High-Impact Teaching Strategies (HITS) for Foundational Learning

Learning Environment



INTRODUCTION

High-impact teaching strategies (HITS), also referred to as high-leverage practices, are core pedagogical practices that help students understand content while also supporting their social-emotional development.¹ These teaching practices can demonstrably impact student learning outcomes in both literacy and numeracy.²

This mini-guide, one in a series, sheds light on how teachers can apply the high-impact teaching strategy of creating a positive learning environment in their literacy or numeracy lessons.

HOW TO USE THIS GUIDE

This guide is meant for those who support teacher professional development at the school level. Depending on the local context and approach to professional development, this role can be played by coaches, community of practice leaders, teacher-facilitators, lead teachers, trainers, and Ministry of Education staff working with teachers. As part of a wider professional development approach, this guide can be a tool to target teachers' use of proven strategies to improve student learning in literacy and numeracy.

Teacher professional development has various modalities, ranging from pre-service courses to one-on-one coaching and mentoring to teacher-led communities of practice. This guide is intended to support professional discussions across a variety of contexts: in-school coaching, communities of practice, and pre- or in-service training. Teachers and coaches can use the guide as part of an individualized professional development plan; teacher-facilitators can use it to drive discussion on high-impact strategies as part of a community of practice; and pre-service designers can incorporate it into their curriculum for teacher training. Finally, this mini-guide reflects the incremental progression that teachers follow in their professional growth.

This mini-guide for Learning Environment, along with the others in the series, reflects the strategy domains and the HITS presented in the following table.

Finally, when adapting the content and use of this mini-guide to the local educational context, it can be integrated into a structured pedagogy program already in place. The mini-guide can be linked directly to the curriculum and teaching and learning materials, and supported through the existing professional development model.

¹ Ball & Forzani (2010).

² Ambrose et al. (2010); Danielson (2022); Rosenshine (2012).



HIGH-IMPACT TEACHING STRATEGIES (HITS)				
Strategy domains		Tier 1: Basic strategies	Tier 2: Developing strategies (built upon Tier 1 strategies)	Tier 3: Advanced strategies (built upon Tier 1 and 2 strategies)
Learning Environment		Teacher establishes clear rules and routines to support learning and create a positive learning environment.	Teacher uses and supports positive interactions in the classroom (teacher-student and student-student).	Teacher organizes students to work in pairs and small groups to enhance collaboration, to build teamwork, and to promote a sense of belonging.
Student Engagement in Learning		Teacher gives all students, including pairs/small groups, regular time for the practice of new skills.*	Teacher uses questioning to build and deepen student understanding of new content.	Teacher plans for the strategic use of partner and small-group work for collaborative learning activities.**
Knowledge Progression and Connections		Teacher plans with and states the lesson objective and links new content to students' background (prior knowledge).	Teacher provides a daily review and links content to previous learning.	Teacher purposefully sequences lesson objectives and adjusts the teaching sequence as needed.
Assessment- Informed Instruction		Teacher routinely monitors learning by checking for understanding during instruction and giving actionable feedback to students.	Teacher modifies content and instructional strategies based on evidence of learning collected through formative assessment.	Teacher provides differentiated instruction and remediation to address learning gaps.
Instructional Approach	Numeracy	Teacher provides explicit models and explanations of math concepts and skills, followed by student practice of modeled skills.	Teacher uses questioning and other interactive approaches to build student understanding when modeling and explaining math concepts and skills. Modeling/explanation is followed by student practice.	Teacher provides opportunities for students to explore concepts and then draws on their ideas when modeling and explaining concepts and their application.
	Literacy	Teacher provides explicit models and explanations of new skills and concepts, followed by student practice of modeled skills.	Teacher adds activities to construct meaning (or build knowledge) together with students.	Teacher gives students opportunities to apply skills in meaningful ways.

Notes:

Recognizing that professional development is most effective when it is focused and incremental, this guide proposes a tiered approach to mastering a collection of strategies, as shown in the table. Professional development activities that support teachers, especially those working in low- and middle-income countries, in mastering the specific strategies listed under Tier 1 are likely to result in improved instruction and learning outcomes. As teachers master the basic strategies of Tier 1 and move toward the more "advanced" Tiers 2 and 3 in each category, they will be empowered with a full set of strategies to reach and support more students. Over time (as measured in years, as opposed to weeks or months), a professional development program that follows a tiered approach can help teachers move toward more depth of instructional mastery (higher tiers) and significantly improve the quality of their teaching, which will ultimately help more students develop a deeper understanding and mastery of foundational literacy and numeracy skills and concepts.

