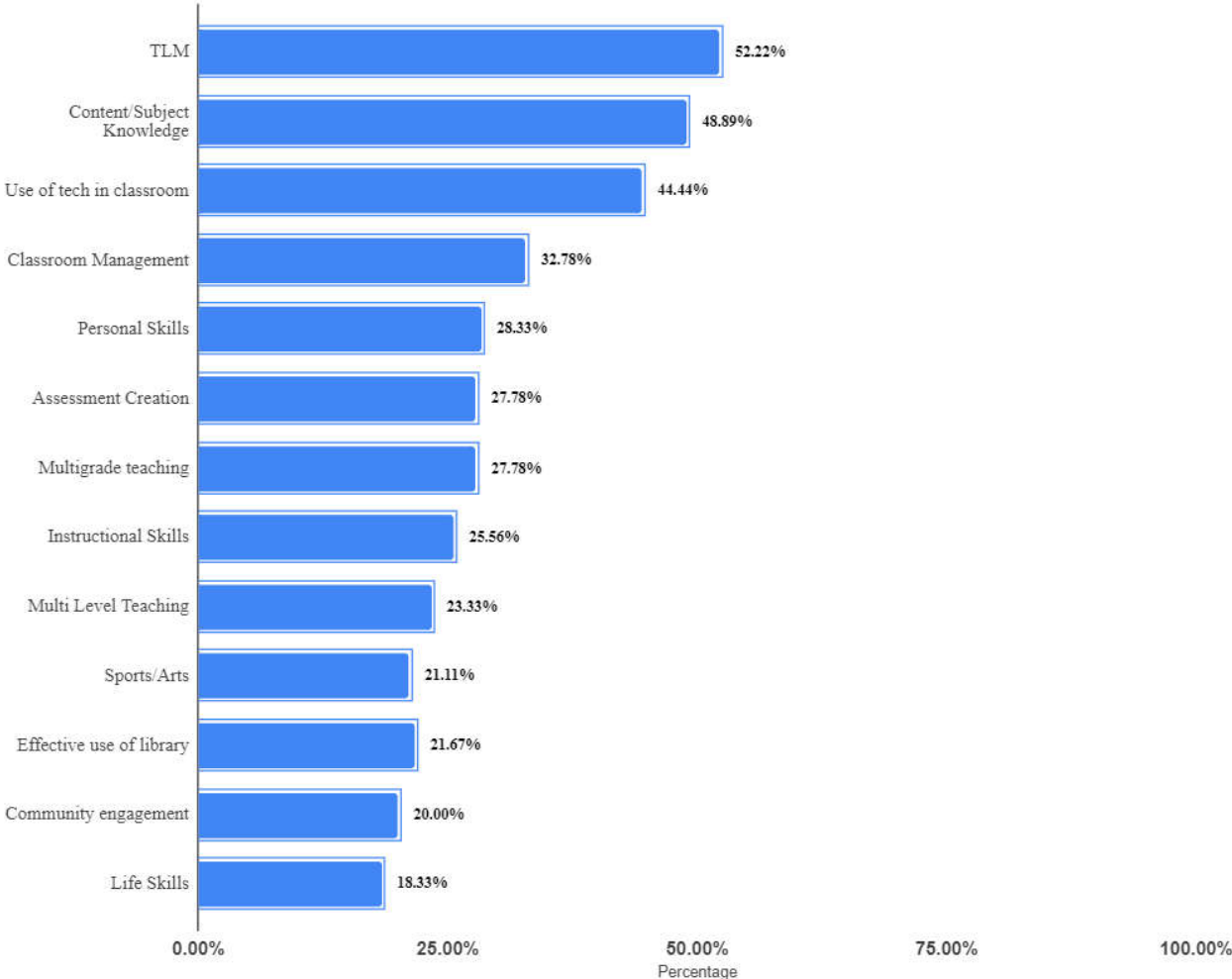
section, the preference given by primary school teachers, upper primary school teachers, and higher secondary school teachers has been shown separately. Subjects from primary classes, upper primary classes, and higher secondary school classes differ from each other. Also, the priority of the teachers of different grades differs from each other. To make it relevant the analysis has been done separately for primary school teachers, upper primary school teachers, and higher secondary school teachers.

Areas of training which teachers want to receive

Through the online survey we also tried to get to know the areas where teachers want training in the future. Around half of the teachers stated they want to attend training on use of teaching learning material (52.2%), content/subject knowledge (48.89%), and use of technology for teaching (44.44%) Teachers feel content and subject-specific training will enhance their knowledge of a particular subject.

These training sessions on content, subject knowledge, and pedagogy will help in finding interesting ways to teach the subject also. While classroom observation it was found that only 10% of teachers used technology in the classroom while teaching. Teachers stated they want to learn the use of technology so that the learning can be improved. During classroom observation, it was also found that only 20% of teachers used multiple learning aids to teach. During FGD teachers stated they want to learn the skill of creating TLM and using it.

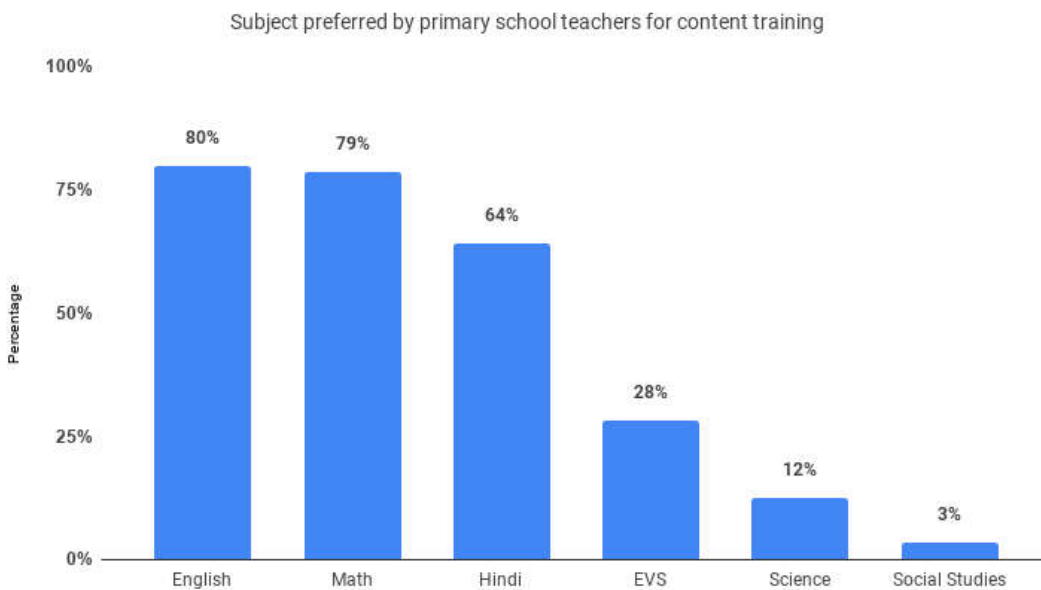
Areas of training preferred by teachers



Subject specific training needs among primary school teachers

In primary schools, there are mainly four subjects taught in a class which are English, Hindi, Maths, EVS. This question was asked to understand the subjects on which primary teachers want to get training.

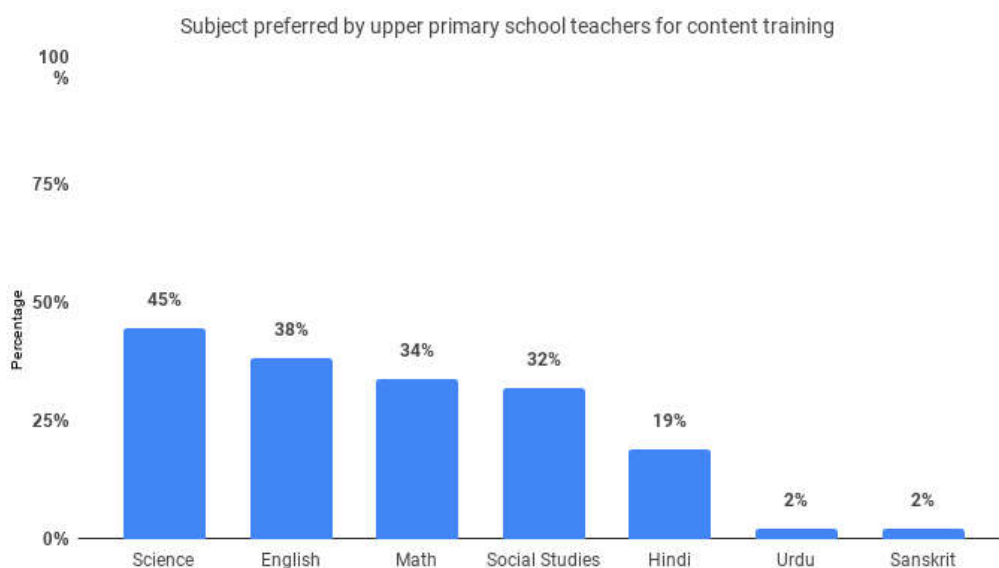
The majority of the teachers want training in English, Maths, and Hindi. It shows the teachers have Language and Mathematics outcomes as a priority. During the FGD also teachers stated that they need support in English and Maths. It mainly includes reading, writing and speaking for English and basic elements of Maths. This needs to be considered while designing training programs for primary school teachers and they need to be given support on English, Maths, and Hindi.



Subject specific training needs among upper primary school teachers

In upper primary school there are mainly five subjects which are English, Hindi, Maths, Science, and Social Studies. Along with this, there are two other language subjects which are Sanskrit and Urdu.

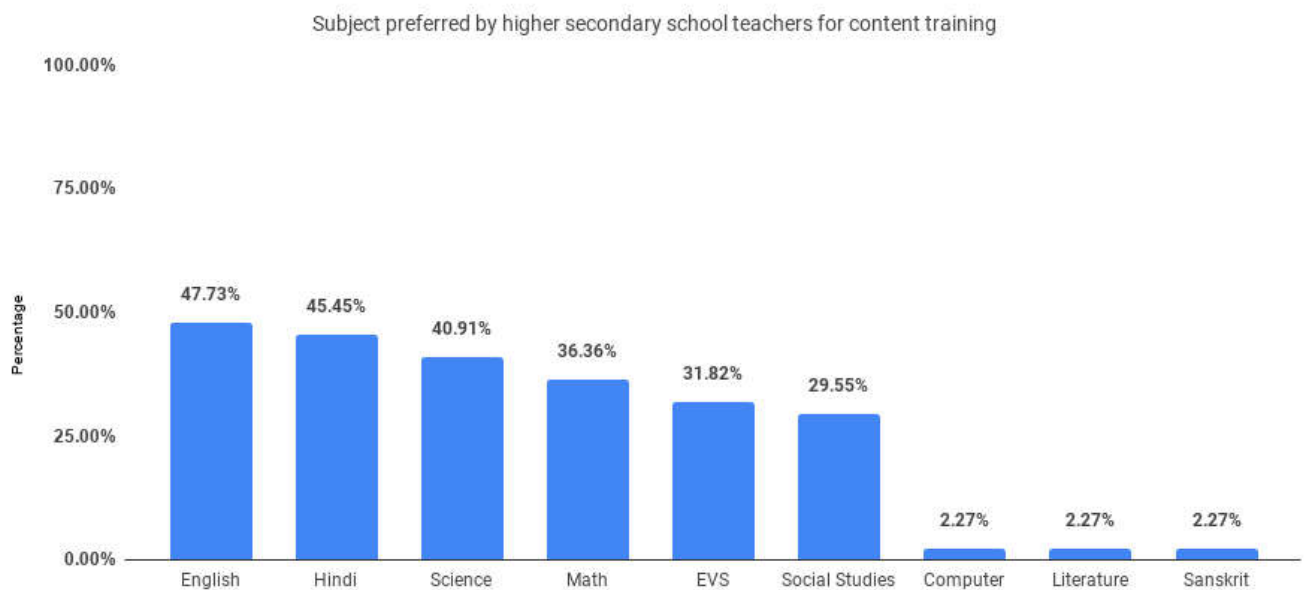
Here almost half of the teachers stated they need support on Science. The priority of the teachers is the Science subject here. Around one-third of teachers preferred to get support in English, Maths, and Social Studies. This will be helpful in designing a training program for upper primary school teachers where the subject can be prioritized as per the choice of the teachers.



Subject specific training needs among higher secondary school teachers

In higher secondary school, there are mainly five subjects which are English, Hindi, Maths, Science, and Social Studies. Along with this, there are two other language subjects which are Sanskrit and Urdu.

According to the majority of the teachers, language is the first choice for support. Most of the teachers want to get support in English followed by Hindi. More than one-third of the teachers prefer to get support in Science and Maths. For higher secondary school teachers, English needs to be prioritized as content while designing training programs followed by Hindi, Science and Social Studies.



CLASSROOM PRACTICES AND PEDAGOGY

THEMATIC AREA

Classroom Practices and Pedagogy

FOCUS AREA

Content clarity
Real -life connections
Classroom instruction
Assessment creation
Classroom management and student engagement
Student learning method
Classroom activities
Classroom resource utilization
Use of technology
Use of learning aids

Pedagogy refers to the method of teaching a class or a lesson. It consists of the strategy teacher uses to teach a concept, the method, use of TLM, and conducting CFU. Some questions related to improving pedagogy and the kind of support needed for pedagogy were asked which are classroom observation, instruction skills, classroom management, and TLM.

