

# TDC PROGRAM

Nov. 2019 -  
Jan. 2020



## Teacher Development Coordinator Handbook

LIC 6

LIC Theme: Teaching and Learning Strategies (Part 2)  
TDC Skill Focus: Encouraging and Sustaining Change

Name of TDC:

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Name of Mentor Teacher:

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Name of School:

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School ID:

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*Thank you*



# SECTION ONE

## Looking Back at LIC 5



*DDE District and DDE Zone at DPCM - RK Puram*

### IN THIS SECTION

- Quick Recap: Skills Focus
- Quick Reflections: Classroom Routines
- Testimonials
- What Is the Aim of the TDC Programme?
- The 6 Steps

# Quick Recap: Skills Focus (Developing a Culture of Learning)

## Developing a Growth Mindset in Schools

Why is it important?	How can I apply this?
<ul style="list-style-type: none"> <li>• Significant amount of evidence suggests that <b>those with a Growth Mindset perform better in a variety of areas</b> (sport, test scores, music and many more) than those with a Fixed Mindset (those who believe intelligence and ability cannot be changed).</li> <li>• It changes lives and systems. <b>Once people start believing in their ability to get better – they work harder, learn from failure, and actually do get significantly better!</b> If teachers and learners adopt a Growth Mindset, they will begin to see their sense of possibility transforming before their eyes.</li> </ul>	<ul style="list-style-type: none"> <li>• Praise effort, not intelligence</li> <li>• Celebrate mistakes/challenges as opportunities to find areas of improvement</li> <li>• Work on finding strategies to improve on areas of development</li> <li>• Challenge them to reflect on whether they have a Fixed Mindset or a Growth Mindset</li> <li>• Show teachers that you have adopted a Growth Mindset</li> </ul>

## Strategy 2: Building recognition in your schools

		Why is it important?	Example
P	<b>Personal</b>	Recognition should be personal. It is important for the person to feel that it is for them and them only. If for example someone sends a thank you email to 100 people, individuals may feel that their personal contribution has not been recognised.	A handwritten letter thanking someone.
A	<b>Authentic</b>	Recognition needs to feel real. Praise or recognition that feels false has a negative effect.	Being clear on why you appreciated something someone has done. <i>e.g. 'your thoughts on making eye contact during facilitation made me realise that I need to change my own practice in this area'.</i>
S	<b>Specific</b>	Recognition needs to be for specific things. This will make it feel personal and authentic, that the person recognising has really noticed what they are doing.	Thanking someone for a specific contribution they have made in a discussion, quoting or paraphrasing their words.
S	<b>Spontaneous</b>	Recognition should feel like it is organic, and not something that has simply been planned out – this will make it feel personal and authentic.	Writing an appreciation note to someone immediately after they have done something that has positively impacted you or others.

## Reflections:

*How did you use Growth Mindset to help teachers overcome challenges?*

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*Did you see any advantages of using Growth Mindset while problem solving in your school?*

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*Were you able to develop a culture of recognition in your school? Write down any changes you observed because of it.*

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*Our Skills Focus for LIC 5 was Developing a Culture of Learning. What are 2-3 things you will do in LIC 6 to continue doing that?*

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# Quick Reflection: Classroom Routines

*What are some successes of classroom routines that you observed during LIC 5?*

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*What were some challenges teachers faced in implementing the classroom routines? How did you support them?*

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*How can you support teachers in continuing the routines in LIC 6?*

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*We have covered 5 LICs so far. Which of the different strategies can teachers use for the following:*

**Building a Culture of Trust and Communication:**

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**Building Retention:**

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**Check for Understanding:**

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# Testimonials

“ TDC Programme equips the teachers with the wings to open their classrooms not only for others but even for themselves to try new strategies, to administer various new techniques of building connect with students, lesson plan, asking different types of questions, dealing with student's responses and evaluation of our teaching style.

ART Meetings has given the platform to teachers to discuss about TEACHING LEARNING PROCESS going inside the classroom, to share the success of any new technique or method they implemented in the class or to discuss the loopholes in any strategy in the reflective manner, moulding the strategy according to the feedback and re-implement it. It's really a great feeling to witness the growing appreciation culture among teachers.

- Pooja Gandotra, BRP/District Coordinator, North West A and B

“ इस कार्यक्रम में सम्मिलित होकर मैं बहुत उत्साहित हूँ। मेरे सम्बंधों में सुधार हुआ है। विभिन्न कार्यशालाओं द्वारा एक विकसित व प्रगतिशील व्यक्तित्व की ओर उन्मुख हुई हूँ। अभी थोड़ी नींव मजबूत हुई है और आशा है आगे की यात्रा गौरवशाली रहेगी।

- डॉ. कविता, प्रवक्ता (हिन्दी) सर्वोदय कन्या विद्यालय पूठकलां

“ Intervention of Mentorship Program and TDC Program are landmarks in Education system of Delhi. Building academic environment in the school was the prime focus for deputing mentors in the schools. Now teachers have a friend and a guide in the form of TDC and Mentor who help them to deal with problems related to teaching learning strategies, pedagogy and academic challenges.

ART meetings provided a platform for discussion about the benefits of changing teaching methods. TDC and ART members are the most effective contributors for further sharing the innovative methods during 30 minutes session to cascade ideas to reach the whole school. HOSs also motivated to attend and contribute their academic vision and wisdom through the ART meetings. Now teachers are showing Exponential Growth using teaching strategies, they are using Elaborative Questioning Techniques, Brain Dump, Do Now, No Hands, etc. Teachers opened up to share their own practices with each other. Class observation started by ART members and TDC. Through Whatsapp group, ART members share the pictures, videos and minutes of 30 minute sessions every day.

- Mrs. Ila Verma, Mentor Teacher



# Testimonials

“ When students see their teachers learn they also tend to learn because they learn what they see, not what they are told. Professional development of teachers inspires them to learn and there cannot be a better program than a school-based learning program and the Teacher Development Coordinator Program offers this opportunity to teachers.

- MT Murari Jha, South West - A

“ TDC program creates an environment that facilitates learning. TDCs collaborate with one another, mentor and HOS to work for the shared vision of the school by conducting focussed learner led discussions, providing one to one support to teachers, sharing new co-teaching learning strategies and model lesson plans, providing development feedback following peer classroom observations, creates a culture of support for each other. TDC program helps in fostering teacher-led culture of collaborative professionalism centred on the holistic development of the child and building a culture of continuous learning and improvement.

- Heena Jain, Mentor Teacher North West - A

“ TDC program is boon for enhancing teaching learning environment in classroom. This program has provided a platform for academic discourse amongst teachers which is so necessary but was missing. It helped in bringing teachers together and sharing their classroom teaching experiences. After introduction of this program teachers have been overcoming inertia of using traditional classroom teaching practices and are motivated to experiment with new age techniques and methodologies.

- Divya Maan, Facilitator DIET Keshavpuram

“ TDC program is a wonderful academic program that gave opportunity to teachers to think innovatively. Classes are more interesting and learning is better than before.