It is important to note that not all teachers will start at Tier 1. Depending on the teacher's level of experience and familiarity with implementing the strategies, she may start at Tier 2 or even Tier 3. Furthermore, a teacher starting at Tier 2 within the Learning Environment domain may start at Tier 1 in the Knowledge Progression domain; this type of variation and personalization is a key component of this guide and reflects each teacher's

^{*}Tier 1: Teacher groups students to engage all children in the learning activity, especially when materials are being shared.

^{**}Tier 3: Teacher purposefully groups students to engage all children through homogenous or heterogenous grouping. Homogenous grouping can be used with students working at a similar, medium level to learn at a higher level together. Heterogeneous grouping is used to provide peer support to students who may be struggling with new content and skills.



individual journey within classroom practice. Each guide includes a decision tree that includes helpful questions about teacher practices and the learning environment to help you decide on how best to work with the teachers you support.

DOMAIN:

Learning Environment

WHY DOES IT MATTER?

Studies have shown that the classroom learning environment has implications for students' learning and performance. Respectful and challenging learning environments support not only the development of intellectual skills and traits (e.g., autonomy, curiosity, academic tenacity, and reflection) but also social and emotional ones (e.g., self-regulation) that are essential to the development of the whole child.³

The learning environment is more than just a space where teaching and learning happen. It is defined by the tone, mood, relationships, and beliefs that the teacher and students create together. A respectful, inclusive, and affirming classroom culture can foster learning.⁴ A teacher who is attuned to these factors can create the emotional and social conditions necessary for students to access higher-order cognitive skills, which are essential to learning important content. Research has found that when students have supportive relationships and opportunities to develop and practice social, emotional, and cognitive skills across many different contexts, academic learning accelerates.⁵

Read more about establishing a positive learning environment here.

WHERE TO START?

As mentioned earlier, **not all teachers will start on the same tier of strategies for a given domain**. The decision tree below is designed to help meet the teacher where they are and support them to implement these strategies at their own pace. There are three different boxes for each domain with prompts to help guide decisions as to which strategy teachers – in individual coaching sessions, in communities of practice, or in pre- and in-service training - should try and how to determine when a teacher is ready to implement a new strategy from the next tier. The strategies are color coded: Tier 1 strategies are listed in green, Tier 2 in blue, and Tier 3 in purple. However, it is important to remember and to convey to teachers that the strategies are not meant to be a checklist; it takes time to implement new ideas, and teachers may have to work on a strategy over several days, weeks, or months before feeling confident in using them and before students start benefiting from them.

Decision Tree

The decision tree below can help teachers identify which strategies to begin with and help those who support their professional development focus their support. Starting with Box 1, teachers can discuss the questions listed to check whether they already implement that strategy. As they proceed through the subsequent boxes in the decision tree, when they reach a strategy that is new to them or they believe needs improvement, teachers work on the strategy noted in that box. The section after the decision tree provides sample activities and approaches for each strategy. Additional strategies offered by teachers should be welcomed.



What
was the
classroom
learning
environment
like when
you were
a student?
How did it
make you
feel?

³ Danielson (2022).

⁴ Ibid.

⁵ Durlak, Mahoney, & Boyle (2022).



Teachers and those who support them can also gauge what type of strategies they use in the classroom by discussing questions such as the following:

- · Do you have rules and routines in your class? How did you develop them?
- · What are some of the ways you get to know your students?
- How do you use praise with your students? When and how often?
- Do your students work together in small groups or pairs? When and how often?

STRATEGY 1

Have teachers created a set of positively worded rules?

Teachers can discuss the following questions:

- How did you co-create the rules or involve the students?
- Are the rules written in a positive tone? If not, how can the language be revised?
- What positive discipline methods do you use (to avoid using physical punishment)?

STRATEGY 2

Do teachers use different routines to strengthen classroom management?

Teachers can discuss the following questions:

- Why are class routines important for managing students during transitions?
- What types of routines do you use in the classroom?

If teachers understand the importance of these two Tier 1 strategies, and use both in their teaching, they can move on to Tier 2.

If teachers still struggle with Tier 1 strategies, they can continue to work on them.

After a few weeks, teachers can assess their progress on these strategies and determine whether they are ready to move on to the next tier.

STRATEGY 3

Do teachers make efforts to get to know their students through positive interactions?

Teachers can discuss the following questions:

- Why is it important to get to know your students? What strategies do you use to learn about your students and their lives?
- How do you model positive teacherstudent interactions in order to get to know them?

STRATEGY 4

Do teachers praise and encourage students?