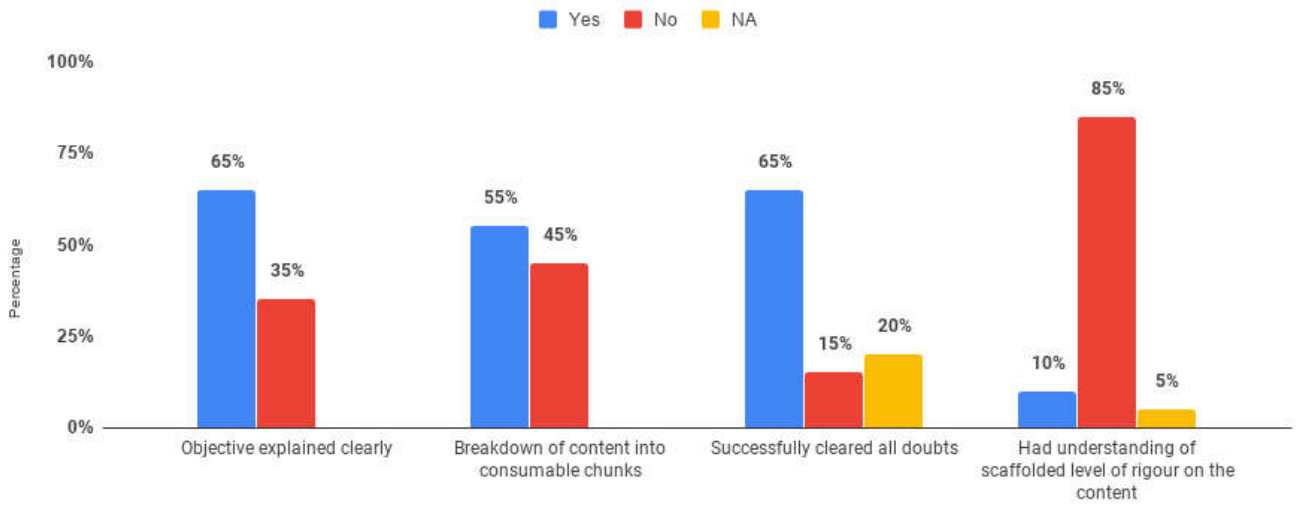
Content clarity

Explaining the objective clearly, breaking down the content into consumable chunks for students, clearing the doubts brings the content clarity among students. If the content clarity has been kept in focus to deliver a lesson it derives students' learning in the classroom. Content clarity is an important factor to be kept while observing a classroom. 65% of teachers explained the objectives clearly. 65% of teachers successfully cleared all doubts. Only 55% of teachers gave instruction by breaking down the content into consumable chunks. 10% teachers had the understanding of the scaffolded level of rigor on the content, which means moving from a simpler version of the concept to a challenging version was missing in the class. Teachers need to be trained on breaking down the content in consumable chunks and scaffolded rigor of the content.

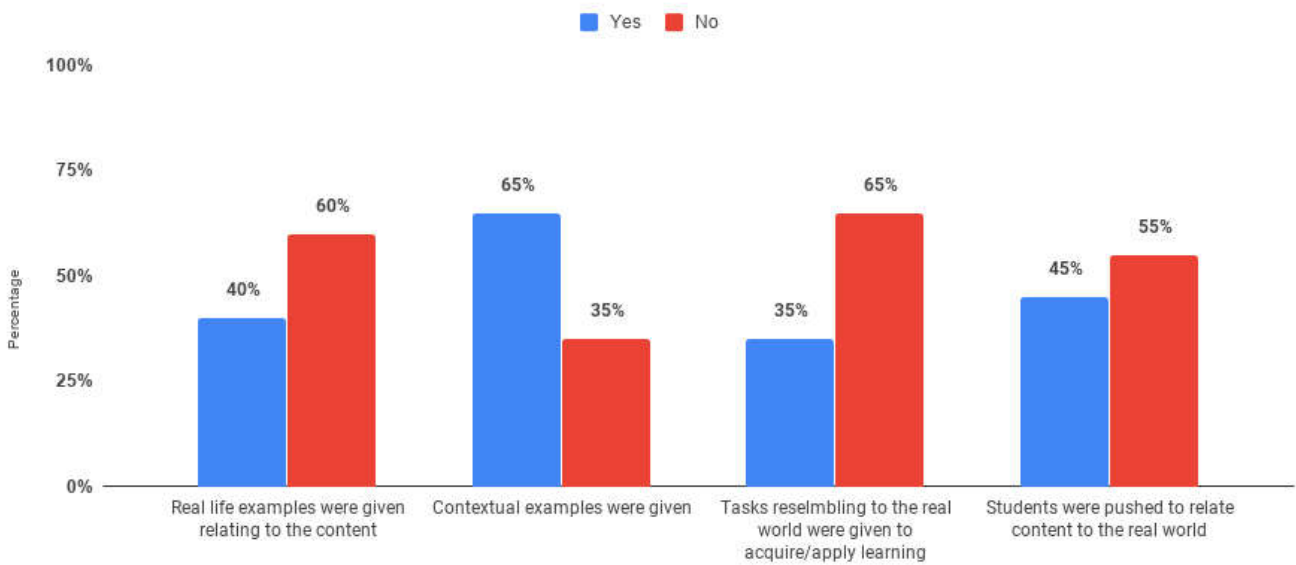
Real-life connections

When a teacher gives an example of a concept that can be easily seen or observed in our day to day life it is called a real-life connection. Currently, it is one of the most demanded elements in a lesson to make the learning easy and relatable for students. Thus, it is an essential factor to be seen while observing a classroom.

Content clarity in teacher instruction



Real life connection used in classroom teaching

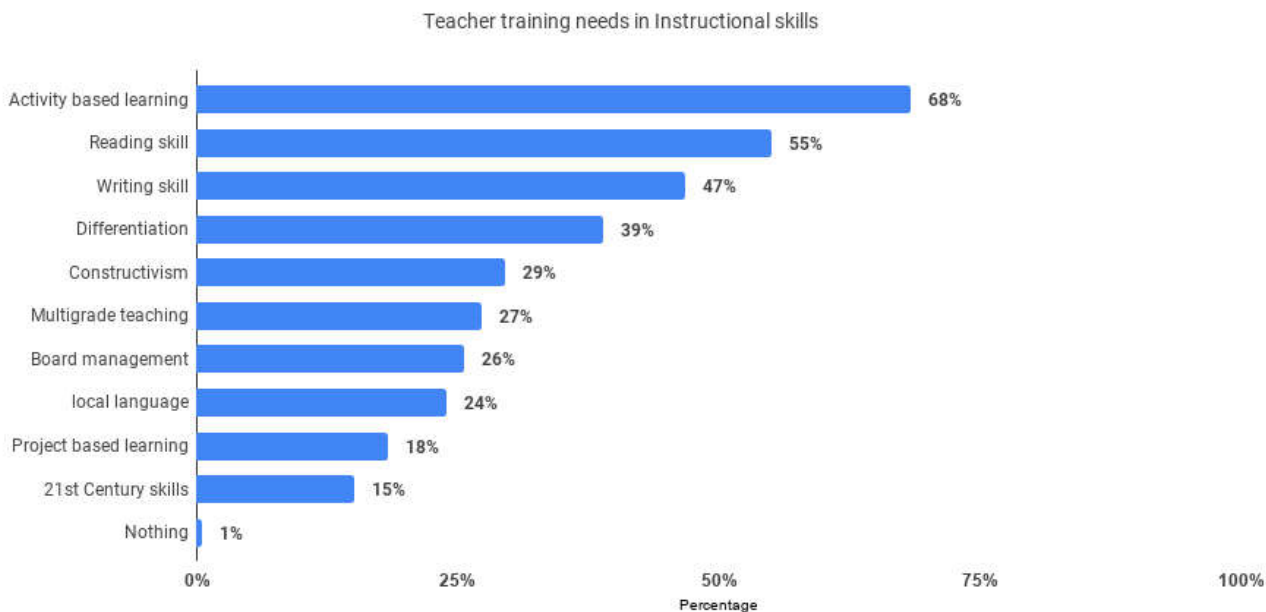


During the classroom observation, it was found that teachers mostly give contextual examples to teach a concept that is given in the book. Only in a few classes real-life examples were given related to the content. In only 35% of classes, tasks resembling the real world were given to acquire learning. In less than half of the classes students were pushed to relate content to the real world. Thus it is required to train teachers about the importance of real-life connection and its use while teaching a class to drive maximum learning among students.

Classroom Instruction

Teacher needs on Instructional Skills

Through instructional skills, it was asked to know what skills teachers prefer for their classroom teaching in a better way. Instruction skill signifies strategy used to teach a lesson. There were 8 to 10 options given in the online survey question where multiple options were given for them and teachers can select more than one option.

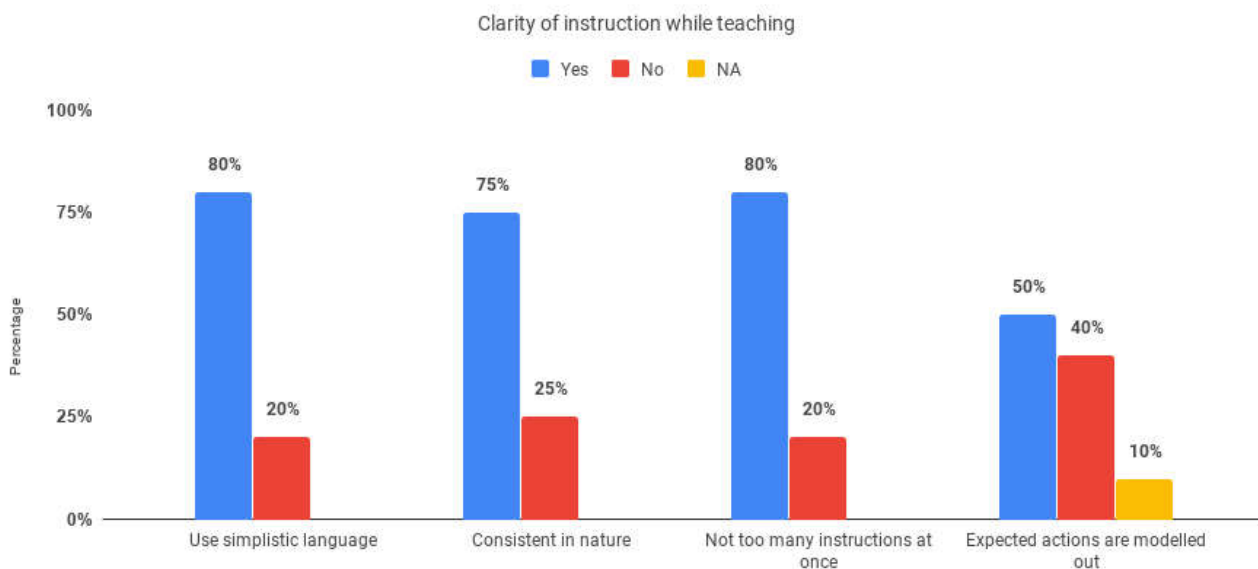


Through an online survey, the majority of teachers (68%) said they need training on activity-based learning whereas 55% of teachers said reading skills. But during classroom observation, it was observed that teachers struggle with other skills set which were not mentioned in surveys and FGDs. For instance, it was observed that the majority of teachers struggle with Multi Grade - Multi Level teaching. In some schools, because of a lack of teachers or classrooms, students from multiple grades sit together and the teacher teaches them together in one class. In both clusters, teachers' vacancies are high and those who are in school sometimes get busy either with non-academic work or attend some training. Thus, teachers need to handle multiple grade students at one time. Also, in every class, there are students with different levels and during classroom observation, it was found that teachers struggle

in teaching these students together. Teachers struggle and need some level of support in both these areas. Also, another area for support observed was classroom management including board management and student management. Teachers were seen struggling in this area as well.

Teacher practices on clarity of instruction

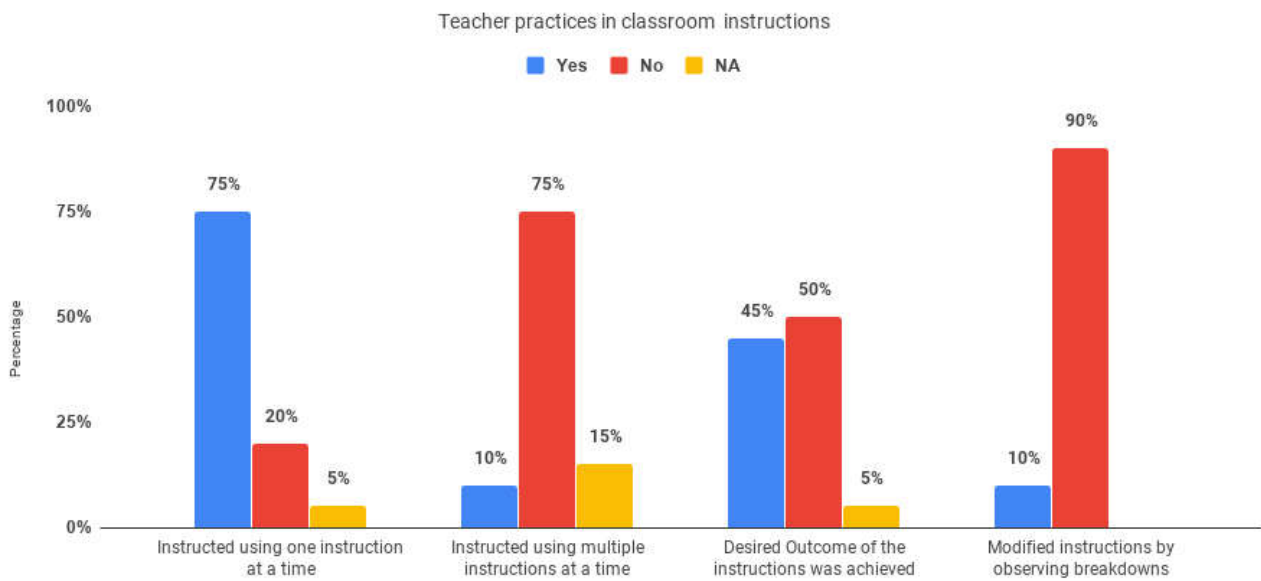
The clarity of instruction means whether the instructions given by teachers are easily understood by students or not. For clarity of instruction use of simple language, clear instruction, and clarity of expectations play an important role. Clarity of instruction plays an important role in driving students' learning and keeping students on task. Thus it is an important factor to be considered during a classroom observation.



During the classroom observation, it was found that teachers used language which was easy for understanding for students in the class. They are consistent in nature. Teachers don't use too many instructions at once which is good for keeping students engaged and interested in the class. But it was also found that expected actions were not modeled out by 40% of teachers. If such actions are not modeled out by teachers, then it results in bringing ambiguity among students and they are confused about the task. This directly impacts students' learning. So to drive 100% student learning it is required that expected actions are modeled out by teachers. This can be one of the factors while designing training programs for teachers.