- Dr. Anjul Sharma, TDC Nodal Officer, DIET Daryaganj



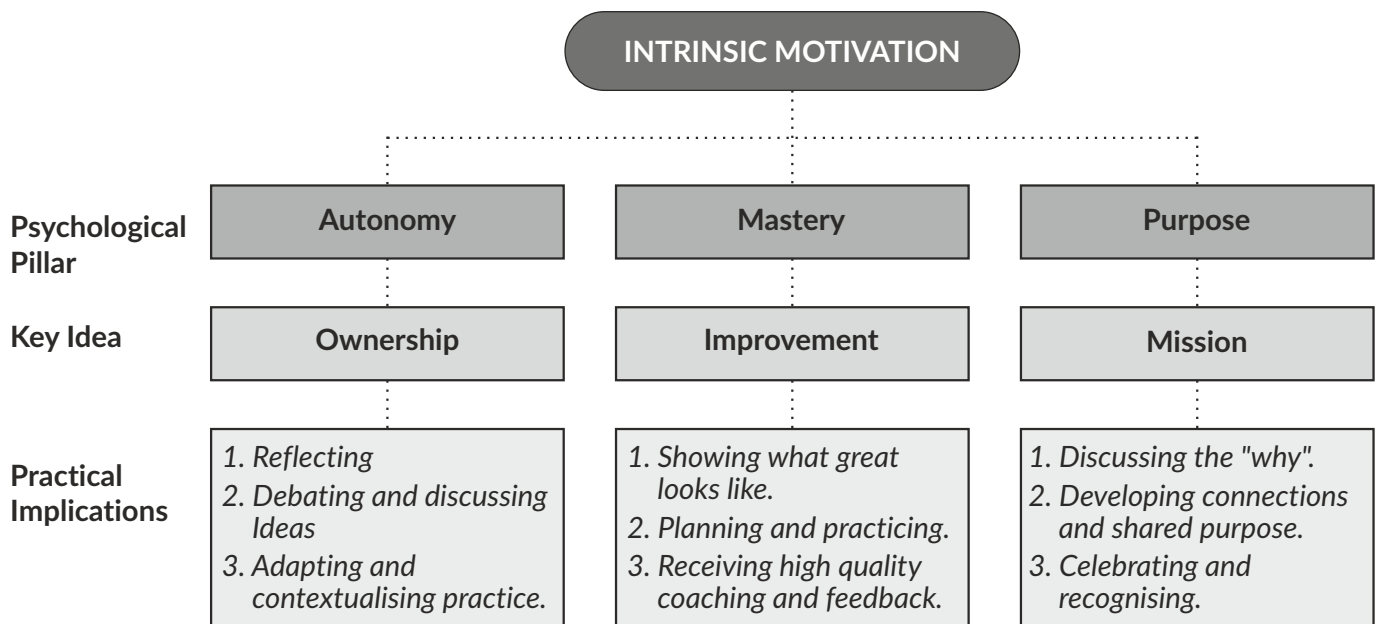


# What is the aim of the TDC Programme?

While each LIC introduces a new theme and new strategies, the main aim of the TDC Programme is not just mastery of those specific strategies but the **creation of an environment in schools that helps teachers sustain their intrinsic motivation to teach.**

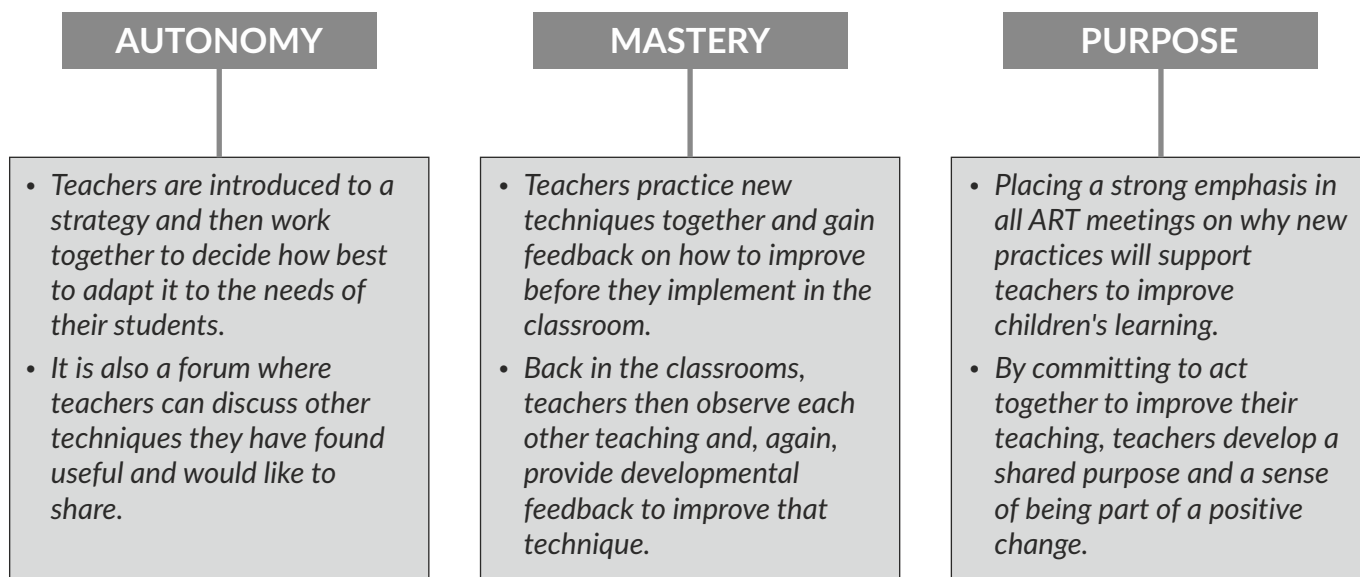
Research tells us that intrinsic motivation can be sustained if a person's need for autonomy, mastery, and purpose is fulfilled:

- **Autonomy:** Being able to decide for ourselves how best to do our work.
- **Mastery:** Constantly being able to engage in opportunities for professional growth; to become better consistently and to be able to see our growth.
- **Purpose:** Being able to see a shared purpose for the work we do.



# Intrinsic Motivation in Action: ART Meetings

At the heart of the TDC programme are the Academic Resource Teams (ART) in every school. ART meetings are designed specifically to increase teacher intrinsic motivation through building autonomy, mastery and purpose:



## How can we ensure Autonomy, Mastery and Purpose in our meetings?

Get into pairs. Think about what you must do in an ART meeting so ART members can feel a sense of autonomy, mastery and purpose.

One such key point has been written down for you!



<b>Programmatic Activity</b>	<b>Practical Implication of Intrinsic Motivation Seen In Activity</b>	<b>Key Points to Ensure</b>
ART Meetings	<ol style="list-style-type: none"> <li>Reflecting</li> <li>Debating and Discussing</li> <li>Contextualising</li> <li>Planning and practicing</li> <li>Getting feedback on plans</li> <li>Establishing purpose of the strategy</li> </ol>	<ol style="list-style-type: none"> <li>Is the purpose of that strategy/skill discussed?</li> </ol>



# The 6 Steps

In the previous LIC, we introduced The 6 Steps for ART meetings and Co-Learning Sessions.

It is important to remember that these 6 steps are to be used for a single session. **They are not the 6 steps of an LIC.** For example, when introducing a strategy in an ART meeting, we will use the 6 steps to guide the process as seen in the table below:

STEP	OBJECTIVES
Inspire	<b>Facilitator introduces the content of the session to the participants:</b> For ex. What is Do Now?
Concrete Examples	<b>Facilitator gives an example of what the strategy/skill looks like when it is implemented well.</b> For example, sharing an example of how Do Now can be used in a Fractions lesson and talking about how the example meets the success criteria.
Contextualize	<b>ART members discuss what was good about the example, how it could be improved and how they will use it.</b>
Practice	<b>Now, ART members plan how they will implement the strategy/skill in their classrooms. Each participant should do this on their own and refer to the success criteria.</b>
Feedback	<b>Each ART members shares their plan with a partner and receives feedback based on the success criteria.</b>
Adapt	<b>After feedback, each participant adjusts their plan.</b>

## Why are we using these 6 steps?

- The 6 steps ensure that participants move from abstract to concrete to application when thinking about a concept/strategy/idea
- The 6 steps also ensure that each participant spends some time thinking about how they want to apply the concept/strategy/idea

Reflect on and write how the 6 steps help introduce aspects of autonomy, mastery and purpose in the ART meetings:

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# SECTION TWO

SKILLS FOCUS:  
Encouraging and  
Sustaining Change



## IN THIS SECTION

- Making It Attractive
- Making It Social

## Strategy 1: Making It Attractive\*

### What does it mean to 'make it attractive'?

The simple idea is that for people to adopt a particular behaviour, it has to be something that is attractive to them in some way. For example, think about '2 for 1' offers in a market. The fact that we think we might make a saving is attractive to us, and therefore we are more likely to buy the item on offer.

It is not just 'rational' choices like this that determine whether something is attractive. If something makes us feel a certain way, we may be more likely to do it. For example, anti-smoking campaigns that have an emotional impact are more successful than those that do not.

Why is it important?	How can I apply this in my work?
<ul style="list-style-type: none"><li>• There is lots of evidence to suggest that making things more attractive in the ways described increases the chances of particular behaviours being adopted.</li><li>• If considered carefully, there is lots of scope to 'make it attractive' in our work which can lead to significant changes in the way that teachers work in your school.</li></ul>	<ul style="list-style-type: none"><li>• Consider the way you ask questions to teachers, and see if you can construct them in such a way that makes their job feel important to them.</li><li>• People are more likely to do something if it is personalized. Consider writing a personalized message or letter to a teacher which thanks them for their work when asking them to do something.</li><li>• Highlight clear benefits that teachers may gain from engaging in a particular activity.</li></ul>

### Example

Deepa is a TDC in a district of Delhi. She has been a part of the Teacher Development Coordinator programme for two years. Recently, she has got a new ART member (Rajvi) who is not engaged in the feedback process as much as Deepa would like. Whenever Deepa asks her to sit down to discuss an ART meeting or classroom observation, she seems to be in a hurry to end the conversation. Deepa has tried lots of things – she has tried talking about why feedback is important, and about the benefits of the programme, but it doesn't seem to lead to long-term change and leaves her feeling exhausted. She decides that she needs to try something new, and from her recent reading about behavioural psychology, she decides that she needs to make it more attractive for Rajvi to be a part of the feedback conversation.

