**Methods that promote interactive learning and teaching**

Based on TESS India OER materials for teacher development <http://www.tess-india.edu.in/>

1. **Talk for leaning** – **valuing the student’s thoughts and words**

***Why use Talk?***

Talk is a part of the human development that helps us to *think* and make sense of the word.

Language is a tool for developing reasoning, knowledge and understanding. Therefor it is important to encourage students to talk as part of their learning experience.

***Application***

Application across all subjects / levels.

1. **Pair work**

***Why pair work?***

In everyday situations people work alongside, speak and listen to others, and see what they do and how they do it. This is how people learn.

Pair work is a natural way for students to talk and learn more. It gives them the chance to think and try out ideas and new language. It can provide a comfortable way for students to work through new skills and concepts, and works well in large classes.

***Application***

Pair work is suitable for all ages and subjects. It is especially useful in multilingual, multi-grade classes, because pairs can be arranged to help each other.

1. **Using questioning to promote thinking**

***Why questioning?***

Teachers generally ask students questions in order to:

* guide students toward understanding when a new topic or material is introduced
* push students to do a greater share of their thinking
* remediate an error
* stretch students
* check for understanding.

But questions can also be used to inspire, extend students’ thinking skills and develop enquiring minds. This can be achieved through higher-order questions, which require more thinking. They may ask the students to put together information previously learnt to form an answer or to support an argument in a logical manner.

***Application***

Questioning can be applied across all levels and subjects, but teachers need to be skilled in asking well- structured questions and in helping students to think more deeply about their answers.

**4. Using group work**

Group work is a systematic, active, pedagogical strategy that encourages small groups of students to work together for the achievement of a common goal. These small groups promote more active and more effective learning through structured activities.

***Why group work?***

Group work can be a very effective way of motivating your students to learn by encouraging them to think, communicate, exchange ideas and thoughts, and make decisions. Your students can both teach and learn from others: a powerful and active form of learning.

But one has to understand that group work is more than students sitting in groups; it involves working on and contributing to a shared learning task with a clear objective. You need to be clear about why you are using group work for learning and know why this is preferable to lecturing, pair work or to students working on their own. **Thus group work has to be well-planned and purposeful.**

***Application***

Applied across all subjects and levels. The task that is set for students to complete depends on what you what them to learn. Through group work students will learn skills such as listening to each other, explaining their ideas and working cooperatively. However, the main aim is for them to learn something about the subject that is being taught.

**5. Using local resources**

Many learning resources can be used in teaching – not just textbooks. These include using various senses (visual, auditory, touch, smell, taste) thus appealing to the different ways that students learn; or by using the resources all around us in our environments and bringing them into the classroom or taking the students out of the classroom.

Resources in the environment include both human resources – one will find people in the immediate environment who have expertise in a wide range of topics; and one can also find a range of natural resources.

***Why use local resources?***

By sourcing materials locally, connections are made between the curriculum and the students’ lives.

It can also help to create links with the local community, demonstrate its value, stimulate students to see the richness and diversity of their environment, and perhaps most importantly work towards a holistic approach to student learning – that is, learning inside and outside the school.

***Application***

Applied across all subjects and levels.

**6. Storytelling, songs, role play and drama**

***Why use Storytelling, songs, role play and drama?***

Students can deepen their understanding of a topic by interacting with others and sharing their ideas. Storytelling, songs, role play and drama are some of the methods that can be used across a range of curriculum areas, including maths and science.

***Application***

* **Storytelling:** Stories help us make sense of our lives. They are a very powerful medium in the classroom: they can
  + be entertaining, exciting and stimulating
  + take us from everyday life into fantasy worlds
  + be challenging
  + stimulate thinking about new ideas
  + help explore feelings
  + help to think through problems in a context that is detached from reality and therefore less threatening
* **Songs:** The use of songs and music in the classroom may allow different students to contribute, succeed and excel. Singing together has a bonding effect. The rhyme and rhythm in songs makes them easy to remember and helps language and speech development.
* **Role play**: Can be used to:
* explore real-life situations to develop understandings of other people’s feelings
* promote development of decision making skills
* actively engages students in learning and enables all students to make a contribution
* promote a higher level of thinking.
* **Drama:** Develops skills and confidence, and can also be used to assess what your students understand about a topic.