Teacher practices in classroom instructions

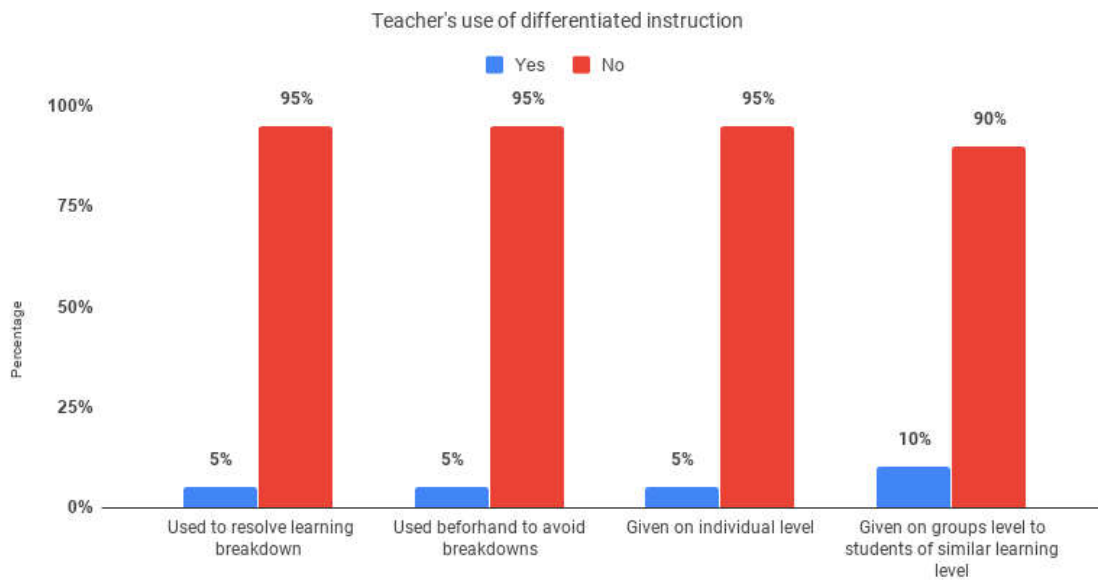
To drive the learning outcome in a class it is required to give clear instructions while teaching. If an instruction is very clear it becomes easy for students to follow. During the observation it was found that most of the teachers instructed using one instruction at a time, only a very few teachers instructed using multiple instructions at a time. This is good for the class and students. In almost half of the classes desired outcome of the instructions was achieved. Only Very few teachers modified their instructions by observing breakdowns. This may be one of the reasons for not achieving 100% learning outcome. Teachers need to modify the instructions or explain it in a simpler way after observing breakdown.



Teacher's use of Differentiated Instruction

Differentiated Instruction is used to teach students of different levels in one classroom, where students are given tasks as per their level to build up the concept learning. This helps in creating a learning platform for all students in a classroom. It is a good practice being used by teachers these days.

During the observation, it was found that there is a lack of understanding of differentiated instructions among teachers. Through the chart, it can be observed that the implementation of differentiated instruction is almost negligible in the classrooms. For teacher training programs differentiated instruction strategies need to be added as a training element.



Assessment Creation

In a regular classroom to see the growth of a student, it is required for a teacher to conduct an assessment in a formal or informal way. There are different kinds of assessments which are CFU, daily assessment, formative assessment, summative assessment, practical assessment, and student level assessment.

- When the teacher asks questions to students while teaching, in order to check the student's understanding, it is called CFU.
- If a teacher conducts a test every day it is known as Daily Assessment. These can be oral or written format.
- Formative assessments are conducted four times in an academic year. These are written exams, where teachers prepare the question paper.
- Summative exams are conducted twice in a year where

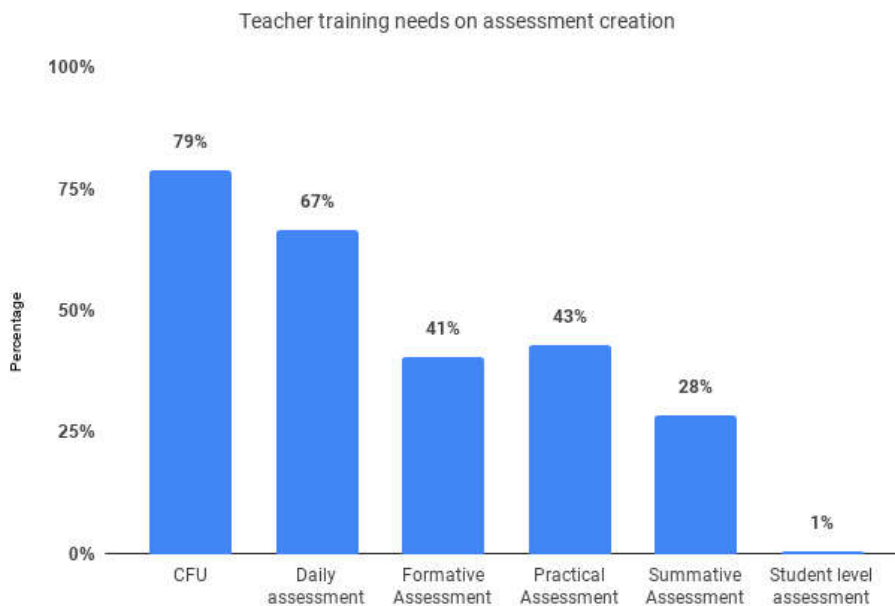
teachers receive the question paper most of the time. They are written exams as well.

- When teachers give some practical task it is considered a practical assessment.
- When teachers create questions as per the student level it is called a student-level assessment.

Assessment creation is a broader area that takes a lot of effort and time to make an effective assessment paper. It is a significant element in the process of learning. Thus a question was asked to know what kind of support teachers need for assessment creation.

Teacher needs relating to Assessment Creation

Replying to this question, most of the teachers preferred to learn about different ways and strategies for checking the understanding of students in the class and through

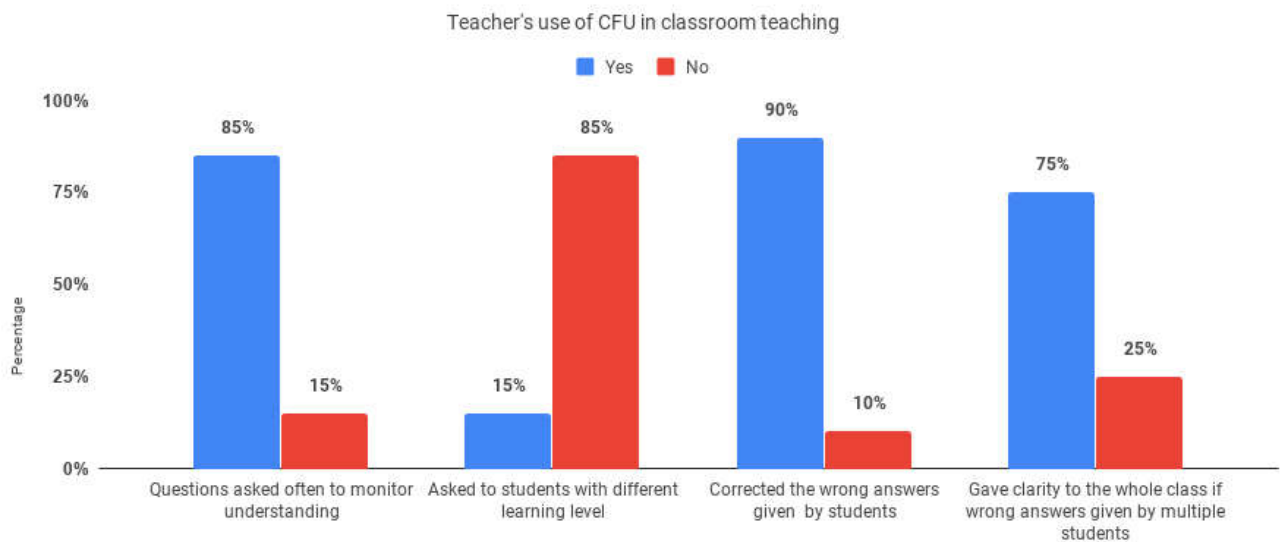


Daily Assessments. The data clearly shows teachers are most interested in learning different methods and ways of doing a check for understanding of students which are informal in use and are part of the daily routine of classroom practice.

Teacher practices on Check For Understanding

Check for understanding is a very short assessment tool that is used by teachers to check the understanding of the lesson among teachers while teaching. It includes short questions that help teachers to understand the progress. Teachers continuously ask questions to different students in between the lesson to check whether he/she has to continue the lesson or need to revise with more clarity. This is an important tool for the teachers and classroom to ensure learning in the class, thus it is required to include CFU to keep as a strand for classroom observation.

It was observed during in the classroom observation that most of the teachers ask questions often during the class to monitor understanding, teachers correct the wrong answers given by students, and teachers give clarity to the whole class if wrong answers are given by multiple students. But Students are not asked questions with different learning levels, which might be a demotivating factor for lower order and higher order⁶ types of students. If a teacher asks a low rigor question to a lower order student he/she may feel happy after giving the correct answer. At the same time if a teacher asks high rigor questions to a higher-order student he/she may try to think critically and will try to bring more clarity in the class. Teachers can be trained in asking questions with different learning levels in the future.



6. Lower order students are the one who struggle in learning and get less than 33% marks. Higher order students are those students who learn very fast and get more than 60% marks.

Creating opportunities to ask doubts

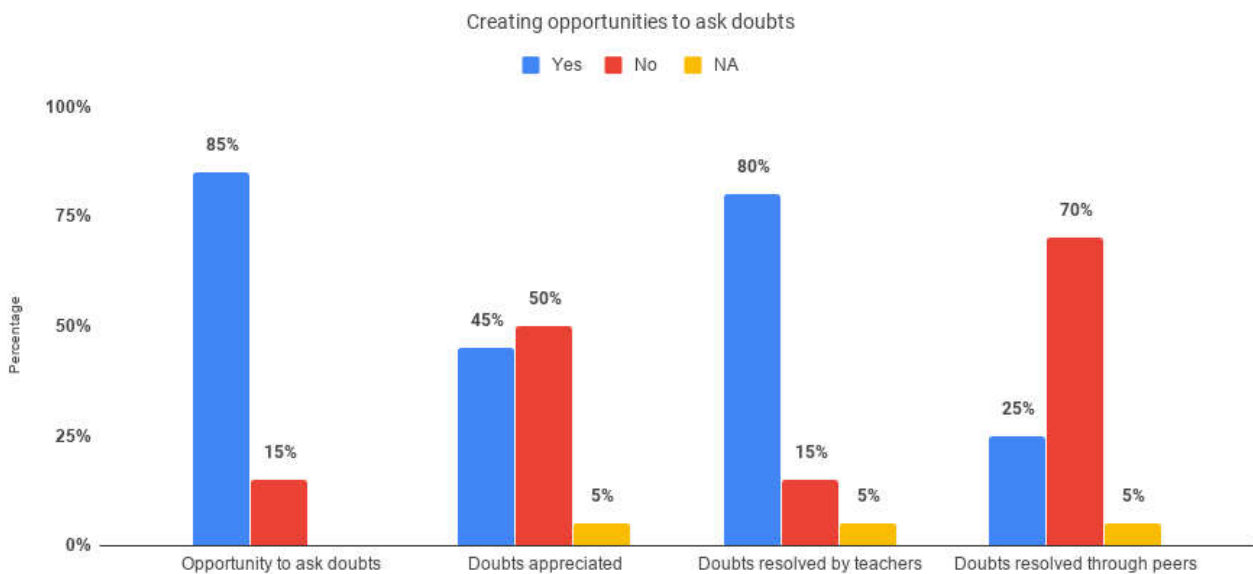
If a teacher creates an opportunity to ask doubts and caters to students' needs, the class is considered a learner-friendly classroom.

In most of the classes observed, the teacher gave the opportunity to ask doubts and were also resolved by the teachers. In a few classes, a doubt was resolved through peers also. Appreciation of students for asking doubt was missing in half of the classes. Appreciation of students for asking doubt is required to increase the motivation of the students and push them to ask doubts. Teachers need to implement this practice in their classes.

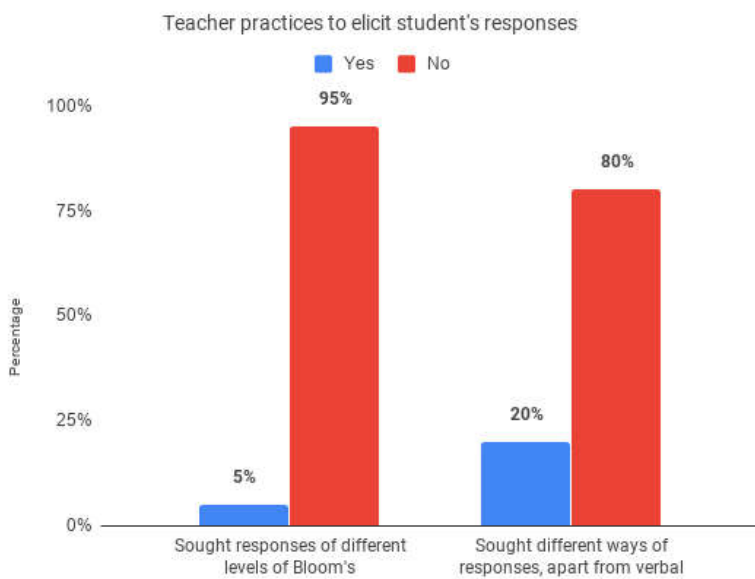
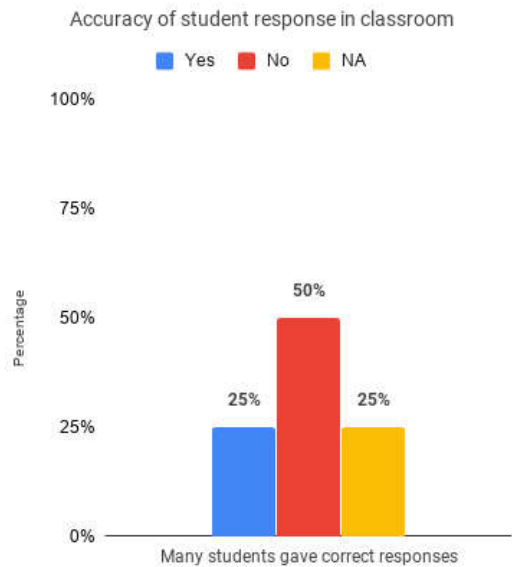
Teacher practices to elicit student responses

In a classroom, if students are responding to a question correctly it means the students have mastered the concept. To check the learning of the classroom it is essential to observe students' responses.

During the observation, it was found that in one-third of the classes only a few students gave correct responses. In one-fourth of the classes, only many students gave correct responses. Questions of different levels of Bloom's taxonomy were almost missing in all the classes. Levels of Bloom's taxonomy include the questions related to knowledge, understanding, application, analysis, synthesis, and evaluation of a topic. In most of the classes, only verbal ways of asking questions were used. Teachers



need to be trained in understanding the different levels of Bloom's taxonomy and its application in understanding the students' learning. Teachers also need to be trained on maximizing the correct responses from most of the students, asking questions with a mixture of verbal, written, practical, and others.