**Highlighting the importance of the person's contribution:** After a classroom observation, Deepa starts by talking about what she noticed went well. She tells Rajvi that she is very impressed by how Rajvi used Do Now to revise the previous lesson. Then, she frames her question in a way that highlights the importance of Rajvi's contribution. Instead of saying, 'I think you need to change the type of questions you use for Do Now so that it takes less time' she says, 'Thank you for trying this new strategy. Seeing teachers like you implementing them motivates others to try them too. What can we do to make sure it doesn't take up too much of your time?'

**Highlighting benefits to that person:** Deepa also tries to highlight the benefit that Rajvi will get by implementing this suggestion. She says, "I know you only have 30 minutes for each lesson. I wonder if we can find some questions that can help you revise within 5-7 minutes."

**Personalised recognition:** Deepa notices that this time, Rajvi is listening to her patiently and also adding a few opinions of her own. Before leaving, Deepa leaves a note for Rajvi that says: Thank you for taking out time today to discuss the lesson, Rajvi. It was great to see you take the initiative to try the new strategy. Looking forward to our next meeting!

After doing this 2-3 times again, Deepa notices that Rajvi starts approaching her for feedback on her own.

In the previous LIC, we discussed Building Recognition – a way to celebrate the efforts of the teachers. Building Recognition is an important part of Making It Attractive as well. However, it is not enough. To make it attractive, it is important that the teachers are able to see why their contribution is important and what benefit they can get from the activity.

**Discussion**

1. Do you think this is an effective use of the 'make it attractive' strategy? Why or why not?
2. What else could Deepa have done to 'make it attractive'?
3. How might you use this strategy with your teachers?

Think back to the pillars of intrinsic motivation. Highlighting a person's strengths shows them how their mastery over their work is improving while highlighting their contribution helps build their sense of purpose – both important ways to increase intrinsic motivation!

Practice

Think of a problem you are currently facing with a teacher that you might be able to solve by 'making it attractive'. Use the Planning Template to plan your conversation with them.

*Planning Template*

<p><b>How will you show them that their contribution is important?</b>  <i>(Example - Seeing teachers like you implementing them motivates others to try them too. What can we do to make sure it doesn't take up too much of your time?)</i></p>	
<p><b>Benefit to them</b>  <i>(Example - I know you only have 30 minutes for each lesson. I wonder if we can find some questions that can help you revise within 5-7 minutes.)</i></p>	
<p><b>Personalised strength of the person</b>  <i>(Example - It was great to see you take the initiative to try the new strategy.)</i></p>	
<p><b>Encouragement of Growth Mindset</b>  <i>(CHALLENGE: Make it even better than Deepa's by linking it to Growth Mindset!)</i></p>	

## Feedback and Adapt

Swap your plan with a partner. Give them ONE area of strength and ONE area to improve. Make sure your feedback explicitly refers to the success criteria below:



### Success Criteria

- Emphasising their contribution
- Personalised strength
- Benefit to them

## Committing to Action

Starting behaviour change through 'making it attractive' is only the beginning. In order to build habits that last, you will need to keep reinforcing this. Think about a teacher with whom you can use this strategy.

- What is the problem you are trying to solve:
- What can you do to make it attractive:
- When should your partner follow-up with you about this:





## Strategy 2: Making It Social

### What is 'making it social'?

As humans, we are social animals – therefore we are heavily influenced by what others around us do. Just think about going somewhere new for a holiday. Before you do, you would want to know what other people think of the place, so you might ask a friend who has been there, or check for reviews on the Internet. You are very likely to make your decision based on what you find out from this exercise – if the reports of the place are good you will go; if they are not you won't go.

'Making it social' tries to help you make use of this phenomenon to build great working habits in your schools and groups.

### Why is it important?

There is now a huge body of research showing that almost every decision we make is influenced by others, but quite often we don't even notice these social influences. Knowing how to effectively build work culture by 'making it social' will help inspire teachers in a sustainable way.

### How can I apply this?

- *Show that most people already do the desired behaviour.* For example, if you find that most of your teachers are successfully promoting peer to peer observation in schools, make sure this is made clear to all teachers by celebrating it (for example, as a congratulatory message on the WhatsApp group).
- *Encourage teachers to make a commitment about action to a peer,* as research shows this is much more likely to result in people actually doing it. For example, ask teachers to choose a specific time and date for when they will meet you to reflect on a lesson, but ask them to also share this with a peer.
- *Use the power of networks.* For example, rather than just committing to a peer, use a WhatsApp group for the commitments above. Make it clear this is not to force them, but it will help them commit to action and therefore improve (make the links to Growth Mindset!)

### Example

Deepa is pleased at the initial reaction that Rajvi has to her attempts at making it attractive. She tries it with the other teachers she is struggling with and again sees initially promising results. However, she begins to notice another challenge. While an action plan is always decided after feedback is discussed, a lot of the teachers do not end up implementing the action plans. They give several reasons for this, such as shortage of time, change in schedule, admin work etc. However, Deepa knows that they have the potential to overcome these challenges if they are motivated to. Deepa initially becomes deflated, but her MT Shashi encourages her to keep trying by reminding her of the importance of keeping a Growth Mindset.

Deepa therefore decides to try 'making it social' in order to get the teachers to implement what they decide on. She previously set up an ART WhatsApp group, but so far it has only been used to share logistics and planning details.

She decides to use the WhatsApp group for teachers to share their action points every two weeks, and then share their successes and areas of support. She takes the following steps to make sure it is set up for success:

1. **Using the power of networks:** She calls each teacher personally to explain what she would like them to do. She is careful to explain the benefits and the fact that she wants them to learn from each other and share each other's successes, but that it can only be successful if everyone contributes.
2. **Making public commitments:** At the beginning of the day on a Friday, she posts her own message on the group to say how much she is looking forward to hearing about all their efforts. 'Good morning

everyone! I'm really excited to hear about your priority actions for the next two weeks. On the 14th, all of us will share back how our efforts went, what went well and where we need more support. That way, we can all help each other by brainstorming ideas!

**3. Highlighting desirable behaviour:** On Sunday morning, she sends a message to the group summarising the messages, and she thanks everyone who contributes by name. *'I loved hearing about Shweta's decision to focus on planning the Do Now activities with any non-ART member from Science. This is inspiring and a brilliant example of someone showing real Growth Mindset and persisting! Many thanks to Shweta, Neha, Ajay, Rahul, Amit and Lakshmi for sharing their action points. All the best!'*

After two weeks, she sends out a reminder message for everyone to share their progress. For the first few weeks, only a few teachers do this. However, gradually, as Deepa celebrates those who were consistent, she notices that other teachers (including Rajvi) start joining in too.

### Discussion

1. Do you think this is an effective use of the 'make it social' strategy? Why or why not?
2. What could Deepa have done even better?
3. What other non-technology forums can you use to 'Make It Social'?

### Practice

Think of a problem you would like to solve amongst your teachers. For example:

- You would like them to observe more classrooms from other subjects.
- You would like them to commit to meeting with you.
- You would like them to share more evidence-based success stories in ART meetings.



Write down the problem here:

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Role Play - A Day at School (Mentor) - Pitampura



In the following table, explain how you will 'make it social' in order to solve the problem:

<p><b>Using the power of networks. What forum will you use?</b> (e.g. WhatsApp group, email group, team meeting)</p>	
<p><b>How will you use it to address the problem?</b> (Look at how Deepa used the WhatsApp group)</p>	
<p><b>Highlighting desirable behaviour.</b> How will you use the forum to show that many people are already doing the behaviour? (e.g. thanking and celebrating those who do it every week)</p>	
<p><b>Making public commitments.</b> What sort of commitment will you want teachers to make publically, and how will you ensure that they do this?</p>	
<p><b>Promoting Growth Mindset.</b> How will you use this opportunity to further promote Growth Mindset?</p>	

## Feedback and Adapt

Swap your plan with a partner. Give them ONE area of strength and ONE area to improve. Make sure you feedback explicitly refers to the success criteria below:

### Success Criteria

- Using the power of networks
- Highlighting desirable behaviour
- Making public commitments

## Committing to Action

'Make it social' yourself to increase your likelihood of using this! Commit to the following with your buddy:

- What is the problem you are trying to solve:
- What can you do to make it attractive:
- When should your partner follow-up with you about this:



# SECTION THREE

## LIC 6 (Theme & Strategies)



### IN THIS SECTION

- What is the theme for this LIC?
- Strategy 1 : Supporting Student Discussions
- Strategy 2 : Student Reflection Diary/Learning Log

# What is the theme for this LIC?

## Teaching and Learning Strategies (Part 2)

Research has long supported writing as an instrument to facilitate learning (Deshler, Palincsar, Biancarosa & Nair, 2007) as it enhances conceptual understanding (Abell, 1992) by asking students to “pay closer attention to details, organize data more logically, and structure the arguments in a more coherent way” (Kober, 1993, p. 45). There is also a growing body of research around how the human brain learns and its implications on the teaching learning process. According to Allan Paivio's Dual Coding theory, the brain has two ways of processing: the visual and the verbal. The combination of the two leads to the most powerful results. Students will remember more when they've mixed language and imagery.