Teachers can discuss the following questions:

- Why is praising and encouraging students important for their learning?
- How do you express praise and encouragement to students who are doing well?
- What kind of praise and encouragement do you offer when a student struggles or answers a question incorrectly?

If teachers understand the importance of these two Tier 2 strategies, and use both in their teaching, they can move on to Tier 3.

If teachers still struggle with Tier 2 strategies, they can continue to work on them.

After a few weeks, teachers can assess their progress on these strategies and determine whether they are ready to move on to the next tier.





STRATEGY 5

Do teachers use group work to create a positive learning environment for students?

Teachers can discuss the following questions:

- Why is having students work together in small groups helpful for learning (beyond facilitating the sharing of materials)?
- · How do you organize and use group work to build collaboration and teamwork?
- · How do you monitor and support students when they are working in groups?

STRATEGY 6

Do teachers have students collaborate on shared tasks?

Teachers can discuss the following questions:

- Why is student collaboration for group tasks important?
- How do you create the groups?
- How do you monitor or support the students as they work in groups?

If teachers understand the importance of these two Tier 3 strategies, and use both in their teaching, they can share their practices with others and continue the discussion.

If teachers still struggle with Tier 3 strategies, they can continue to work on them.

STRATEGIES FOR CREATING A POSITIVE LEARNING **ENVIRONMENT**

The strategies below can be used with students across the early primary grades and adapted for the upper grades. Teachers may need to adjust the strategy from the way it is described to work with a specific grade or group of children. The strategies in this mini-guide are written with the classroom teacher in mind, even though, in most cases, coaches or teacher learning facilitators will be the ones sharing the strategies with teachers. Whether it is providing printed handouts or discussing the strategies together, the coach can decide the best way to share them with teachers.

Each of the strategies corresponds to one of three tiers:

Green: TIER 1

Blue: TIER 2

Purple: TIER 3

TIER 1: Teacher establishes clear rules and routines to support learning and create a positive learning environment.

Strategy 1 – Creating Rules for the Classroom

Establishing collective rules in a classroom at the beginning of the year is key to a year full of learning. Students should know what is expected of them, as well as the types of behaviors that are not conducive to learning. Clear rules and fair consequences give students opportunities to be accountable to the community and to uphold values of responsibility, respect, fairness, caring, and helpfulness. Rules ensure that all children can participate and engage in the classroom and create a positive classroom climate. Importantly, when creating class rules, it is more effective to choose positive practices that reduce, prevent, and improve harmful behaviors than to use punishments that shame or stigmatize students.



PLANNING					
1.	Post a large piece of paper on the board and have a dark-colored pen or marker ready to write with.				
2.	Reflect on and select a sample rule to model and start with.				
	OPTIONS				
1.	 Use questions such as these to activate students' background knowledge: Do you have rules at home that everyone in your family follows? What are they? Why do you think they are important? 				
2.	Explain to students: Today we are going to be making rules for our classroom, and you are going to help decide what rules we need for everyone to learn together. I have an idea for the first rule. Then you will have your turn.				
3.	Share with students one sample rule that is important in any classroom, such as <i>Treat your classmates</i> with kindness and respect.				
4.	Lead students in a discussion about how that rule will help everyone learn. Share a few examples of what this would look like in the classroom—for example, sharing pencils with a classmate, thanking others for their help, or speaking kindly to a partner who is struggling with a problem.				
5.	Tell students that now it is their turn to think of some rules.				
6.	Help students think of other rules by asking them what kinds of behaviors they would like to see in a reading or math class.				
7.	Arrange students in small groups and give each group some paper and something to write with.				
8.	Once the groups have come up with their rules, have each group read one of their rules out loud.				
9.	Then have groups read the rule out loud a second time, and this time ask students to stand up if they think the rule should be included in the group rules. Write down the final list of rules on a piece of paper.				
10.	Decide as a group on three more rules in addition to the ones already decided.				
11.	Assign each group one of the rules from the class's final list. Provide the groups with paper and colored pencils and ask them to make a drawing that reflects the rule. Include the drawings next to the printed rules and post the paper in a place where everyone can see it.				

Applying Rules

Once the rules have been established, post them near the front of the room. When someone is breaking one of the rules, call their attention to the list and remind them of what the rule means and why it is important. This may be enough to stop the behavior.

If a student continues to repeat one of these behaviors, it may be time to talk with them outside of class to find out if there is something that is making them behave this way (e.g., they are frustrated, bored, or having difficulty with something outside of class) and whether it might be helpful to talk with their parents.