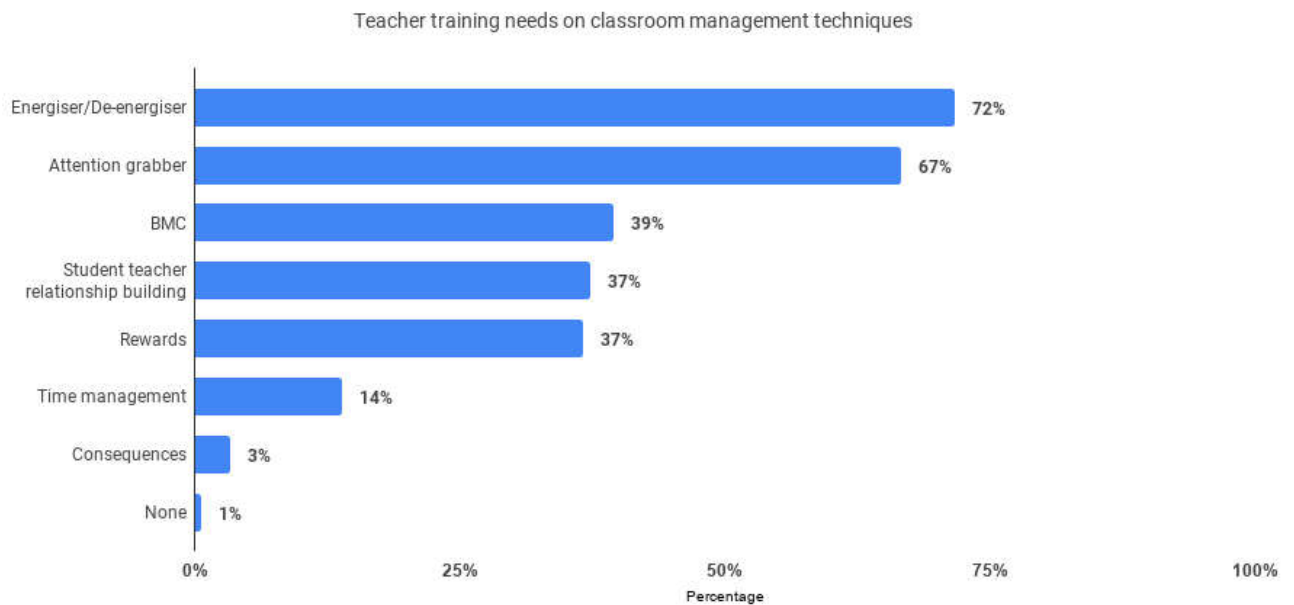
Classroom Management and Student Engagement

Teacher needs on Classroom Management Techniques

Classroom management is a term that describes the process of ensuring that classroom lessons run smoothly without disruption in the class. It also helps in creating a learning environment for students in the class and increases student's involvement in learning in the class. It is always highly recommended that teachers have a command over classroom management skills and generally it seems to be a struggling area for teachers in these clusters. Classroom management includes various techniques that can be used in the classroom either for managing student's behavior in the classroom or their

involvement in classroom learning. Thus it was asked to get to know what teachers feel about classroom management and which techniques teachers need support on.

Replying to this question, most of the teachers preferred to learn different energizers to engage students in the classroom and attention grabbers to bring students attention to getting learning in the class. During classroom observation also, it was seen that teachers are struggling to hold students' attention continuously and get them back on track. Overall, during FGD also, teachers highlighted that they need guidance either through training or in-class support regarding classroom management skills. During the FGD, teachers stated they need support in making a learning environment in the



class, where students listen to the teacher, engage in the lesson and ask doubts confidently.

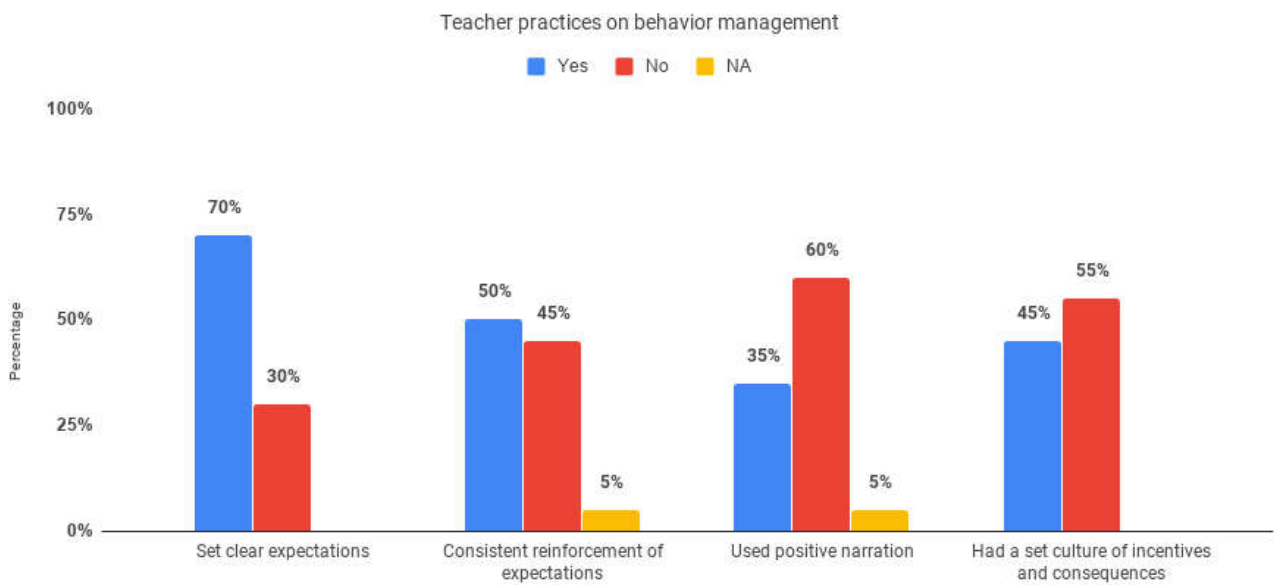
“In every class, there are a lot of students and as a primary teacher, I need to be in class for at least 5 hrs daily. Every student has a unique and different ability to learn. Some learn fast, some need more time. Also, there are students who diverted from attention every single minute. So, managing all these things and teaching is a big and continuing task every day. So as a teacher I need more and more techniques how I can handle class, getting all on the same page and teaching - on a regular basis”

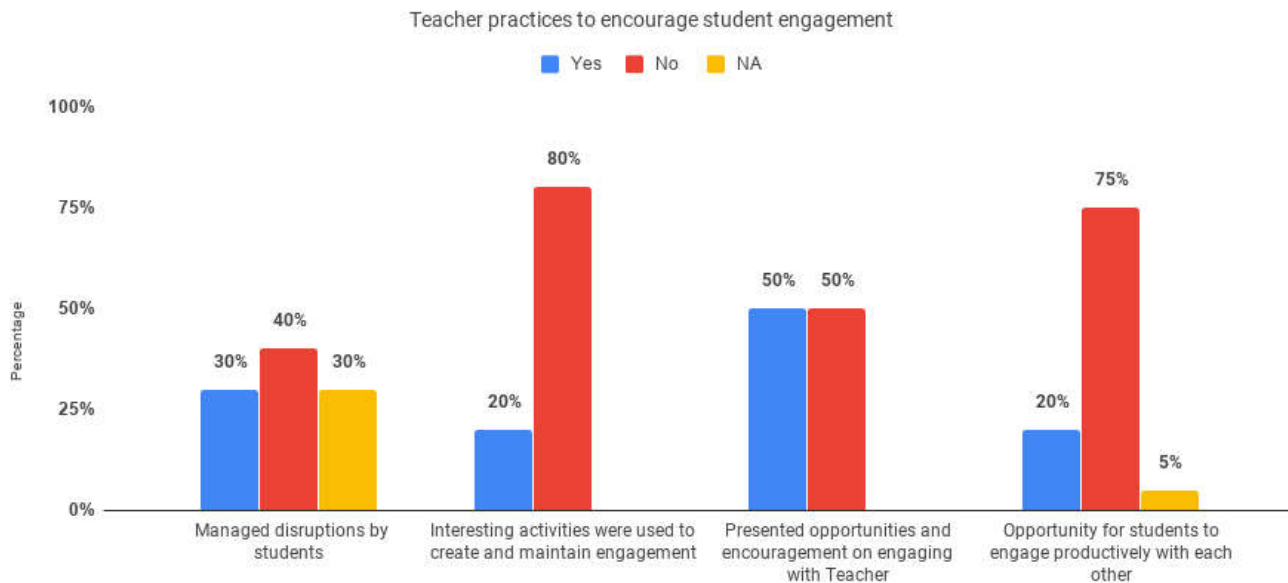
- Teacher, Government Primary school, Charoda

Teacher practices on behavior management

Behavior management is an approach to manage the behavior of students in class and teachers try to drive positive behavior in the class. In a class, if students are behaving well and the teacher is able to maintain the positive behavior in the class consistently it becomes very easy to make a learning environment in the class.

During the observation it was found that in terms of the behavior of students, in most of the classes it was observed that the class was set, students were listening to teachers and there was no requirement of doing positive narration and setting a culture of incentives and consequences.





Teacher practices to encourage student engagement

For a smooth class, it is highly required to keep the students engaged throughout the class. If the students are engaged it means conditions for learning are created in the class and the objective is being achieved. It becomes an important factor to see during a classroom observation.

On a positive note, in most of the classes the disruption by students was managed or disruption by students was not there in the classroom. In half of the classes, teachers presented opportunities and encouragement to students on engaging with teachers. Interesting activities and opportunities for students to engage productively with each other were missing in most of the classes. Teachers need to be trained on bringing interesting activities for students in the class to engage them and create

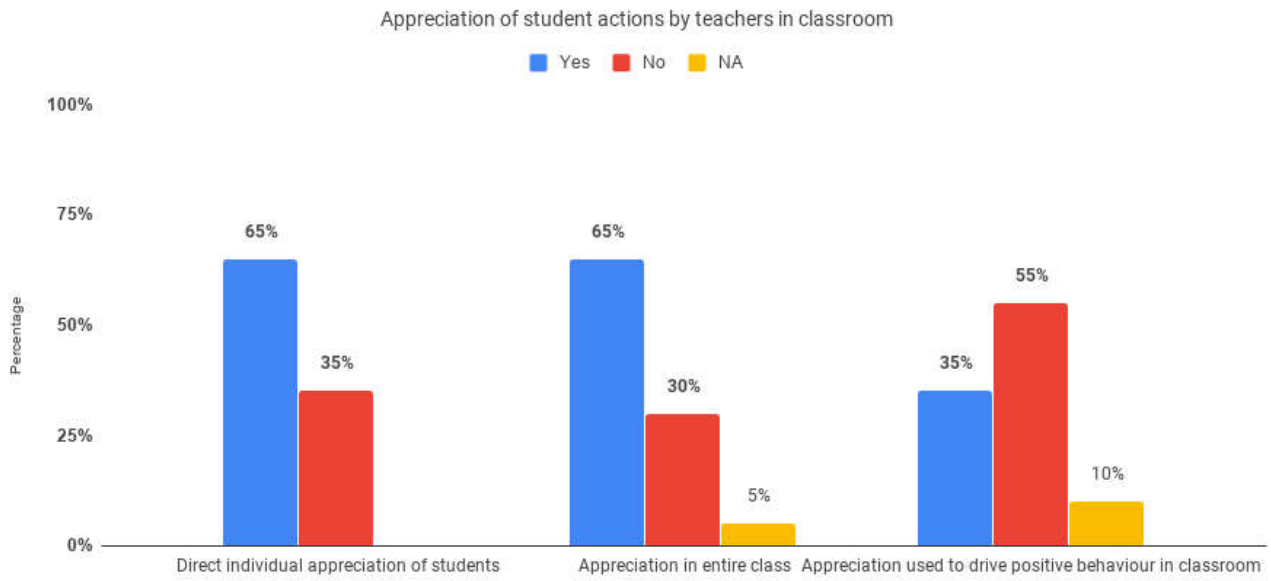
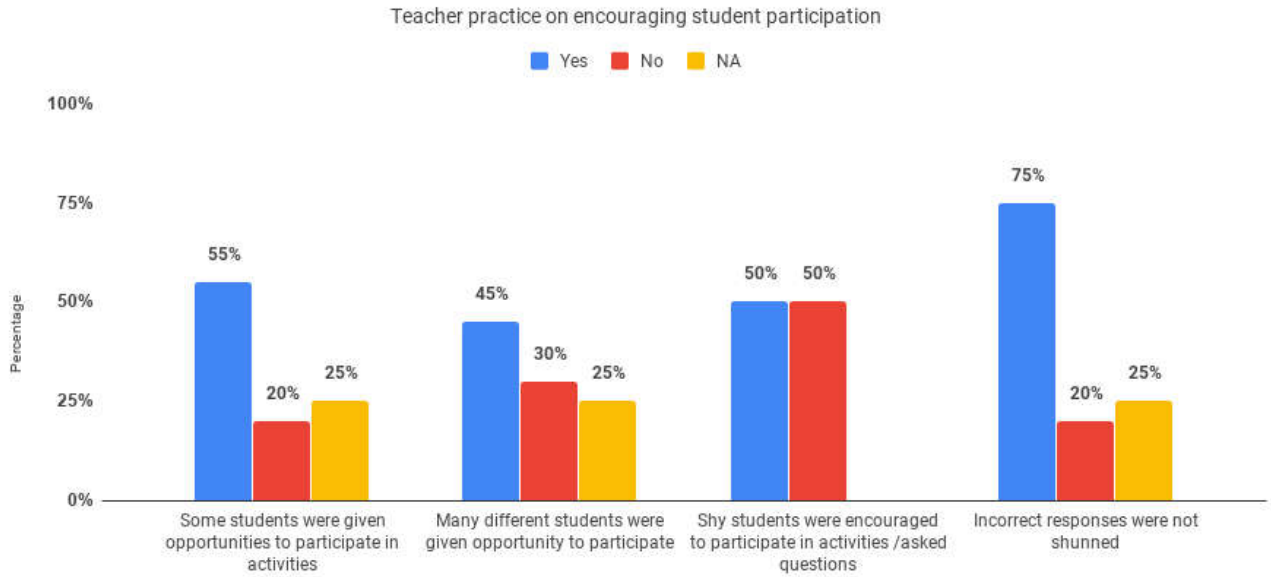
opportunities for peer learning.

Teacher practices on encouraging student participation

Encouraging participation means helping and pushing students to participate in the class, this is being done by teachers by creating opportunities for all students to participate. Student’s participation plays a significant role in serving student’s learning.