However, while writing is an important tool for learning, so is talk! Talk is a part of human development that helps us to think, learn and make sense of the world. People use language as a tool for developing reasoning, knowledge and understanding. Therefore, encouraging students to talk as part of their learning experiences will mean that their educational progress is enhanced. Talking about the ideas being learnt means that those ideas are explored, and reasoning is developed and organized.

Keeping these principles of learning in mind, we will be focussing on the following two strategies this LIC:

- 1) Supporting Student Discussions
- 2) Student Reflection Diary/Learning Log

# What are the two strategies for this LIC?

## Strategy 1: Supporting Student Discussions

**What:** After teachers finish explaining a concept and check for understanding, based on their students' needs, they provide elaborative questions for student discussions (in pairs or groups) that help students elaborate on key concepts. The teacher also provides several support structures such as initial modelling, suggested sentence structures, list of key ideas etc. The students then discuss in pairs or groups, and share with the larger class. As the students get more comfortable with this approach, teachers can also start including broader questions or asking students to create their own questions for discussion. This strategy can be used as and when the teacher sees fit based on how much time they have.



Why is it important?	How to use it effectively?
<ul style="list-style-type: none"> <li>• Builds on the effectiveness of elaborative questioning to consolidate learning while also helping students improve their communication skills.</li> <li>• Providing support structures helps students develop their skills by taking away support slowly and also models for students what effective communication looks like around a specific topic.</li> <li>• Can be used to start laying the foundation for effective group working.</li> </ul>	<ul style="list-style-type: none"> <li>• When introducing this strategy in your class, ask students to discuss in pairs so that every student contributes to the discussion. As students become more confident, teachers can create bigger groups to introduce more variety in discussions.</li> <li>• In classrooms with fixed desks or limited space, ask students to turn around to make groups or get them to pair up with the person sitting next to them.</li> <li>• Ensure that the pairs and groups are different every time.</li> <li>• Use elaborative questions, as discussed in LIC 4, to create discussions questions.</li> <li>• It is also important to listen to student interactions in order to intervene and support wherever required.</li> </ul>

Whenever possible, use these discussions to get students to make connections between the lesson and their real lives!

### Example

Meena is a Mathematics teacher in Delhi who has been using No Hands for the past few months. While she is happy that more of her students are now participating in class, she still sees them struggle to express their opinions and communicate their thoughts verbally. While observing her colleague, Vimal – an English teacher, she sees that he uses part of his lesson to let students discuss their ideas with each other. She wants her students to be able to do this in Math as well and decides that twice a week she will include some 'Talk Time' in her lessons.

Meena explains to the students that during the last ten minutes of the class, they will get time to revise what they will learn by discussing it with a partner. Having previously discussed the concept of averages, Meena guides the students through a worked (solved) example. Then, she puts up another solved example on the board:

*Ashish studies 4 hours, 5 hours and 3 hours respectively on 3 consecutive days. How many hours does he study on an average daily?*

$$\begin{aligned}
 \text{Average study hours on a daily basis} &= (4+5+3)/3 \\
 &= 12/3 \\
 &= 4 \text{ hours}
 \end{aligned}$$

Under the worked example, Meena writes 3 questions:

- **Why did we add 4, 5 and 3 in the first step?**
- **What do you understand by average/mean?**
- **Where do you find use of averages in your real life?**

Since this is the first time she is trying to get students to have focussed discussions, she supports the activity by preparing a student beforehand to model the discussion with her for the rest of the class to see.

Meena then asks students to begin their discussion with the first question. As students begin their discussions, Meena goes around the classroom and gives support to the students who are having difficulty getting started. At the end of the ten minutes, she invites one pair to come up and share their thoughts with the rest of the class. Due to the different kinds of support structures she provides, she notices that students gradually start becoming better at expressing their thoughts verbally. She also realizes that this is a great way to get students to revise concepts!

## Success Criteria

- Use elaborative questions as prompts for discussion.
- Provide adequate support structures based on your students' needs (eg. list of key words, sentence starters, etc.)
- Go around the room to identify students who need help.

### Discussion

1. Do you feel that 'Supporting Student Discussions' is a useful strategy for students? Why/why not?
2. What are some challenges that teachers might face? How can these be addressed during the ART meeting?
3. Is there anything you would do to improve Meena's use of the strategy? What would it be and why?

Remind students that good listening is an extremely important part of strong communication skills!

ART meeting at Kalkaji



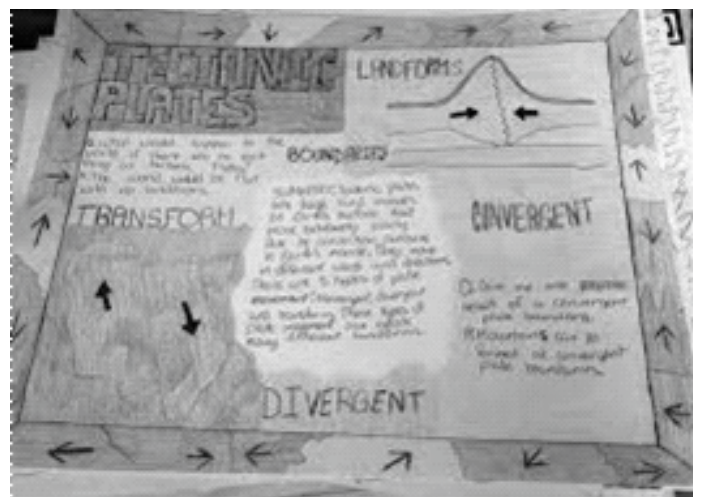
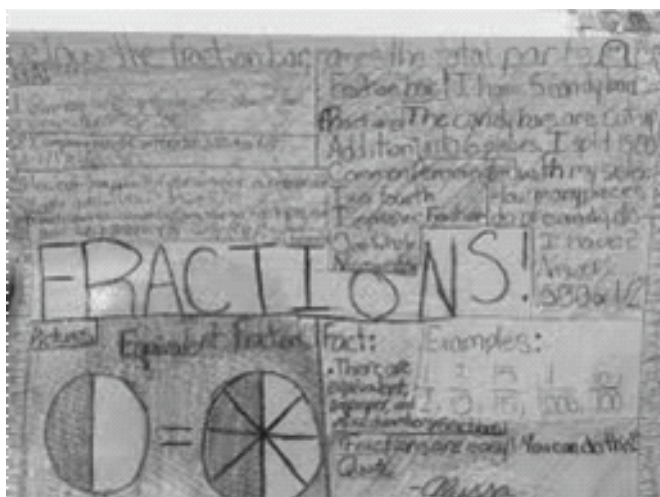


## Strategy 2: Student Reflection Diary/Learning Log

**What:** A 'Student Reflection Diary/Learning Log' is a notebook students use to reflect on what they learnt. It is one of the various activities under 'Writing to Learn' - short, informal writing tasks that help students think through key concepts or ideas presented in a course. Students, either during the last five minutes of class or as part of Do Now, reflect on and summarize what they learnt during that, or the previous, class. Then, teachers provide students with an opportunity to self-check their responses by referring to class notes or textbooks. Building on the effectiveness of retrieval practice in consolidating learning, Student Reflection Diary/Learning Logs encourage students to recall information they had previously learnt while also providing a safe space for them to practice their writing.

Why is it important?	How to use it effectively?
<ul style="list-style-type: none"> <li>• Writing is an important tool for facilitating learning and enhancing conceptual understanding of students. However, students often associate writing only with examinations and struggle to become comfortable with writing.</li> <li>• Writing to Learn activities present writing as non-threatening opportunities for students to put their thoughts into words, developing confidence and skill.</li> <li>• As discussed in LIC 4, long-term memory is enhanced when students try and recall information that they had previously received.</li> <li>• Retrieval is made more effective if students get a chance to check for accuracy and points they may have missed.</li> <li>• This makes Student Reflection Diary/Learning Logs an ideal, yet simple, way to help students revise and retain what they learnt in class.</li> </ul>	<ul style="list-style-type: none"> <li>• Student Reflection Diary/Learning Logs are most effective when they are not used as assessments. The most important aspect of the strategy is to use it to let students write down their thoughts without the fear of being judged.</li> <li>• Ask students to make a separate notebook that will be their Student Reflection Diary/Learning Log. Let them know that this will be only for them!</li> <li>• While Student Reflection Diary/Learning Logs should not be corrected like other notebooks, go around the classroom to ensure that all students are engaged and offer support where required.</li> <li>• Ensure that students get a chance to self-correct their work.</li> </ul>

A great variation is to get students to use images along with text to summarise their learnings. According to Allan Paivio's dual coding theory, the brain has two ways of processing: the visual and the verbal. The combination of the two leads to the most powerful results. Students will remember more when they've mixed language and imagery. Plus, one-pagers provide variety, a way for them to share what they've learned that goes beyond the usual written options.