**Summary table of key interactive methods**

| **Method** | **Application** |
| --- | --- |
| **Talk for leaning** | **Used in a variety of ways/ across various subject areas**   * For literacy and vocabulary lessons; mathematics and science work and other topics. * It can be planned into whole class, pair or group work, outdoor activities, role play-based activities, writing, reading, practical investigations, and creative work. * For young children – use talk to make predictions about a story, an animal or a shape from photos, drawings or real objects. Students can list suggestions and possible solutions about problems to a puppet or character in a role play. Students can do presentations (show and tell) and demonstrations of specific skills which they explain. * **Build on student talk by probing questions** like ‘Why?’, ‘How did you decide that?’ or ‘Can you see any problems with that solution?’ * **Encourage students to ask questions themselves & combine with pair/ group work:** * Give students a question grid with who/what/where/when/why questions to practise basic enquiry * give the students some data (such as the data available from the World Data Bank, e.g. the percentage of children in full-time education or exclusive breastfeeding rates for different countries), and ask them to think of questions you could ask about this data * design a question wall listing the students’ questions of the week |
| **Pair work** | **Pair work tasks could include:**   * **Think–pair–share:** Students think about a problem / issue work in pairs to work out possible answers before sharing their answers with other students e.g. spelling, working through calculations, putting things in categories or in order, giving different viewpoints etc. * **Sharing information:** Half the class are given information on one aspect of a topic; the other half are given information on a different aspect of the topic. Work in pairs to share their information in order to solve a problem or come to a decision. * **Practising skills such as listening:** One student could read a story and the other ask questions; one student could read a passage in English, while the other tries to write it down; one student could describe a picture or diagram while the other student tries to draw it based on the description. * **Following instructions:** One student could read instructions for the other student to complete a task. * **Storytelling or role play**: Students could work in pairs to create a story or a piece of dialogue in a language that they are learning. |
| **Using questioning to promote thinking** | **Strategies for helping students to think more deeply about their answers:**   * **Prompting** requires appropriate hints to be given * **Probing** is about trying to find out more, helping students to clarify what they are trying to say to improve a disorganised answer or one that is partly right. * **Refocusing** is about building on correct answers to link students’ knowledge to the knowledge that they have previously learnt. This broadens their understanding. * **Sequencing** questions means asking questions in an order designed to extend thinking. Questions should lead students to summarise, compare, explain or analyse. Prepare questions that stretch students. |
| **Using group**  **work** | Some examples of tasks could include the following:   * **Presentations:** Students work in groups to prepare a presentation for the rest of the class -each group has a different aspect of the topic – this motivates students to listen to each other.   Set of criteria for a good presentation. Write these on the board before the lesson. Students can the use the criteria to plan their presentation and assess each other’s work. The criteria could include:   * **Problem solving:** Students work in groups to solve a problem or a series of problems. This could include conducting an experiment in science, solving problems in mathematics, analysing a story or poem in English, or analysing evidence in history. * **Creating an artefact or product:** Students work in groups to develop a story, a piece of drama, a piece of music, a model to explain a concept, a news report on an issue or a poster to summarise information or explain a concept. * **Differentiated tasks**: Group work is an opportunity to allow students of different ages or attainment levels to work together on an appropriate task. Higher achievers can benefit from the opportunity to explain the work, whereas lower achievers may find it easier to ask questions in a group than in a class, and will learn from their classmates. * **Discussion:** Students consider an issue and come to a conclusion. This may require quite a bit of preparation on the teacher’s part in order to make sure that the students have enough knowledge to consider different options, but organising a discussion or debate can be very rewarding for both you and them. * **Writers circles**: in groups the students read one another’s written pieces and give each other feedback / make corrections. |
| **Using local resources** | * **Using local experts in your classroom:** If you are doing work on money or quantities in mathematics, you could invite market traders or dressmakers into the classroom to come to explain how they use maths in their work.   You may also have experts within the school community (such as the cook or the caretaker) who can be shadowed or interviewed by students related to their learning; for example, to find out about quantities used in cooking, or how weather conditions impact on the school grounds and buildings.   * **Using the outside environment:** Outside the classroom there are a whole range of resources - you could collect (or ask your class to collect) objects such as leaves, spiders, plants, insects, rocks or wood. Bringing these resources in can lead to interesting classroom displays that can be referred to in lessons. They can provide objects for discussion or experimentation such as an activity in classification, or living or not-living objects. * **Using the school grounds as an extension of the classroom.** This is suitable for activities such as: * estimating and measuring distances * demonstrating that every point on a circle is the same distance from the central point * recording the length of shadows at different times of the day * reading signs and instructions * monitoring crop growth and rainfall. * **Going beyond the school grounds – into the community** * Conducting interviews and surveys * Inviting community members to tell stories/ make music/ share knowledge or expertise |
| **Storytelling, songs, role play and drama** | * **Stories:** Beyond listening, storytelling can prompt a number of student activities:   + Students can be asked to note down all the colours mentioned in the story, draw pictures, recall key events, generate dialogue or change the ending. They can be divided into groups and given pictures or props to retell the story from another perspective.   + By analysing a story, students can be asked to identify fact from fiction, debate scientific explanations for phenomena or solve mathematical problems.   + Asking the students to devise their own stories is a very powerful tool. If you give them structure, content and language to work within, the students can tell their own stories, even about quite difficult ideas in maths and science. In effect they are playing with ideas, exploring meaning and making the abstract understandable through the metaphor of their stories * **Songs** are also a useful way to memorise and retain information even formulas and lists can be put into a song or poem format. Your students might be quite inventive at generating songs or chants for revision purposes. * **Role play:** Various scenarios can be set up to facilitate role plays including information gathering or sharing or conflict resolution. Role play can be used for maths – students can form angles and shapes. A shopping experience can be role played to deal with money/ adding/ subtracting etc. In science they can for example model the behaviours of atoms, taking on the characteristics of particles in their interactions with each other. * **Drama:** Short plays can be produced related to, for example, the impact of negative environmental activities; health matters or historic events. |
| **Drawing/clay work** | * Drawing historic/cultural events/ observations in nature |