The good thing was that during the observation it was found that in one third for the classes incorrect responses were not shunned by teachers, which is good for keeping the morale high in the class. In half of the classes, students were given opportunities to participate in activities. As noted during the observation, in half of the classes shy students were encouraged to participate in activities and were asked questions. In future teachers



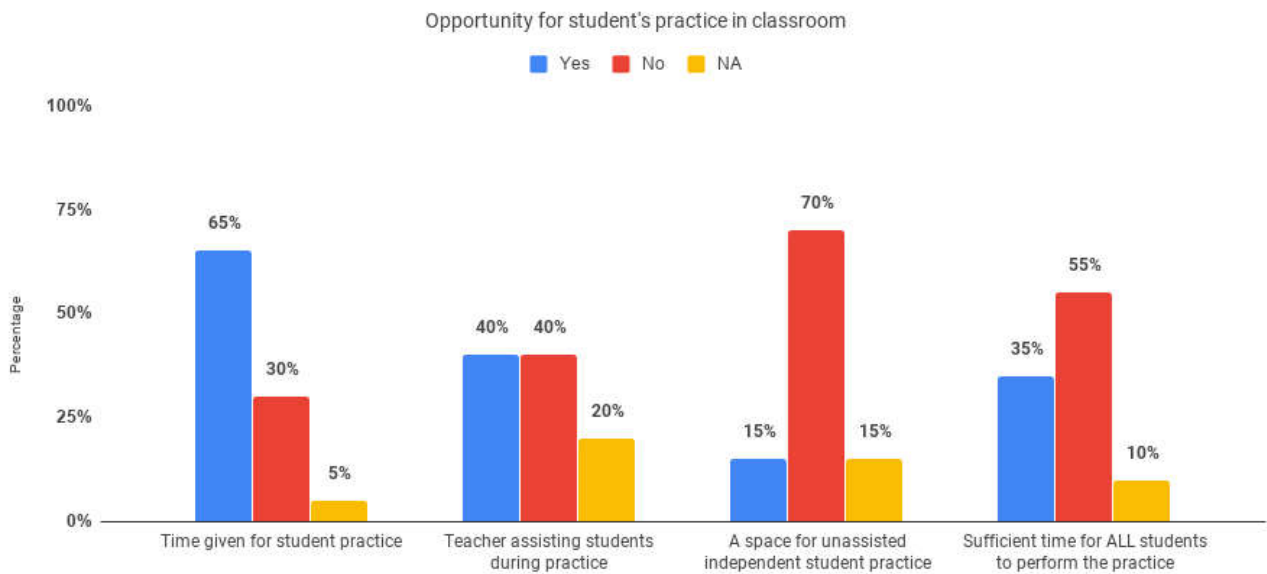


can be trained on involving 100% of students in classroom participation this will help in reaching out to the goal of 100% learning.

Appreciation of Student Actions in Classrooms

Appreciation of student actions means praise of a student's action to the students or in the whole class. This helps in deriving motivation factors in the class and create a positive learning environment in the class. It is an important factor for a learner-friendly classroom thus it becomes a significant aspect to see in the class while observing. In most of the classes, teachers appreciated the students directly or in the entire classes, which is a good symbol of creating a learning environment. But only in a few classes appreciation of a student action was used to drive positive behavior in the classroom. Many times

teachers derive positive behavior in the classroom by appreciating a student's action. This element was missing in most of the classes. Teachers can be trained in the future to use appreciation to drive positive behavior in the classroom.



Student Learning Techniques Used

Opportunity for student's practice in the class

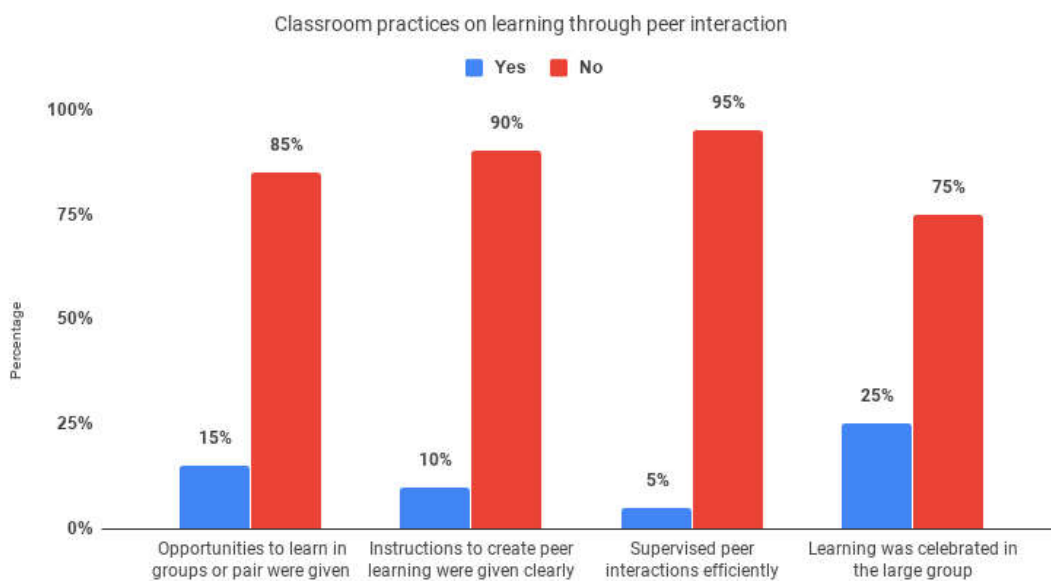
In a lesson, the opportunity for students to work on a problem/objective is called an opportunity for student's practice. It can be in different forms such as - individual practice, peer practice, group practice, and guided practice. It helps in getting mastery over a concept and clearing doubts while practicing. Thus it becomes a significant element of a lesson.

In more than half of the classes observed, time was allocated for student practice. In around half of the classes, teachers assisted students during practice. In a few classes there was a space for independent practice, where students were required to work without any

assistance. But the most important thing is that in only 35% of classes there was sufficient time for all students to practice, which is not conducive to derive learning outcomes. Teachers need to be trained in planning their lessons better which helps in giving sufficient time for students to practice.

Classroom practices on learning through peer interaction

When an opportunity is created in a class where students interact with their classmates and learn from them it is called learning through peer interaction. It helps in improving the learning level of the class because a student explains a topic or clears doubts in a familiar way to their classmates. So learning through peer interaction is an important element to be seen during a classroom observation.

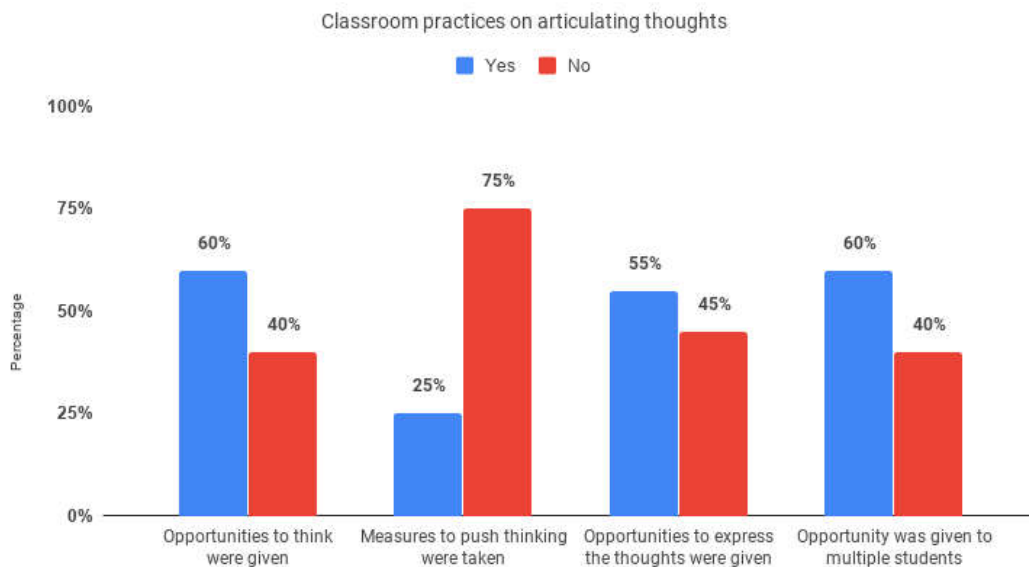


In only 15% of the classes observed, teachers gave opportunities to learn in groups or pairs. In a very few classes, instructions for facilitating peer learning were given clearly and teachers supervised peer interactions efficiently. In only a quarter of the classrooms, learning was celebrated in a large group. These data clearly show that learning through peer interaction is missing in most of the classes. It may be one factor of poor learning outcomes in the classes. Teachers need to be trained in creating opportunities for learning through peer interaction and its different elements.

Classroom practices on Articulating Thoughts

When a teacher creates opportunities for students to think and express in the class, it becomes easier for the class to achieve the learning objective. Articulation of thought was added in the observation tool to see whether the opportunity of thought and expression is present in the class or not.

In more than half of the classrooms opportunities to think and opportunity to express, were given to multiple students. The missing part in articulating thought in most of the classes was a measure to push thinking by teachers. Teachers need to be trained on how to apply measures to push the thinking of the students.

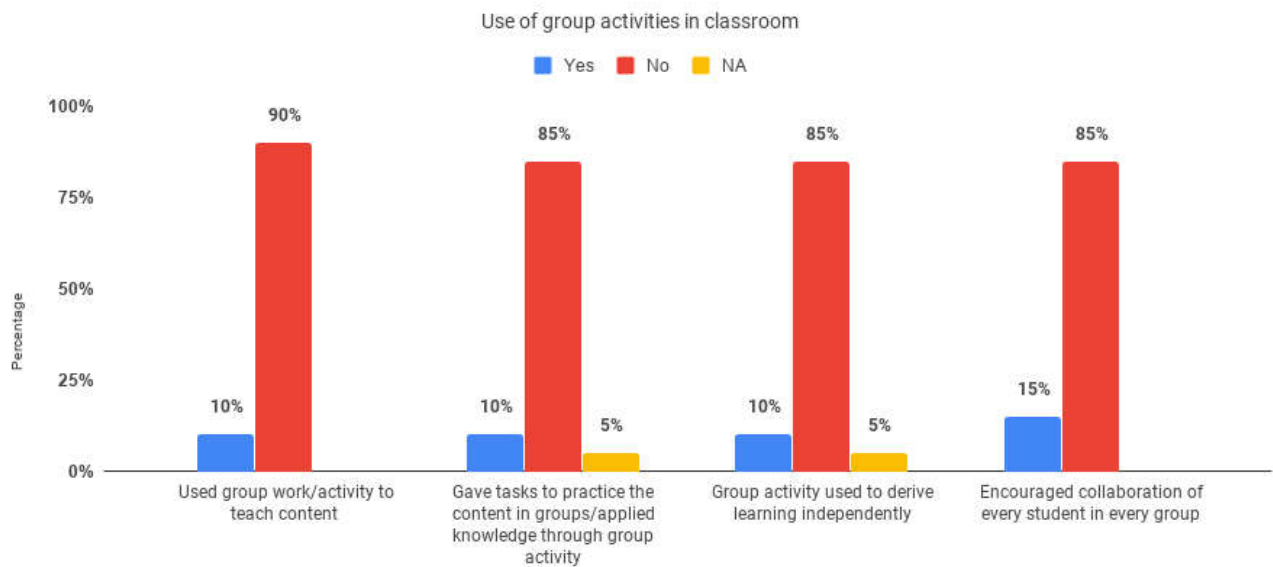


Classroom Activities

Use of Group Activities in classrooms

Group activities are a strategy commonly used by teachers, where two or more than two students are put in a group and then asked to complete a task. In this process, peer learning takes place where the doubt of one member is being clarified by the other member of the group. Also, it provides a platform for students to think in a group and push each other to think more which maximizes the learning output. Group activities have become an essential element for most of the lessons. During the classroom observation, it was found that in very few classes teachers were using group activities to drive learning or giving tasks

to students in a group. It clearly shows peer learning is not taking place in classes and students are not being taught to work in a group. Teachers need to be told about the benefit of using group activities to derive learning and build a culture of teamwork among students. Teachers are needed to be trained on the different aspects of group activities which enables them to use it in the classroom easily.

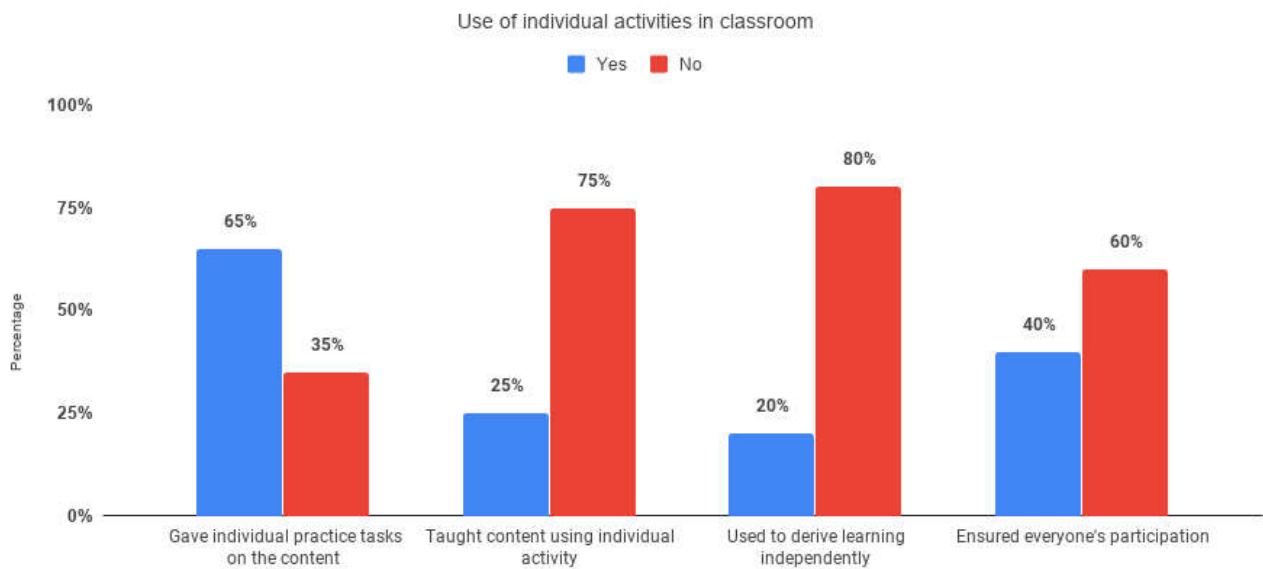


Use of Individual Activities in classrooms

To check the understanding of a concept among students, teachers give individual tasks or activities to students. Normally it takes place in the last part of a lesson where each student is given time to practice, master, or complete a task individually. In this process each student tries to complete the task and if any concern arises teachers clarify that concern. It is required to conduct individual activities in a class to ensure the achievement of an objective or lesson.

During the observation, it was found that in more than half of the classes teachers gave individual practice tasks on the content. But in only 25 percent of the classes teachers taught content using individual activity and in only 20%

classes, teachers used individual tasks to drive learning independently. In less than half of the classes, teachers ensure everyone's participation. Here most of the teachers conducted individual activities in class but they did not ensure the effective execution of the task by students. Teachers need to be trained on the execution of individual tasks in a class and ways to ensure everyone's participation to derive learning independently.