The prompts for Student Reflection Diary/Learning Logs can be broad (Write down everything you remember from today's lesson) or slightly more specific (Write down what you remember about Mendel's experiments), based on your objective for the reflection.

### Example

Hema, a Biology teacher in Meena's school, has been wondering how she can get students into the habit of writing down their thoughts. Currently, she notices that her students feel nervous showing their answers and this often leads to them copying answers off of other students. She comes across the concept of Writing to Learn and decides to use Student Reflection Diary/Learning Logs in her class to get students to record their learning and reflections every day. As always, when she enters the classroom, she writes down the learning outcomes for that lesson. When there are 5 minutes left, she tells the students to take two minutes to read the learning outcomes of the lesson again.

She then asks her students to take the last five minutes of the class to write down whatever they remember related to the learning outcomes. She tells the students that they can use diagrams and words to summarise what they have learnt. Their homework, Hema tells them, is to go home and look at their books in the evening to see how much of what they remembered was accurate. Whatever was inaccurate, they must correct.

After a week of doing this, Hema decides to club Do Now and Student Reflection Diary/Learning Log to save more time. She gets students to fill in their Student Reflection Diary/Learning Logs as part of the Do Now, and asks them to self-correct when they go home.

Through this activity, Hema is able to make her students more comfortable with writing and is also able to take advantage of strategies that help build long-term memory. Slowly, she starts encouraging students to also look out for spelling mistakes to help them self-monitor and improve. By focusing on self-correction, she ensures that students do not feel afraid of getting things wrong and, instead, see it as an opportunity to learn.

### Success Criteria

- Encourage all students to participate by allowing a variation in responses (*eg. using words instead of full sentences, using images and captions, etc.*).
- Provide students the opportunity to self-check their work.
- Encourage students to use images along with words when writing down summaries.

#### Discussion

1. Do you feel that 'Student Reflection Diary/Learning Logs' is a useful strategy for students? Why/why not?
2. What do you see as the key points to keep in mind while implementing this strategy?
3. What are some challenges that teachers might face? How can these be addressed during the ART meetings?

# SECTION FOUR

## Detailed ART Meeting Plans







*Energizer at DPCM*

### IN THIS SECTION

- ART Meeting One
- ART Meeting Two
- ART Meeting Three

# ART MEETING ONE

WELCOME	SETTING THE TONE OF THE ART MEETING (10 minutes)
   	<p><b>BE POSITIVE: Please start the meeting with high energy and a smile!</b></p> <p>A. Welcome teachers to the meeting, emphasise their role in helping students learn.</p> <p>B. Review the aims for this ART meeting and ensure these are displayed.</p> <p><b>Meeting Aims:</b></p> <ol style="list-style-type: none"> <li>1. To discuss and practise the strategy of 'Scaffolded Student Discussions' in order to consolidate students' learning and improve communication skills.</li> <li>2. To collaborate and plan peer support through developmental feedback.</li> </ol> <p>C. Together come up with community agreements to guide your ART meeting.</p> <p>D. Explain to teachers that they will work with and learn from their peers. Your job is to help that process – they will be doing most of the work!</p> <p>E. Use an <b>energiser</b> to start the meeting! But remember, keep it quick!</p>

ACTIVITY 1	STRATEGY 1 – Supporting Student Discussions (1 hour)
<p><b>STEP 1:</b> Inspire (15 minutes)</p>	<ul style="list-style-type: none"> <li>• Direct teachers to the strategy page on page 7 of their portfolio. After giving them 5 minutes to read, ask them to reflect on the questions given below:             <ol style="list-style-type: none"> <li>1. Do you agree or disagree with the reasons in the portfolio for why Supporting Student Discussions are important?</li> <li>2. How can Supporting Student Discussions help strengthen the strategy you already use for students discussions?</li> </ol> </li> <li>• In pairs, teachers share own reflections with a partner. Ask a few teachers to share with the bigger team.</li> <li>• Let the teachers know that we will now develop a deeper understanding of the strategy by reading an example of its use.</li> </ul>
<p><b>STEP 2:</b> Model (5 minutes)</p>	<ul style="list-style-type: none"> <li>• Ask teachers to read through the example of using “Supporting Student Discussions” on page 8 of the portfolio.</li> </ul>
<p><b>STEP 3:</b> Contextualise (10 minutes)</p>	<ul style="list-style-type: none"> <li>• Give teachers 4-5 minutes to respond to the reflection questions given after the model example individually in their portfolios. (Questions given below for your reference)             <ul style="list-style-type: none"> <li>✦ Do you feel that 'Supporting Student Discussions' is a useful strategy for students? Why/why not?</li> <li>✦ Is there anything you would do to improve Meena's use of the strategy? What would it be and why?</li> <li>✦ What challenges might you face while implementing this strategy? What could you do to tackle the challenges?</li> </ul> </li> </ul>



	<p><b>Narrate The Why:</b> Remind them that this discussion will be key to them being able to use and contextualise this strategy effectively. Encourage teachers to be really honest about the strategy, but also think constructively about how they can use it.</p> <p><b>Circulate:</b> Go round and listen to the group discussions. Invite 1 - 2 people to share. Probe.</p>
<p><b>STEP 4: Practice (10 minutes)</b></p>	<ul style="list-style-type: none"> <li>• Tell teachers they are now going to put this technique into practice, by planning how they will use 'Supporting Student Discussions' in their own classrooms. Ask the teachers to read carefully through the table on page 10 in the portfolio, and to use the questions to help them plan their content.</li> </ul> <p><b>Narrate The Why:</b> Teachers are the only ones who know their students. It is not possible to give a 'one size fits all' – all teachers have to reflect upon what is the most useful way to use a strategy in their classroom – this table is designed to help them do so.</p> <p><b>Time limits:</b> Give teachers 10 minutes to do the action plan by themselves, and remind them when there is two minutes left.</p>
<p><b>STEP 5: Feedback (10 minutes)</b></p>	<ul style="list-style-type: none"> <li>• Direct teachers to do the practice and feedback session on page 11 of the portfolio.</li> <li>• Encourage teachers to work in groups that teach similar subjects or classes. Encourage each to share their plans and give feedback on their quality based on the success criteria.</li> </ul> <p><b>Narrate The Why:</b> Tell teachers that to ensure every teacher gets high quality feedback, they need to use the success criteria for giving feedback. Share that they will also find it easier to construct effective feedback using this. Also explain that is very important that teachers write down the feedback they receive in the table to help them remember it.</p> <p><b>Circulate:</b> Go round and listen to what teachers are saying. Where you see teachers are not using the success criteria to give feedback, encourage or challenge them to do so.</p> <p><b>Recognise:</b> At the end of the activity, draw the group's attention to examples of great feedback you saw.</p>
<p><b>STEP 6: Adapt (5 minutes)</b></p>	<ul style="list-style-type: none"> <li>• Once the feedback activity is complete, you should then ask teachers to commit to using what they have learned in their lessons. They should therefore complete the action plan on page 11.</li> </ul> <p><b>Narrate The Why:</b> Explain that the purpose of the action plan is to help teachers think about when they will actually do it, and to commit to working with a peer. State that working with a peer will be enormously helpful for them, but make it clear it is not about judgement, but improvement.</p>




ACTIVITY 2	REFLECTION OF PREVIOUS LIC (15 minutes)
	<ul style="list-style-type: none"> <li>• Direct teachers to the reflection questions for LIC 5 page 12 in the Teacher Portfolio.</li> <li>• Reflection Questions:               <ol style="list-style-type: none"> <li>1) What are some successes of classroom routines that you observed during LIC 5?</li> <li>2) What were some challenges you faced in implementing the classroom routines?</li> <li>3) What will you do to continue using the routines in LIC 6?</li> </ol> </li> <li>• <b>Time Limits:</b> Teachers should spend only a maximum of 5 minutes reflecting on the questions and then share with a partner.</li> <li>• <b>Circulate:</b> Move around and listen to the pair discussions. Take note of interesting responses. Invite 1 or 2 pairs to share with the whole group - use probing. Thank them for their contributions (again keep this quick).</li> <li>• Once this is complete, ask teachers to commit to one action they will take to ensure they continue using the routines in the next LIC. Ask them to write this down.</li> <li>• <b>Use Cold Call:</b> Ask 1 or 2 teachers to share their actions, and thank them for their response.</li> </ul>
<b>Peer Classroom Observation</b> (5 minutes)	<ul style="list-style-type: none"> <li>• Ask teachers to look at the first classroom observation tool on page 13 of the portfolio. Share that this is what they will use to help each other. If there is time in the meeting, give teachers time to familiarise themselves with the tool.</li> </ul>
<b>Closure</b> (2 minutes)	<ul style="list-style-type: none"> <li>• Appreciate the teachers.</li> <li>• End on a high note.</li> </ul>