Strategy 2 - Creating Routines for the Classroom

Transitions between lessons or between settings can be distracting, disruptive, and overwhelming, especially for young children. Establishing and practicing routines to follow during key transition points or as a way to start and end the day will ensure a smooth environment and less stress for yourself and for your students. Students like to know what to expect and prepare themselves for what comes next—routines do exactly this. Develop a repertoire of routines that you use consistently which the students will learn mean *It's time to listen now*.

Playing a simple game or reviewing skills when transitioning from one lesson to another or from recess back into the classroom will capture students' attention, help them focus on the new activity, and warm them up for the new lesson. Games and review should be simple, short, and fun and should not replace the lesson.

OPTIONS

- 1. Lead students in games such as these:
 - **Listen and clap**. Stand in front of the classroom and tell students, *If you can hear me, clap once. If* you can hear me, clap twice. *If you can hear me, clap three times*. Prompts can be adjusted based on the lesson you are teaching. For example, *If you can hear me, hold up four fingers* or *If you can hear me, pat your shoulder three times*.
 - **Guess the word**. Choose a simple object that children are familiar with and describe it in detail. For example, say: *I am thinking of an animal with sharp teeth. This animal also has a tail. Some people like to keep this animal as a pet. Can you guess the word?* (a dog)
- 2. Review skills while children are transitioning, waiting for materials, etc.
 - **Letter or number review**. Ask students to (1) say the alphabet or count; (2) name words with target letter or even/odd numbers; or (3) sing an alphabet or number song.

TIER 2: Teacher uses and supports positive interactions in the classroom (teacher-student and student-student).

Strategy 3 – Getting to Know Your Students

Getting to know the students in your class is an important step in making them feel valued and safe at school. This strategy contributes to the development of a child's sense of belonging in the classroom.

OPTIONS

- 1. Communicate to your students that you are happy to be their teacher and that you enjoy your time with
- 2. Share something about yourself with the class, such as where you are from, what your favorite activity or food is, or something you sometimes worry about.
- **3.** Greet each student by name when they arrive at school and when they leave for the day. Over time, as you establish these connections with your students, they will learn that you care about them and will feel more comfortable sharing things with you.



4.

Use an activity such as the ones below to get to know your students:

- Pass out some paper and some colored pencils to the students and say, *I would like to get to know you all. Can you please write three sentences about yourself on this paper? You can write about something that makes you happy, something that makes you sad or nervous, or something new that has happened in your family.* For younger students who are not able to write, you can ask them to draw a picture of themselves and write their name underneath.
- Post all students' drawings on a large piece of paper (or multiple pieces of paper) and hang it up in the classroom. You can refer to the poster when asking a student a question and call the student by name. Having the poster visible where all can see will help everyone learn one another's names and will make students feel proud and happy to see their work in the classroom.
- When all students have finished writing their notes, go through them to learn more about each of your students.
- Use the information in the notes (or drawings) that your students wrote/drew to make personal connections with a few different students every day. For example, you can say something like, *Good morning, Matthew. You said you liked music in your note. What kind of music do you like best?*
- Make a class chart with every student's name and put it up in a visible place in the classroom. You can use this chart to remember students' names, as well as for other types of student engagement activities. If the class is very big, you can use a class list to call out students.

Note: In large classes, it may be necessary to split the above activities into parts. For example, you can give students ten minutes to work on their notes over several days.

Strategy 4 – Using Praise and Encouragement Effectively

Establishing a positive relationship with students in the classroom is essential to learning. Teachers hold the key to making sure that interactions between all members of the classroom are positive, respectful, compassionate, and caring. Using praise and encouragement can create positive relationships with students.

OPTIONS

- 1. Model giving praise so students can hear what effective praise sounds like. When giving praise, be specific and focus on what the child did. Also, keep in mind that praise should reward effort and not only be given for getting the correct answer. For example, you can say something like, *Janice, you worked very hard on that problem.*
- 2. Ask students to practice praising a friend (or the teacher) for something they did well today, even if just trying their best. Give students some time to think about this. If nobody volunteers, give them an example, such as, *I saw Parveen opening the door for Stephan today. That was kind of her.*
- Set up a Praise Box in the classroom and place some slips of paper beside it. Tell students that when they notice someone doing something that deserves praise, they can write it down (or draw it) on a piece of paper and place it in the Praise Box. At the end of the week, check the box and bring out the slips that were added. Ask students, if they are comfortable, to read out loud what was written about them (or describe what was drawn); for nonreaders, have someone read the slip quietly to the child so they can say what was written. After several weeks, tape the praise slips around the classroom so children can see them. Continue doing this until it becomes a part of the classroom culture to praise and encourage.

Science of Teaching MARCH 2024



TIER 3: Teacher organizes students to work in pairs and small groups to enhance collaboration, to build teamwork, and to promote a sense of belonging.