Classroom Resource Utilization

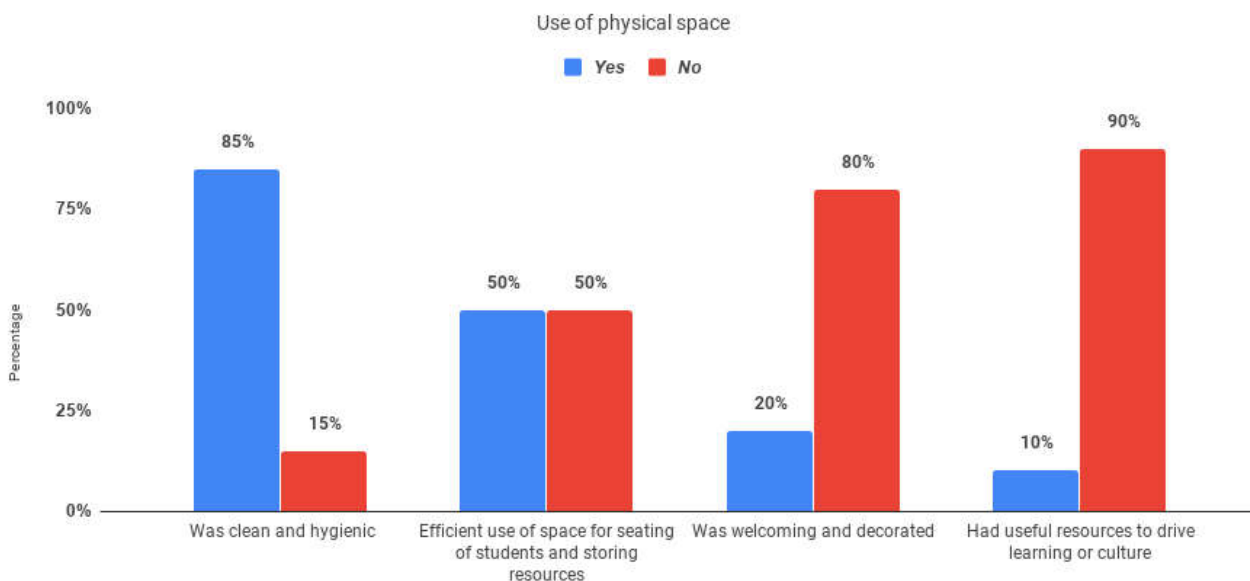
Use of physical space

To make a classroom learner-friendly it is required to use the physical space efficiently and effectively. The classes need to be clean, organized, and welcoming.

Most of the classes were clean and hygienic. But only half of the classes had efficient use of space for seating of students and storing resources. Only a few classes were welcoming and decorated and had useful resources to drive the learning culture. Teachers need to be trained in using the physical space to drive learning and making it welcoming.

Teacher needs for Teaching Learning Material

Teaching and learning material (TLM) refers to the educational materials which are prepared by teachers themselves or bought and used by teachers while teaching in class for a better understanding of concepts. It can be concrete or pictorial. TLM makes a concept very easy for students to understand it. It helps students in understanding the relevance of a topic. These days teachers have been widely using TLMs and the focus on their use has increased. Some teachers use TLM available in the market while some prepare these themselves to use in the class. But at the same time, there are a lot of teachers who face difficulty in finding or making appropriate TLM for a concept and using it in the class. It was required to know the preference of teachers on which



subject they want training or support in making and using TLM; thus we asked questions in an online survey for the same. Here the analysis of primary school, upper primary school, and higher secondary school has been done separately to make it reliable and relevant. During the FGD, teachers of all the grades said they need support in the creation and use of TLM both. They insisted on attending sessions and helping in the creation and use of TLM in the class.

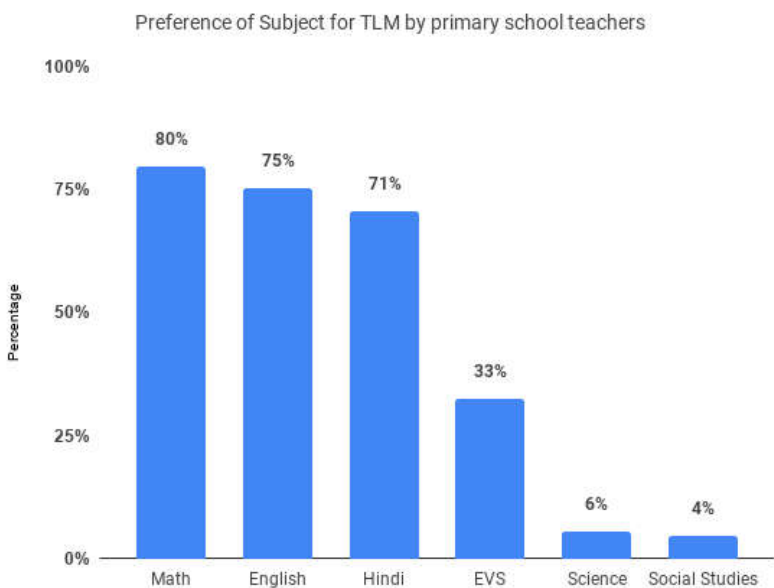
Subjects preferred by primary school teachers for TLM

In primary schools, the use of TLM is required to build up the concept among children. Younger students find it very easy to understand a concept when they are being taught with the use of some materials. As per the survey participants, teacher's preferred to get trained on the

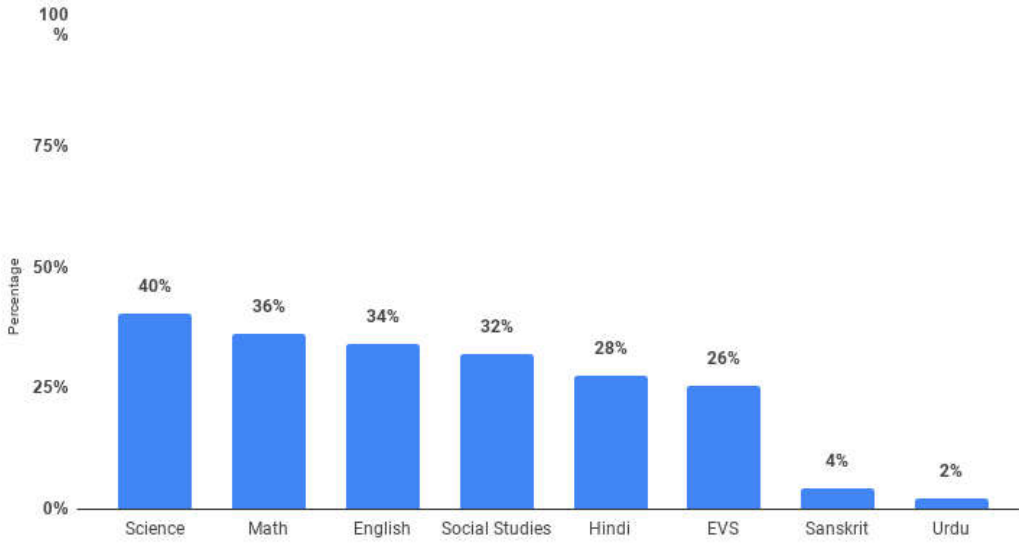
creation and use of TLM in Math, English, and Hindi. For TLM sessions, the priority of Maths followed by English and Hindi needs to be given while designing a training program for teachers where a session on TLM is kept.

Subject preferred by upper primary school teachers for TLM

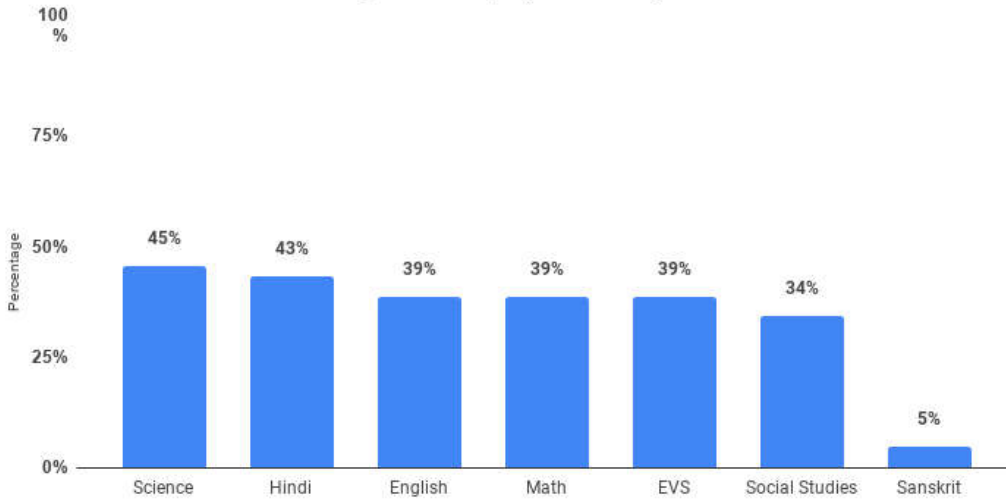
In upper primary school, the concept taught with the use of TLM in Science and Maths becomes very easy for students to understand. Here teachers preferred to learn to create and use TLM for Science as a priority, followed by Maths, English & Social studies. The first priority for the teachers in Science. For TLM sessions of upper primary school teachers, the creation and use of TLM of Science and Maths need to be prioritized while designing the training program.



Preference of subject for TLM by upper primary school teacher



Preference of subject for TLM by higher secondary school teachers

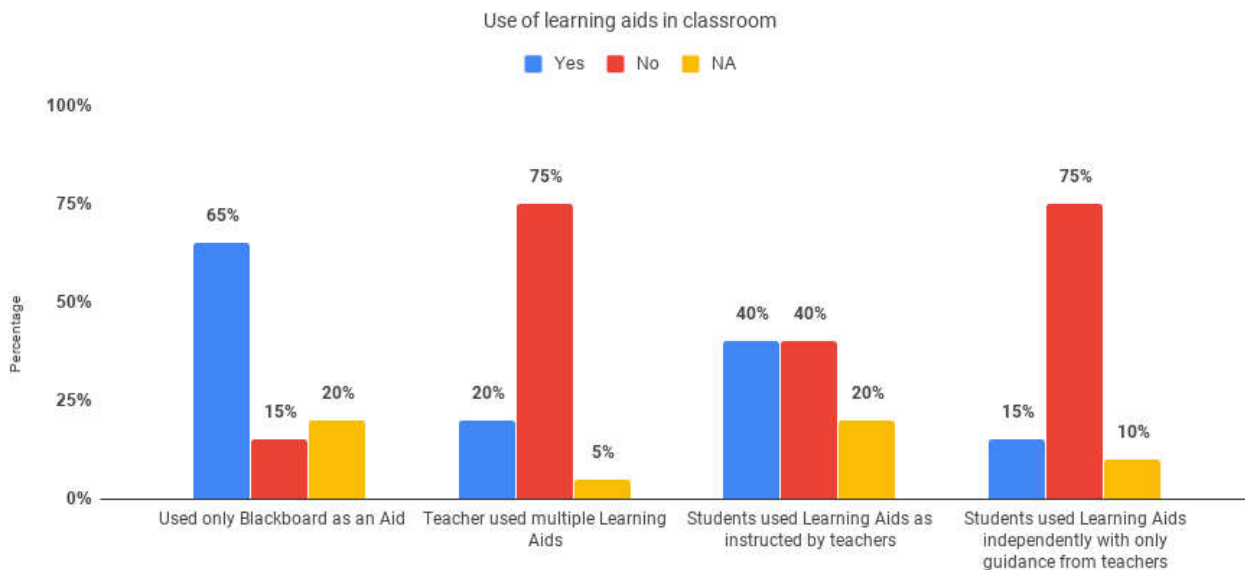


Subject preferred by higher secondary school teachers for TLM

In higher secondary school, teachers use materials to explain the concept in an easy and relatable way. When they were asked to choose the subject on which they need support and training in the creation and use of TLM, the first priority came as Science and the second priority is Hindi. More than one-third of the teachers preferred to get support in English and Maths also. This needs to be considered while designing training programs for higher secondary school teachers.

Use of learning aids in classrooms

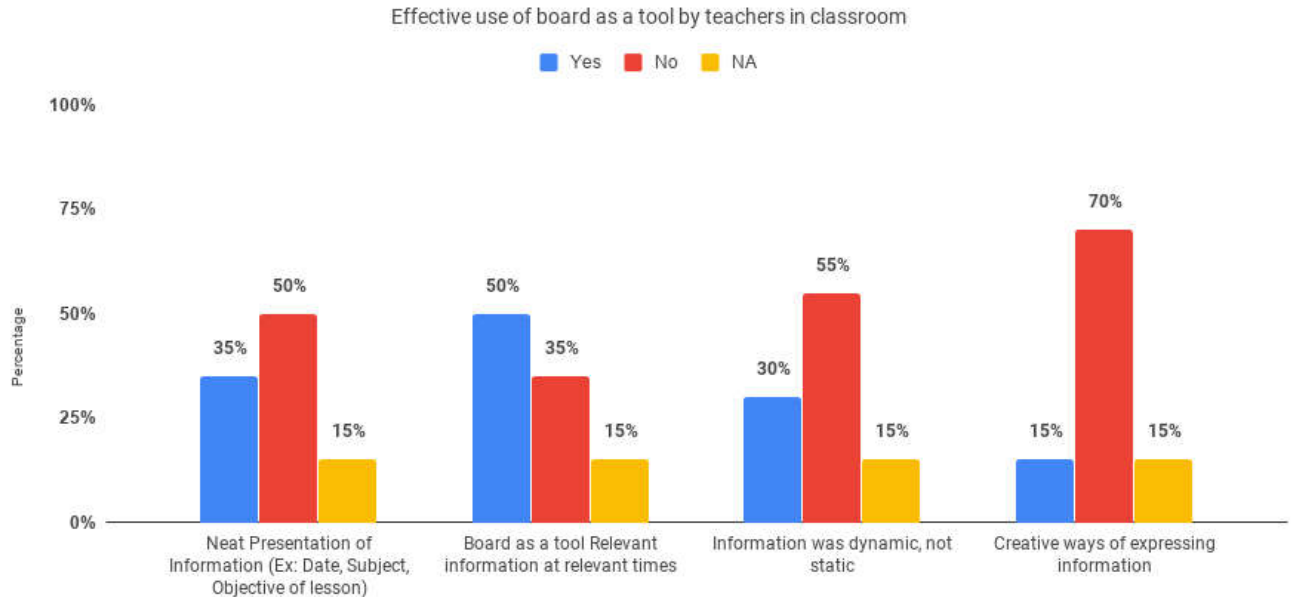
Different learning aids are being used to teach a lesson. This may include books, blackboards, use of technology, charts, and concrete material. Use of different learning aids makes the classroom interesting and keeps the students engaged in the class. During observations, it was found that in more than half of the classes teachers used only blackboards as a learning aid. In only 20% of the classes, teachers used multiple learning aids. In less than half of the classes students used learning aids as instructed by teachers. Only 15% of students used learning aids independently with only guidance from teachers. Teachers need to be trained on using different learning aids in the classroom to make a lesson interesting and keep the students engaged.