DIET principal addressing MTs at DPCM



# ART MEETING TWO

WELCOME	SETTING THE TONE OF THE ART MEETING (10 minutes)
	<p><b>BE POSITIVE:</b> Please start the meeting with high energy and a smile!</p> <p>A. Welcome teachers to the meeting, emphasise their role in helping students learn.</p> <p>B. Review the aims of the ART Meeting 2:</p> <ol style="list-style-type: none"> <li>1. To inspire teachers through reflection and sharing of their experiences using 'Supporting Student Discussions'.</li> <li>2. To discuss and practice a second strategy – 'LStudent Reflection Diary/Learning Log'.</li> </ol> <p>C. Together come up with community agreements to guide your ART meeting.</p> <p>D. Explain, teachers will work with and learn from their peers. Your job is to help that process.</p> <p>E. Begin with an <b>energiser</b>, but remember to keep it quick!</p>
ACTIVITY 1	STUDENT REFLECTION DIARY/LEARNING LOG (1 hour)
<p><b>STEP 1:</b> <b>Inspire</b></p>	<ul style="list-style-type: none"> <li>• In this meeting, we will first explore a strategy that helps students build long-term learning while also giving them regular writing practice.</li> <li>• Direct teachers to the description on 'Student Reflection Diary/Learning Logs' on page 15 of the portfolio.</li> <li>• Ask teachers to read through the sections on what the strategy is, why it is important, and how to use it.</li> </ul> <p><b>Narrate The Why:</b> Research tells us that writing is an important tool for facilitating learning and improving conceptual understanding of students. However, students often associate writing only with examinations and struggle to become comfortable with writing. Writing to Learn activities present writing as non-threatening opportunities for students to put their thoughts into words, developing confidence and skill. As discussed in LIC 4, research also tells us that long-term memory is enhanced when students try and recall information that they had previously received. This makes Student Reflection Diary/Learning Logs an ideal, yet simple, way to help students revise and retain what they learnt in class.</p> <p><b>Probe:</b> Ask teachers if they agree or disagree with the reasons in the portfolio for why worked examples are important, and how is it different than what teachers are currently doing?</p> <p><b>Circulate:</b> Go round listening to the group discussions and note interesting responses. Invite 1 or 2 pairs to share with the whole group. Probe teachers ('why do you agree/disagree?').</p>
<p><b>STEP 2:</b> <b>Model</b></p>	<ul style="list-style-type: none"> <li>• Ask teachers to read through the example of Student Reflection Diary/Learning Logs on page 16 of the portfolio.</li> </ul>

<p><b>STEP 3: Contextualise</b></p>	<ul style="list-style-type: none"> <li>• Give teachers 4-5 minutes to think and write notes on the discussion questions themselves.</li> <li>• <b>Discussion Questions:</b> <ul style="list-style-type: none"> <li>✦ Do you feel that 'Student Reflection Diary/Learning Log' is a useful strategy for students? Why/why not?</li> <li>✦ What are some challenges that you might face? How can these be addressed?</li> <li>✦ Is there anything you would do to improve Hema's use of the strategy? What would it be and why?</li> </ul> </li> <li>• Assign teachers to small groups to discuss further.</li> </ul> <p><b>Narrate The Why:</b> Remind them, it is important to think themselves first. Also remind them that this discussion will be key to them being able to use and contextualise this strategy effectively. Encourage teachers to be really honest about the strategy, but also think constructively about how they can use it.</p> <p><b>Circulate:</b> Go round and listen to the group discussions. Invite 1 – 2 people to share.</p>
<p><b>STEP 4: Practice</b></p>	<ul style="list-style-type: none"> <li>• Tell teachers they are now going to put this technique into practice, by planning how they will use 'Student Reflection Diary/Learning Log' in their own classrooms. Ask the teachers to read carefully through the table, and to use the questions to help them plan their content.</li> </ul> <p><b>Narrate The Why:</b> Teachers are the only ones who know their students. It is not possible to give a 'one size fits all' – all teachers have to reflect upon what is the most useful way to use a strategy in their classroom – this table is designed to help them do so.</p> <p><b>Time limits:</b> Give teachers 10 minutes to do the action plan by themselves, and remind them when there is two minutes left.</p>
<p><b>STEP 5: Feedback</b></p>	<ul style="list-style-type: none"> <li>• Direct teachers to do the practice and feedback session on page 19 of the portfolio.</li> <li>• Encourage teachers to pair as per the instructions on page 19 of the portfolio. Teachers work in pairs that teach similar subjects or classes. Encourage each to share their plans and give feedback on their quality based on the success criteria.</li> </ul> <p><b>Narrate The Why:</b> Tell teachers that to ensure every teacher gets high quality feedback, they need to use the success criteria for giving feedback. Share that they will also find it easier to construct effective feedback using this. Also explain that it is very important that teachers write down the feedback they receive in the table to help them remember it.</p> <p><b>Circulate:</b> Go around and listen to what teachers are saying. Where you see teachers are not using the success criteria to give feedback, encourage or challenge them to do so.</p>
<p><b>STEP 6: Adapt</b></p>	<p><b>Circulate:</b> As you are circulating, check that in each group teachers get a chance to incorporate the feedback they receive.</p> <ul style="list-style-type: none"> <li>• Once the feedback activity is complete, you should then challenge teachers to commit to using what they have learned in the classroom. They should therefore complete the action plan on page 19.</li> </ul> <p><b>Narrate The Why:</b> Explain that the purpose of the action plan is to help teachers think about when they will actually do it, and to commit to working with a peer. State that working with a peer will be enormously helpful for them, but make it clear it is not about judgement, but improvement.</p>

**ACTIVITY 2****REFLECTION: TEACHERS TO REFLECT ON THEIR EXPERIENCES AND IMPACT OF IMPLEMENTING 'SUPPORTING STUDENT DISCUSSIONS' (15 minutes)****STEP 1:  
Reflection****Think - Pair - Share**

- Ask teachers to pair up and reflect on their own experiences of implementing the 'Supporting Student Discussions' strategy. Direct them to use the guiding questions in the teacher portfolio page 20.

**Questions**

1. What do you consider to be your highest point of success while you implemented:
    - i) Supporting Student Discussions
    - ii) Developmental classroom observation
  2. Share any challenges you faced while implementing 'Supporting Student Discussions'. What did you do to address those challenges?
- Ask the teachers to write down any actions or points to consider arising from this reflection, or anything they are still unsure of.

**FACILITATOR'S TIP**

*Probe and challenge teachers to think about what they did. What was important about what they did? What aspects will they apply again? What worked, what do they need to improve? What will they do next?*

- Teachers spend 2 minutes to think deeply on own experiences and 3 minutes writing about the questions.
- Teachers share own reflections with a partner or in small groups.

**STEP 2:  
Peer  
Observation  
(5 minutes)**

- Ask teachers to look at the first classroom observation tool on page 21 of the portfolio. Share that this is what they will use to help each other. If there is time in the meeting, give teachers time to familiarise themselves with the tool.

**STEP 3:  
Closing  
(2 minutes)**





- Appreciate the teachers for their time, engagement and commitment towards improving learning.
- Close the meeting on a high with an energiser!