Strategy 5 - Establishing Groups

All students learn at a different pace and with different abilities. Groupwork effectively taps into the different skills and abilities of students and is discussed in several HITS domains. Here the focus is on ways that groupwork can foster collaboration and teamwork. Creating opportunities for students to work together on tasks in the classroom also helps establish a classroom culture that is collaborative, where all students feel a sense of belonging. When students engage positively with one another to complete shared tasks in a group, they learn about cooperation, develop listening skills and empathy, and make new friends.

OPTIONS

- 1. Think about how you will physically arrange the students in groups and where they will sit so that students can hear you and one another. Plan strategies for how you will moderate the activity to minimize noise. This may be necessary only at the beginning of the year.
- 2. Change student groupings from time to time (every two to four weeks) to allow students to work with and get to know other students, to create more gender-balanced groups, or to split group members who are being disruptive. Here are a few ways you can quickly arrange students in small groups:
 - Observe and assess students over the course of the first month of school. Note how different students work together, as well as students' work styles and behaviors. Based on this, devise groups that will work productively together.
 - Arrange students who sit next to one another into small groups by asking them to turn toward one
 another during group time. With practice, you can use a signal like ringing a bell or clapping twice
 to indicate that it is group time, at which point students should turn toward one another to work
 together. While this method of grouping is more about convenience, it is an effective way to group
 students in large classrooms. If using this strategy frequently, make sure to change students' seats
 monthly so they have opportunities to work with different groups of students.
 - Pass out a basket with small squares of paper with numbers written on them. (The number of squares will depend on your class size. For example, in a class of 80 students, you will want to have at least 10 groups. This means you should have the numbers 1–10 written on each paper square.) Once all students have taken a paper square, ask the students with the same number to form a group. Assign a different location in the classroom for each group to meet.
 - Have students count from 1 to 10, one at a time. When one student reaches 10, ask the next student to start at 1, and continue again from there. Once all students have a number, ask all students with the same number to meet in a specific location in the classroom. You will have 10 small groups using this method.



Strategy 6 - Assigning Collaborative Tasks in Pairs and Groups

While it is important to model and teach new skills and concepts, it is equally important to support young children as they learn with and from their peers. Group-learning tasks in which all students participate respectfully are key to building a positive learning environment. Working together on tasks also builds social-emotional skills such as empathy, listening, teamwork, and problem solving. While discussions can be fostered in a whole-class setting, collaboration happens best in small groups or in pairs of students.

OPTIONS

- 1. Plan out the pair or small-group task carefully and align it to the lesson objective.
- Consider using Think-Pair-Share, in which children learn to pause, think about a problem, and then turn to talk to a peer about their ideas. This helps them develop and practice communication and problem-solving skills. When using this strategy, it is important to choose an open-ended question—that is, a question that has more than one correct answer. In math lessons, for example, Think-Pair-Share can be used for estimation, patterns, and logic, or for problem solving. For literacy lessons, Think-Pair-Share might involve ordering words to make a coherent sentence or answering a comprehension question.
- Plan a small-group activity by organizing students into small groups and assigning each student a role—for example, time keeper, distributer (of materials), recorder, and reporter.
- Bring the class back together after students have finished the task. Ask them questions such as these:
 - How did it feel to quietly think about the question before talking with your group/partner?
 - Did you and your group/partner agree on how to answer the question [or solve the problem]?
 - If you didn't agree initially, how did you later come to an agreement?
 - Was there something you didn't understand, and your partner helped explain it better?

REFERENCES

Ambrose, S., Bridges, M., DiPietro, M., Lovett, M., & Norman, M. (2010). *How learning works:* 7 research-based principles for smart teaching. Josse-Bass. https://firstliteracy.org/wp-content/uploads/2015/07/How-Learning-Works.pdf
Ball, D., & Forzani, F. (2010). Teaching skillful teaching. *Educational Leadership: Journal of the Department of Supervision and Curriculum Development*, 68, 40–45. https://www.ascd.org/el/articles/teaching-skillful-teaching
Danielson, C. (2022). *The framework for teaching: At a glance*. Danielson Group.

Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. *Psychological Bulletin*, 148(11–12), 765–782. https://doi.org/10.1037/bul0000383

Rosenshine, B. (2012). Principles of instruction: Research-based strategies that all teachers should know. *American Educator*, Spring, 12–19. https://www.aft.org/sites/default/files/Rosenshine.pdf

JULY 2024

Authored by: Elizabeth Long, Shirin Lutfeali, Lydia Nakijoba Julianne Norman, Wendi Ralaingita