Board as a Tool

Board as a tool means the use of board while teaching. Currently board management has become a significant factor for a lesson and has a direct impact on the learning of students. Good board management means a neat presentation of relevant information, at relevant times using creative ways of expression.

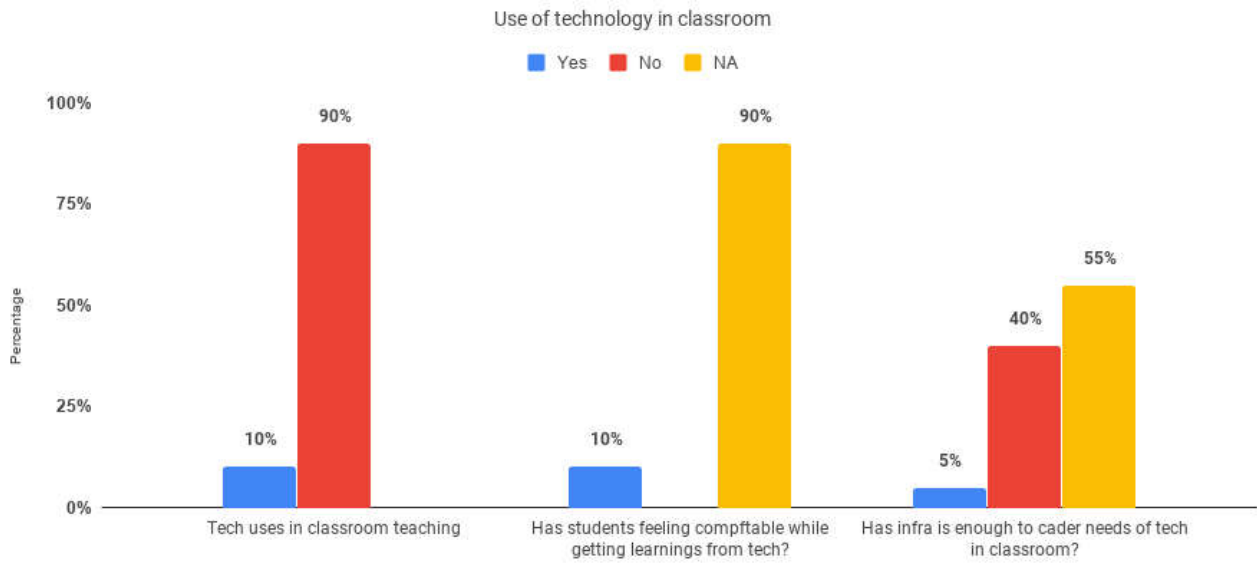
It was observed that half of the classes did not have a neat presentation of information on board which includes the date, subject, objectives of lessons. In half of the classes board as a tool was used to give relevant information at relevant times during the lessons. But creative ways of expressing information were missing in most of the classes. In the future, the board as a tool can be kept in focus while designing a teacher training program where teachers can be trained on board management including uses of the blackboard in a better way.



Use of Technology in classroom

The use of computers, projector, mobile, or any other technology is being considered as the use of technology while teaching. To see the availability of technology and its use among teachers and students, this theme was added as an observation tool.

During the classroom observation, it was observed that teachers generally don't use technology for teaching in the classroom. In most of the classes, there is no infrastructure available for the use of technology. Here the government needs to make technology-enabled infrastructure in the classes. It will help the teachers and students both update a topic and help in increasing the learning outcome.



POST-TRAINING CLASSROOM SUPPORT NEEDS

THEMATIC AREA

Post-training classroom support needs

FOCUS AREA

Support after training
Teachers expectations
for on-ground support
Classroom observation

To understand the need and kind of support that teachers want after training, the questions related to support were asked including elements such as support after training, support personnel, and classroom observation. The details of each element with analysis are given below.

Support after training

In this strand, we asked teachers about what kind of support they are looking to get more in the future which includes supporting in-classroom learning, classroom observation⁵, monthly peer learning space, expert and solution helpline, and help in lesson planning. On the basis of the online survey responses, it was seen that 65% of the teachers need support in-classroom learning while 56% of teachers indicated classroom observation and debrief on progress. This shows that teachers want support at the classroom level where someone is observing their class and helping in improving classroom learning. Support at the classroom level will help in ensuring the implementation of learning of a training program.

One example could be where experts come to school, conduct a demo class and give guidance. Alternatively, a teacher mentor or teachers themselves can do classroom observations, and do the debrief with the teacher where they discuss what went well and what are the areas of improvement, where the teacher has to work to improve. It clearly shows teacher's need personal level support where personal learning space is created and also gives some leverage to use learnings directly on the ground. The other options which were suggested by teachers in online surveys also included some level of personal support like peer learning space, helpline, etc.

5. Here, note we are differentiating between classroom observation as just about observing the class and classroom as learning including aspects of co-work.

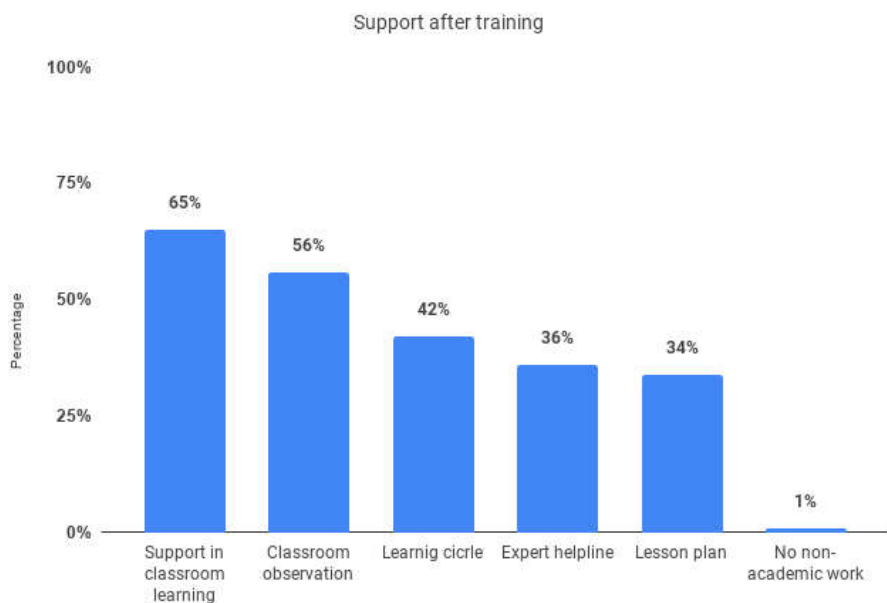
“We got the training at the cluster level, but when we implemented the learnings that we got from training at the classroom level, we had some difficulty. It is really important that someone help us at the classroom level to implement learnings, solve our problems on the ground, and observe us and tell us about improvement frequently”.

- Primary school teacher, Government school, Kumhari

Teachers expectations for on-ground support

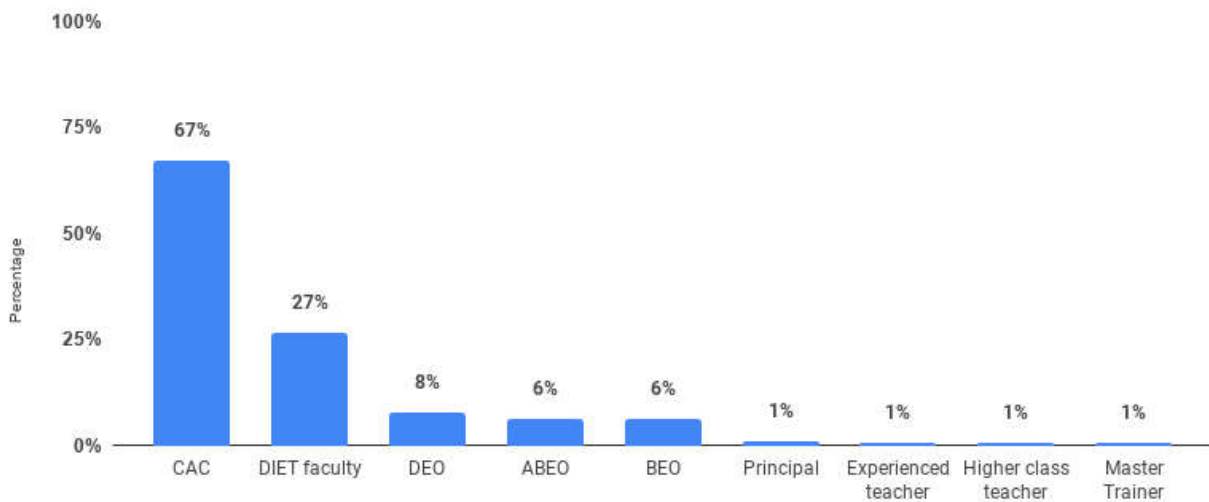
In addition to the above questions the survey and FGD asked the teachers whose support they are looking for the most. The survey data shows that 67% of teachers stated Cluster Academic coordinator (CAC) is the most supportive person for them on the classroom level. It is also because CAC is the person who visits schools frequently and meets teachers on a regular basis.

But during FGD most of the teachers stated that subject experts should come for classroom-level support. Subject experts are the persons from the DIET who have mastery over the subject and every block has one subject expert per subject. Teachers feel that assistance from subject experts at the classroom level will help in improving the



teaching of content and pedagogy. Teachers feel that support from subject experts will enhance their content knowledge and will enable them to teach content in a fun and interesting way. Thus it is very important that subject experts need to be involved in classroom-level support in the future. However, an important point that was highlighted during FGD and from the teacher's interview was that CAC has now more administrative work, due to which it is not possible for them to do classroom observations during every school visit.

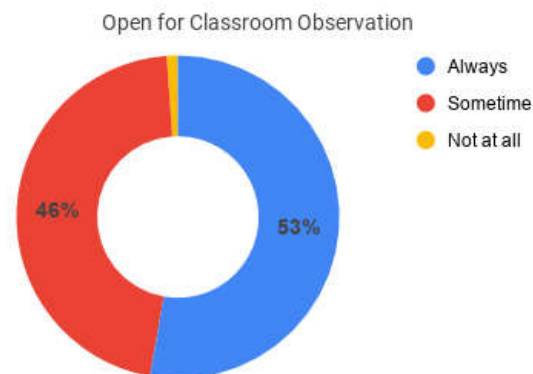
Teacher Preference on 'Who should do the follow-up and co-work at school and classroom level after any training?'



Classroom observation

It is assumed that teachers feel highly supported regarding teaching methods, content, and pedagogy through classroom observation. It gives personal space for teacher learning while doing. In classroom observation where concerned people like subject experts from DIET or CAC from the education department observe teachers' class and do the debrief with teachers about what went well during class and where teachers need to focus more to improve. This is a personal guidance space for teachers.

So, it was asked to check whether teachers are open to classroom observation or not. 99% of teachers are open for classroom observation and co-work at the classroom level, in which 53% are always open for classroom observation while 46% are open for classroom observation for some time. So, it is clearly admired that, in future classrooms, observation can be one of the tools for the teacher's support. During FGD the teachers appreciated the concept of classroom observation and they found it will help in the learning level of the classroom as well as the teaching style of a teacher. In the interview, CAC of both clusters stated teachers are very welcoming for people who are visiting their class and school. It was found true when the classes were observed for this study. Everywhere teachers welcomed the observer to their classes enthusiastically.



ADDITIONAL TRAINING NEEDS

THEMATIC AREA

Additional training needs

FOCUSTIC AREA

Personal development skill

Teaching CWSN students

Support for SMC/SMDC

Support for board preparation

Career guidance

Scholarship and competitive examination

To understand the additional support which helps in the better management of a school, we asked questions related to the additional support. This includes elements like personal development skill, support for children with special needs (CWSN), support for SMC/SMDC, support for class 10 and class 12 students, support for a scholarship, and competitive exam. The details of each element with analysis are given below.

Personal Development skill

For getting to know the interest of teachers for personal development we asked dedicated questions in the online survey and FGD. In both methods, most of the teachers demanded for presentation skills and English speaking skills. Teachers want to work on their presentation skills which will enable them to facilitate a class effectively and present the topic in an easy and interesting way to students.

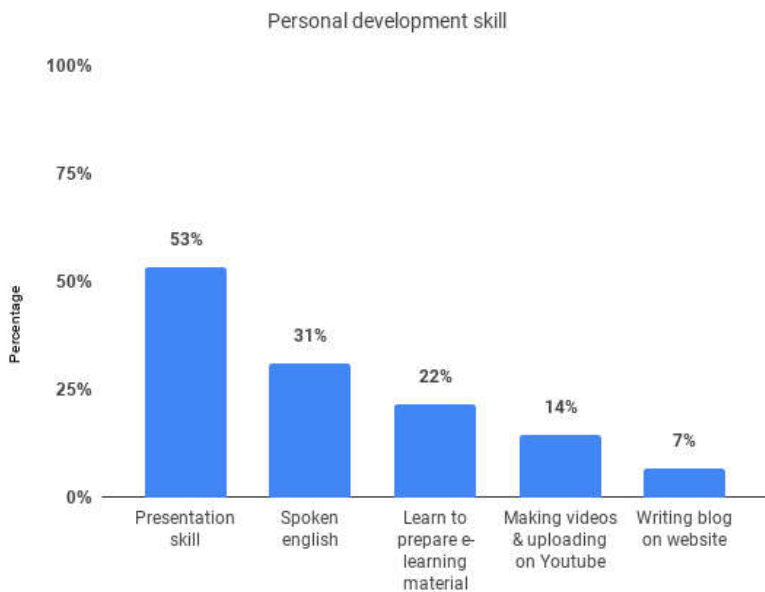
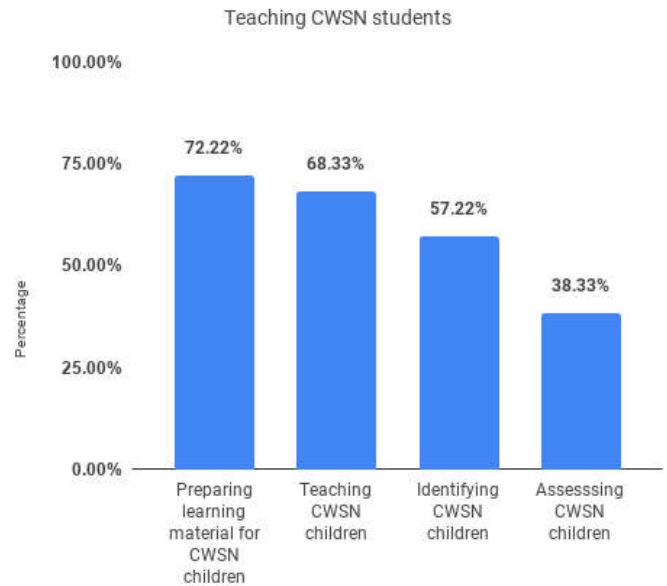
“As per the current world, teachers need to be more facilitators in the classroom rather than teachers. Teachers need to use different ways or methods for teaching which includes different styles of facilitation skills and thus teachers need more support on facilitation skills. Teachers also need to develop their spoken English to get in a better position to teach English to students.”