DPCM Group - RK Puram






# ART MEETING THREE

WELCOME	SETTING THE TONE OF THE ART MEETING (10 minutes)
   	<p><b>BE POSITIVE:</b> Please start the meeting with high energy and a smile!</p> <p>A. Welcome the members to the third ART meeting. <b>Recognise them for their individual actions to improve their classroom practices.</b></p> <p>B. Review the aims for this ART meeting and display them on the board:</p> <p><b>Aims for ART Meeting 3</b></p> <ol style="list-style-type: none"> <li>1. Teachers to provide evidence of implementation of 'Teaching and Learning Strategies (2)' strategies by sharing successes, challenges and lessons learned over the term.</li> <li>2. Teachers to exhibit awareness of their development as a result of developmental classroom observations and feedback.</li> <li>3. Teachers to celebrate their effort in improving learning outcomes in their classrooms, school and district.</li> </ol> <p>C. Review the community agreements to guide your ART meeting. Explain how important they are to guide the success of the ART meeting.</p> <p>D. Quickly tell teachers how you will facilitate the meeting. This is their chance to work with and learn from their peers. Your job is to help that process but they will do most of the work!</p> <p>E. <b>Energiser. Keep it quick!</b></p>

REFLECTIONS	REFLECTING ON THE LIC (65 minutes)
<p><b>STEP 1:</b> <b>Introduce</b></p>	<ul style="list-style-type: none"> <li>• Explain to teachers that in this ART meeting, they will be sharing their reflections and lessons from the LIC, and identify specific ways in which they will continue to improve their use of Teaching and Learning Strategies.</li> </ul> <p><b>Narrate The Why:</b> Remind teachers of why peer learning is so crucial. Ask them to think about the other classrooms they have visited, and the value of the expertise of their colleagues. State that through the presentation activities they will have the chance to both receive great learning from their peers, and also share their own expertise to help others.</p>
<p><b>STEP 2:</b> <b>Model</b></p>	<ul style="list-style-type: none"> <li>• Talk teachers through the presentation structure on page 23 of the portfolio. Explain that they will use the table to help them structure their thoughts to share with their peers. Direct them to the words in italics in the table as examples to guide their thinking. Then, give them 5 minutes to reflect by themselves on the questions in the table.</li> </ul>
<p><b>STEP 3:</b> <b>Discuss</b></p>	<ul style="list-style-type: none"> <li>• Once the individual reflection is complete, ask the teachers to share their responses to the questions with a peer. Then, give the teachers 10 minutes to complete the grid.</li> </ul>

<b>STEP 3: Practice</b>	<ul style="list-style-type: none"> <li>• Teachers then get into groups of 5-6 to share their reflections from the LIC as a whole. Explain to teachers that they will share their reflections as a whole. Direct teachers to the table on page 24 in their portfolio, and ask them to use this to take notes on each other's presentation.</li> <li>• Tell teachers that each person should have 5 minutes to present.</li> </ul>
<b>STEP 4: Feedback</b>	<ul style="list-style-type: none"> <li>• Observers should share one thing that was good about what the teacher shared, and one thing they should improve or think about going forward.</li> </ul> <p><b>Narrate The Why:</b> Explain to teachers the importance of using the success criteria to give feedback, as per the previous meetings.</p>
<b>STEP 5: Improve (10 minutes)</b>	<ul style="list-style-type: none"> <li>• Once the feedback activity is complete, you should then challenge teachers to commit to using what they have learned in the classroom. They should therefore complete the action plan on page 25.</li> </ul> <p><b>Narrate The Why:</b> Explain that now the LIC is over, that does not mean that they should stop thinking how to effectively use these strategies. A master teacher is always seeking to tweak and improve their craft. Explain that this action plan will help them to think about how they can continue to improve. As per previous LICs, encourage them to share their action plan with a peer and commit to when they will implement it.</p>
<b>STEP 6: Closing and Next Steps (5 minutes)</b> 	<ul style="list-style-type: none"> <li>• Congratulate teachers on completing the term.</li> <li>• Encourage them to continue applying all of the skills and knowledge acquired so far to improve learning.</li> <li>• Appreciate teachers for the effort and commitment to improving learning by modelling the right professional mindset and for collaborating with their peers.</li> <li>• End on a very high note with a song.</li> </ul>

*Closing day for the Co-Learning Session*



# APPENDIX 1: Planning Activity Flow and Dates

## Activity Flow

ACTIVITY	To be completed by	Specific Dates <i>(To be discussed with your Mentor Teacher)</i>
TDC Co-Learning Session		
ART Meeting 1		
Classroom Visits		
30-Minute Meetings		
TDC Reflection Meeting 1		
ART Meeting 2		
Classroom Visits		
30-Minute Meetings		
TDC Reflection Meeting 2		
ART Meeting 3		
Classroom Visits		
30-Minute Meetings		

TDC Singapore visit





# APPENDIX 2: Classroom Observation Tools

## Strategy: Supporting Student Discussion



### BEFORE THE LESSON (Teacher to complete)

What do you hope to achieve by using 'Supporting Student Discussions' today?	<b>Example:</b> I would like the students to be able to explain to each other what the features of the different types of tissues are.
What will you do to achieve this? (For example: what support will you provide students so they are able to do this?)	<b>Example:</b> I will provide students a list of terms/phrases that are associated with the types of tissues. This might help reduce the load on them and they can focus on expressing their thoughts.
What would you like the observer to focus on during the observation?	<b>Example:</b> I would like the observer to note if the support structures I am providing are enough and efficient in helping students express their thoughts verbally.
What is the agreed time and lesson for the observer to come?	



### 2. DURING THE LESSON (Observer to complete - teacher to give observation sheet to observer in advance)

Is the teacher implementing the action steps outlined in Point 2 above? What is the impact on students? Make notes about what you observe.	<b>Example:</b> Most students seemed to find the list helpful and used it as a reference. This helped them be more confident while answering.
Write down 1-2 things the teacher does well in using 'Supporting Student Discussions' (use the success criteria in the next table for help). Why?	<b>Example:</b> The teacher was able to create an atmosphere that helped the students relax. She emphasised consistently that this is an exercise for them to practice talking about the subject and they did not have to worry about their grammar or if they were getting all the answers right. This also motivated the students to help their partners. She provided adequate support structures to the students by having a pair model the activity first and by providing the list of key terms.
Suggest ONE AREA FOR DEVELOPMENT for the teacher in using 'Supporting Student Discussions' (use the success criteria). Why?	<b>Example:</b> The teacher might focus a little more on monitoring the conversations. There were pairs who were either not talking at all or talking about something entirely different.

Write down any questions that can help the teacher identify how they might improve.	<i>Example: What do you think you might do to ensure that all students are engaged in the task?</i>
Write down one thing YOU have learned from observing this lesson	<i>Example: You used the support structures for the discussion very effectively. I would like to talk to you and learn more about the process you follow to decide what support to provide!</i>
Write down any other strategies from previous LICs you saw the teacher implement	

### 3. SUCCESS CRITERIA

CRITERIA	OBSERVATION
Does the teacher use elaborative questions as prompts for discussion?	Yes / No
Has the teacher provided adequate support structures to help students lead the discussions?	Yes / No
Does the teacher go around the room to identify students who need support?	Yes / No

### Post-Observation Discussion (Observer and teacher talk through section 2 together)

- a. Observer shares strengths from the lesson
- b. Observer shares area for development, and asks probing questions
- c. Teacher responds to probing question
- d. Observer shares one thing they have learned from the lesson

### ACTION (After discussion – teacher to complete and share with observer)

As a result of the feedback, what ONE thing will you do differently when you use Supporting Student Discussions?	
--	--

## Strategy: Student Reflection Diary/Learning Log



### BEFORE THE LESSON (Teacher to complete)

What do you hope to achieve by using 'Student Reflection Diary/Learning Log' today?	<b>Example:</b> I would like to get the students to focus their reflection on the focus of the learning outcomes.
What will you do to achieve this?	<b>Example:</b> I will explain the learning outcomes clearly at the beginning of the class. I will then connect them to the students' reflection in the Student Reflection Diary/Learning Log.
What would you like the observer to focus on during the observation?	<b>Example:</b> I would like the observer to note if at the end of the class, I am able to explain to the students clearly what they should focus their reflections on.
What is the agreed time and lesson for the observer to come?	



### 2. DURING THE LESSON (Observer to complete - teacher to give observation sheet to observer in advance)

Is the teacher implementing the action steps outlined in Point 2 above? What is the impact on students? Make notes about what you observe.	<b>Example:</b> The teacher wrote his learning outcomes on the board and explained each one to the students clearly. He also explained why it is important to be able to achieve each of the learning outcomes.
Write down 1-2 things the teacher does well in using 'Student Reflection Diary/Learning Log' (use the success criteria in the next table for help). Why?	<b>Example:</b> The teacher connected the Student Reflection Diary/Learning Log very clearly with the learning outcomes. He also emphasised on using diagrams and images while writing down their reflections.
Suggest ONE AREA FOR DEVELOPMENT for the teacher in using 'Student Reflection Diary/Learning Log' (use the success criteria). Why?	<b>Example:</b> The teacher should try and create some time and space for students to self-correct their reflections. This is important so that students can rectify any misunderstandings they may have.