*- Headteacher, Government school,
Dharsiwa*

Teaching CWSN Students

As per the RTE Act 2009, students can enroll in any school and can not be refused admission because of special needs. Thus now in most of the schools, children are enrolled who need more attention while teaching and thus we asked dedicated questions from teachers about what kind of training they need for teaching CWSN (Children with special needs) in the classroom.

For teaching children with special needs, teachers need help in preparing learning material, teaching CWSN children, identifying children with special needs, and assessing CWSN children. Teachers need complete support from identifying CWSN students to their learning and assessment. Teachers need to be trained to create a friendly learning space for CWSN.

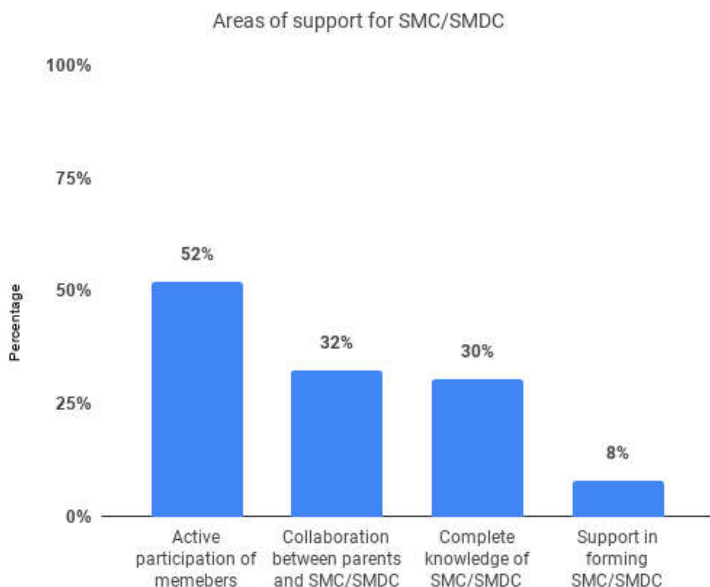
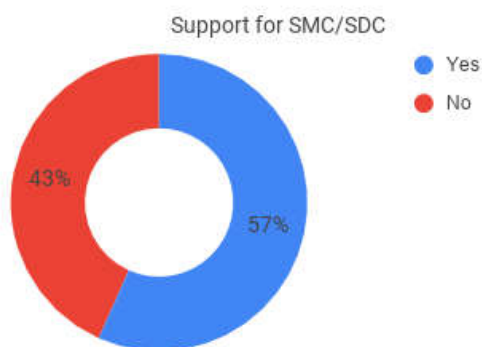


Support for SMC/SMDC

As mentioned earlier most of the teachers did not receive any type of training for the function of SMC/SMDC. When asked if teachers need support for the smooth function of SMC and SMDC, 57% of the teachers stated they need support. During the school visit, it was observed that members of SMC/SMDC are not active. It takes a lot of effort from the teachers' side to run the SMC/ SMDC. Teachers expressed their interest in learning methods to run the SMC/ SMDC effectively, as they believed it to be required to have an active SMC for the development of school and students.

There are different methods of support needed in the smooth function of an SMC/SMDC. Teachers were asked what kind of support they need for the proper function of SMC/SMDC. 52% of teachers stated they need support

on learning ways of encouraging active participation of SMC/SMDC for the development of school and students, and how to keep parents involved in the functioning of SMC. It seems teachers believe the active participation of the SMC/SMDC members will enable the smooth function of SMC/SMDC.



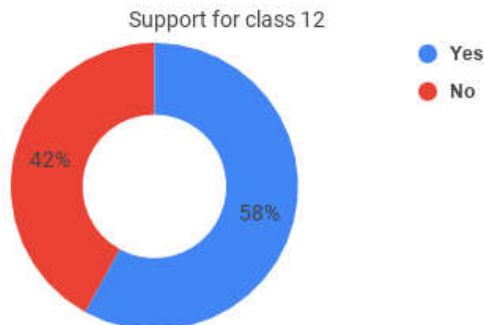
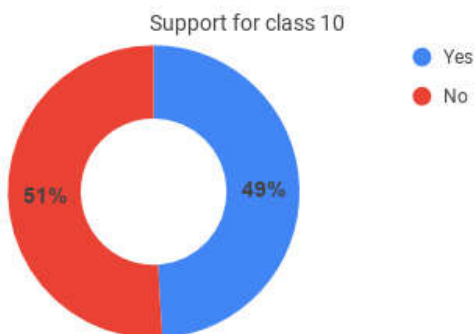
Support for class 10

In grade 10, students appear for the state board exam and the exam results always get the spotlight. To some extent this decides the career of students as well as the credibility of school in the society. Thus every school, every student, and every parent focuses more on 10th-grade results. The pattern of the exam also differs from the regular exam till class 10 and it is well reported in the media that students feel anxiety from the board exam. It is required to train students for board exams to bring the required knowledge and confidence and thus we asked teachers whether they need support or training for class 10th students. During the survey, 49% of higher secondary school teachers stated they need special training for the class 10 students.

During classroom observation of higher secondary classes, the majority of teachers expressed that they need training regarding the 10th grade about setting demo papers as per board exams. This is mainly between the months of December and February.

Support for class 12

The class 12th board exam is a milestone for students to go for higher studies. In class 12th students appear for exams in specific subject streams such as Science, Commerce or Humanities. Students in class 12 need continuous motivation and practice of the subjects which they are going to appear in. Considering these factors, teachers were asked about special support for the 12th class. 58% of higher secondary school teachers stated they need special training for class 12 students. Thus, it is needed to give special training to the teachers who are preparing the students for the class 12th board exam.



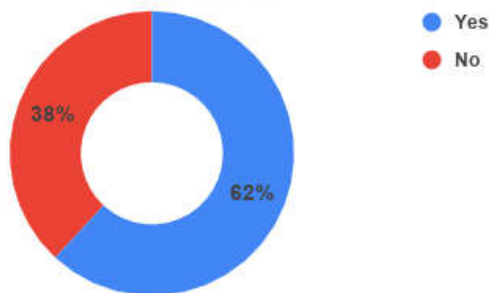
Career Guidance

Generally, at the 10th and 12th-class level, the majority of the students start thinking for a career and thus it is important for teachers to guide students on this strand. Class 10th is the platform where students decide to pursue one specific stream from Commerce, Art, or Science. This is the time where students decide about their career goals. And in class 12th students start looking for opportunities to pursue their dream. Thus the school is required to have a supportive environment where students are guided towards their goal, dream, and streams they are going to opt-in class 11th. In the online survey questionnaire, teachers were asked whether they need some level of training on career guidance for students of class 10th and 12th. 62% of teachers of the higher secondary schools stated they need training for the career guidance of higher secondary students. It may include the information which is required to be in a place to guide students about choosing a stream and choosing a college.

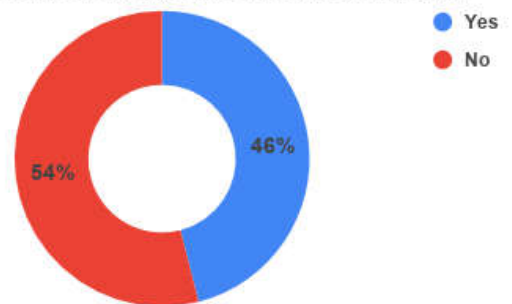
Scholarship and competitive examinations

Nowadays, the importance of scholarship exams (5th grade and 8th grade) and competitive examinations has increased not only in schools but within society also. Most of the schools and students prefer to give these exams. Scholarships exams and other competitive exams help students both economically and socially. With a good performance in a scholarship examination, students receive monetary benefits along with recognition. In competitive examinations, students get either admission to a good school or certificate of appreciation. Doing well in a scholarship exam and competitive examination, it takes a lot of effort from the student as well as the teachers' side. It was asked by teachers about whether they need support for scholarship exams. 46% of teachers stated that they need training for the preparation of scholarships and competitive exams. This will help teachers to prepare the students of their class and school to do well in these exams.

Support for the career guidance to the students of class 10th to class 12th



Support for scholarship and competitive examination



CONCLUSION

Based on the above findings, there are some conclusions which stand out from the study that are highlighted here.

Delivery of training

- *Exploration for blended models.* Majority teachers prefer to attend a face to face training but it is advisable to conduct blended training that can be organized once for exploration and to see the outcomes.
- *Teachers prefer a training period from July to September and the majority of teachers are ready to give 2 to 4 hours for training in the month.* This will help in the implementation of the learning of a training program in the classroom as well as tracking the progress throughout the year.
- *Teachers need to be supported by modeling out the expected action in the classroom during training.*

Content

Teachers express the need to receive subject and content-specific training. Providing training on these areas will cater to the need of teachers and will keep them motivated in training programs.

- *For primary school teachers,* English is the most prioritized subject followed by Maths and Hindi.
 - *For upper primary school teachers,* Science is the most prioritized subject followed by English, Maths, and Social Studies.
 - For higher secondary school teachers* English is the most prioritized subject followed by Hindi and Science.
-

- *Assessment Creation.* Teachers want to learn the skill of using checks for understanding in the class and conduct daily assessments of the students.

Pedagogy

- *Teachers are most eager to learn activity-based teaching, differentiation and multigrade teaching.* Teachers stated these skills will help improve the reading and writing skills of children, as evidenced by the FGDs and interviews.
- *Teachers want to learn to create and use subject-specific TLM for teaching and improving learning.* Primary school teachers prioritized Maths and English, upper primary and higher secondary school teachers prioritized Science subjects. Teachers can be given support on the choice of their subject for creating and using TLM in teaching.
- *Teachers can be trained on the use of appreciation of student action.* This is to derive positive behavior in the classroom which was missing in most of the classes.
- *There are still numerous areas for implementing basic pedagogical techniques that teachers are struggling with:*
 - Classroom Management
 - Using real-world examples
 - Usage of blackboard and physical space
 - Opportunities for student practice
 - Integrating technology to their everyday teaching
 - Conducting effective student assessments

Post-training support

- *Regular Classroom Observation and Support:* Teachers are open to having peers or mentors observing their class and providing feedback and modeling best practices on how they can improve on a regular basis.
- *Teachers are eager for follow-up after training:* They want subject experts, master trainers, DIET faculty, and CAC to observe the class and help in improving the learning outcome and applying all the new techniques learned during training.

Additional Training needs

- *Teachers stated the need for training and support in creating a friendly learning space for CWSN students and designing learning material for these students.*
 - *Teachers expressed interest in an active SMC/ SMDC at schools.* Teachers believe it is required to have an active SMC for the development of school and students, but require training and guidance on how to organize and conduct effective SMC meetings and invest their communities in the progress of their schools.
 - *Higher secondary school teachers have expressed a need for support on the preparation of board examinations and career guidance for class 10th and 12th students.*
 - *Teachers also demanded support in preparing students for competitive and scholarship exams.*
 - *Teachers want to work on their presentation skills which will enable them to facilitate a class effectively and present the topic in an easy and interesting way to students.* Providing training on presentation skills will help teachers in bringing clarity in the delivery of content and instructions.
-

RECOMMENDATIONS

1. *Municipal Corporation and SCERT to establish guidelines for the annual cycle of monthly classroom observation and support for all teachers.* These respective authorities need to have a year-long strategic plan and SOP for CAC members and Subject experts to conduct classroom observations and review this periodically. This plan or SOP includes calendaring for visits, tools for observation and system for catching data. It is also recommended to provide robust training and support to these members on skills like classroom observation, constructive feedback, data analysis, etc.

2. *Identify and coach teacher mentors at the cluster level to observe and coach teachers.* For helping teachers at the classroom level, some dedicated officials need to be there. However, looking at current officials' work areas, it is very difficult for them to get the time and help teachers at the classroom level. Thus it is recommended that local authorities need to identify and create teacher mentors by having robust processes for selecting and training them on mentoring, coaching aspects. These mentors can be full-timers or teachers who can play additional roles of a mentor on particular days in a week or month.

3. *Training content progression to be defined at the beginning of the year, and made optional for teachers (or given on a need basis).* It is highly recommended for DIET and SCERT to create a training plan for teachers at the beginning of every year which will be based on teacher's needs. This will follow training topics - class wise, subject wise- as well as teachers need and preference months for training. This training plan will be available publicly and NGOs / CSR should follow this as well.

4. *Planning and review committee on the district level.* Like Maharashtra state, a district-level planning and review committee needs to be formed for finalizing needs of teachers, finalizing calendar of training, granting permission for NGOs to work with teachers (those align with this plan), and reviewing NGOs' work periodically. This will help to reduce duplication of work or training as well as accountability will also increase in internal and external parts. In this committee members from the Education department and DIETs should participate.

5. *The focus of teacher training needs to be trained on their subject-specific needs.* Along with this, training content to be specifically aimed at improving basic pedagogical techniques, activity-based learning, differentiation, multigrade teaching, classroom

management, behavior management, usage and creation of TLM, encouraging participation and appreciating student's action, using real-world examples, usage of blackboard and physical space, opportunities for student practice, integrating technology to their everyday teaching, conducting effective student assessments.

6. *Training delivery to be practice-oriented, incorporate modeling of techniques and in a remote way (blended + online).* All further training must incorporate a practical component where the facilitators not only deliver the content but also practically show (demo) how to deliver in the classroom. It gives participants more clarity and a chance to clear their doubts. Also, facilitators need to have established some system for helping teachers (if required) during execution for instance through handouts, on-site support or online or telephonic support, etc. Blended models also need to be explored for future training.

7. *With the advancement of technology, teacher training can become more effective with digital content focusing on different pedagogy skills addressing the gaps in classrooms.* Digital content has helped to control the cascade loss in teacher training programs. It has also supported teachers by having a digitized content to keep going back to in case their notes were not completely sufficient. It is important to ensure that using instructional design principles is important while creating digital content. This should be made available to all teachers on an open platform to keep teachers engaged in contextualized content.

8. *Training sessions need to be conducted at the beginning of the academic year* from April to September. Months of October to March can be utilized in the implementation of the training program at the school and classroom level.

9. *Create a support system for running SMC/SMDC effectively,* preparation of scholarship and competitive exams, preparation of board exams, learning space for CWSN students.

10. *Train and support teachers on life skills for students.* As per the current COVID-19 situation, it is highly recommended that teachers now need to be trained and supported for helping students in life skills education. Next two years at least teachers training not only focus on foundational skills but on Life skills education and this will be the focus area of the education department.