Write down any questions that can help the teacher identify how they might improve.	<i>Example: What do you think we can do to make sure students get into a habit of self-correcting their work?</i>
Write down one thing YOU have learned from observing this lesson	<i>Example: I really learnt the importance of thinking about providing focused reflection questions to students. This ensures that students use their time thinking about the concepts that are most important for their learning – I will try to do the same in my class.</i>
Write down any other strategies from previous LICs you saw the teacher implement	

### 3. SUCCESS CRITERIA

CRITERIA	OBSERVATION
Does the teacher encourage all students to participate by allowing a variation in responses (eg. using words instead of full sentences, using images and captions, etc.)?	Yes / No
Does the teacher give students the chance to self-correct their responses?	Yes / No
Does the teacher encourage the students to use images along with text during their reflections?	Yes / No

### Post-Observation Discussion (Observer and teacher talk through section 2 together)

- a. Observer shares strengths from the lesson
- b. Observer shares area for development, and asks probing questions
- c. Teacher responds to probing question
- d. Observer shares one thing they have learned from the lesson

### ACTION (After discussion – teacher to complete and share with observer)

As a result of the feedback, what ONE thing will you do differently when you use 'Learning Journals'?	
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# APPENDIX 3: Subject Specific Examples

## Supporting Student Discussions

### Science, Grade 9, Chapter 3 – Atoms and Molecules

Yesterday and today we learnt about the Mole Concept. With your partner, discuss the following two questions:

- 1) Why are molar mass and molecular mass not the same?
- 2) Why was the unit 'mole' introduced by scientists?

### English (Flamingo), Grade 12, Chapter 3 – Deep Water

Talking About the Text (Question 1) - "All we have to fear is fear itself". Have you ever had a fear that you have now overcome? Share your experience with your partner. Make sure you mention:

- 1) What were you afraid of?
- 2) Why were you afraid?
- 3) How did you stop feeling afraid?

### Social Science (Democratic Politics – 1), Grade 9, Chapter 4 – Electoral Politics

- Country X is about to hold their first democratic election next month. They come to you to ask for advice. What are the different challenges that they may face in conducting a free and fair election? What will you suggest they do so that they can tackle those challenges?
- Ramit did not vote in the previous elections. When the government implements a policy that Ramit does not like, his father says, "You didn't vote. So you chose this." How does abstaining from exercising your right to vote affect a democracy?

#### Chapter 3 – Working of Institutions

We have seen in history lessons that many times when trying to dismantle a democracy, dictators try to destroy the independent judiciary. Why do you think an independent judiciary is so important for a democracy?

### Hindi (वसंत), Grade 8 – (कामचोर)

- घर के किन कामों को आप रुचि के साथ करते हैं और किन कामों को करने में आपको मज़ा नहीं आता?
- आपके अनुसार कहानी क्या संदेश दे रही है?

### Happiness, Grade 7 (माँ का प्यार)

- Have you ever appreciated yourself? If yes, when and why?
- How can you help your younger siblings or other friends to develop self-confidence?

### EMC (Field Project)

- How was your first day experience in running the project outside the school?
- What new did you learn?
- Where do you think you or the team could have done better?



# Student Reflection Diary/Learning Log: *Providing a format for reflection*

Name \_\_\_\_\_ Date \_\_\_\_\_

## Learning Log: Visual Learning Log

Topic/Big Idea:	
<p><b>What I Learned</b> Picture, diagram, or illustration of main ideas</p>	<p><b>My Reaction</b> Your thoughts, questions, and connections</p>

GOALBOOK

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Name \_\_\_\_\_ Date \_\_\_\_\_

## Learning Log: Student Prompts & Sentence Frames

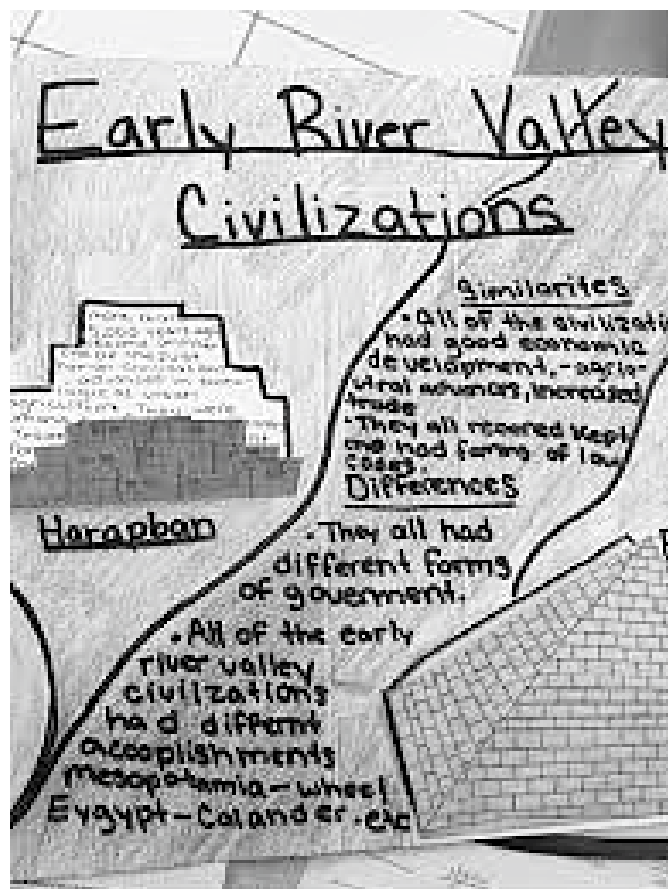
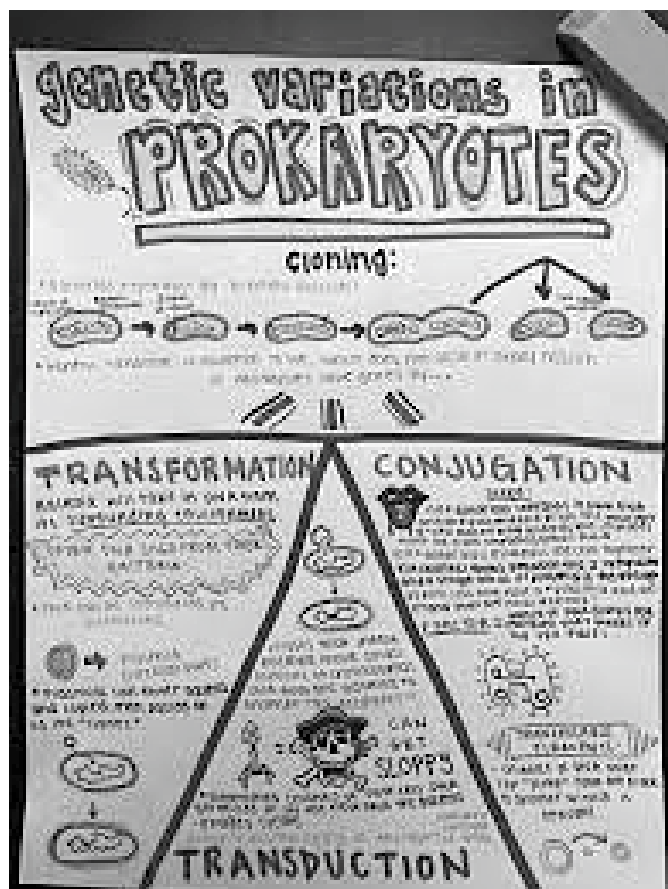
Topic/Big Idea:	
<p>What were the main ideas and important facts you learned from the lesson?</p>	<p>Today, I learned</p>
<p>How do these ideas connect to things you have already learned?</p>	<p>One important idea I'll remember is</p>
<p>What did you find most interesting in what you learned?</p>	<p>What I learned reminds me of</p>
<p>What questions do you have from the lesson? Are there any ideas that you are still confused about?</p>	<p>I'd like to know</p>
<p>How do you feel after today's lesson?</p>	<p> <input type="checkbox"/> I understand!                        <input type="checkbox"/> A little confused                        <input type="checkbox"/> I need more help                 </p>

GOALBOOK

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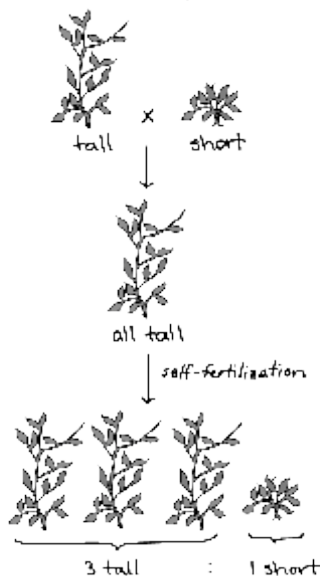


## Using images to represent learning:



## Different types of prompts for Student Reflection Diary/Learning Logs:

- 1) Gregor Johann Mendel conducted experiments to work out the rules of inheritance. Write down what you remember of these experiments and their significance.
- 2) Write what comes to your mind when you see the image below:



- 3) Imagine you are a scientist. You conduct an experiment in which you breed tall pea plants bearing violet flowers with short pea plants bearing white flowers. The progeny all bore violet flowers, but almost half of them were short. What do you know about the tall parent?



स्वाध्यायान्मा प्रमदः