Book 4:

Creating Inclusive, Learning-Friendly Classroom

United Nations
Educational, Scientific and
Cultural Organization

Book 4: Creating Inclusive, Learning-Friendly Classroom

TOOL GUIDE

This Booklet will help you to understand how the concept of learning has changed over time as our classes have become more welcoming, child-centred, end learning-friendly. It will give you tools and ideas about how to deal with children with diverse backgrounds and abilities that attend your class, as well as how to make learning meaningful for all.

Tools

Tool 4.1
What is Learning?

In the report to UNESCO by the International Commission on Education for the Twenty-First Century it was stated that education throughout life is based upon four pillars: L**earning to know, learning to do, learning to live together, and learning to be.**

The concept of learning, and teaching, has changed dramatically over the past decades. Inclusive education, child-friendly schools and life-long learning are concepts that have been introduced an enabled millions of children who used to be out-of-school to come to school, feel welcome and receive help by educators to develop their intellectual, social, emotional and physical abilities. In this Tool you will learn about how you can reform the teaching-learning processes within your schools and classrooms.

Learning and Teaching

In the introduction to this Toolkit, we said that "inclusive" meant including not only children with disabilities in the classroom but ALL children with diverse backgrounds and abilities. Getting these children into our classrooms is part of the challenge. The remaining part of the challenge is meeting all their individual learning needs, especially giving individualised attention to those children who are usually excluded from the classroom or from participating and/or learning in the classroom (excluded from and within education).

Our classrooms are diverse in terms of the types of children we teach and how they learn. New research tells us that **children learn in different ways** either because of hereditary factors, experience, environment, or their personal traits and characteristics. Consequently, we need to use a **variety of teaching methods and activities** to meet the different learning needs of the children in our classes.

At first, this can seem like a frightening idea. Many of you may be working in large classrooms and may wonder, "How can I use different teaching methods to suit individual children when I have over 50 different children in my classroom?" Actually, this is one of the reasons why some of us may resort to "rote learning." We simply repeat information over and over, and then have the children repeat it back to us, over and over again, hoping that they will remember it. While this may seem like an easy method to manage many children, it is boring, both for us and for our students.

In order to change, we need to learn new ways of teaching. We will begin to enjoy the different ways our students can learn. Some teachers are already using a variety of methods, which they find to be more rewarding for them as well.

Reflection Activity: How Were YOU Taught?
Think about how you were taught in school and if you liked being taught that way! Write down how you felt about these methods. Reflect on your own schooling …

Which of these teaching methods helped you to learn the best? Are you using these in your classroom? How are your children responding to these methods? Are they actively and happily learning, or are they just sitting quietly listening to you? How are they performing on their examinations, quizzes, or other assessments?

How Children Learn

No child is "uneducable." Given the right conditions, ALL children regardless of their abilities, disabilities, backgrounds and circumstances can learn effectively, especially when they are "learning by doing."

Many of us, we learn best by "doing," actively participating and hereby gaining experience. This is what we really mean when we talk about "active learning," "children's participation in learning," or "participatory learning." It's getting children to learn new information through different activities and teaching methods. These activities are often linked to children's practical experiences in everyday life. This linkage helps them to understand and remember what they are learning, and to use what they have learned in school later in life.

When we know the different ways children learn it will help us to develop learning activities that are more meaningful for ALL children, and for us.

Learning by Sight, Sound, and Movement
What are your children doing when they first come into your class in the morning? Hopefully they are looking at you (sight), listening to you (sound), and watching what you, and others are doing (movement). In other words, they are learning!

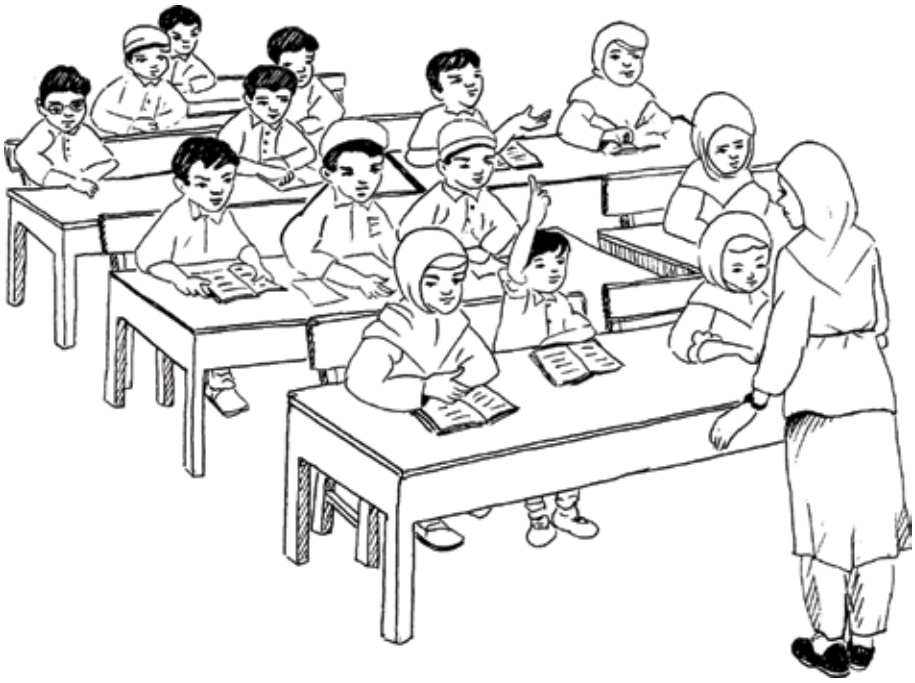
These three - sight, sound, and movement - are important in helping children to learn. For some children with disabilities, their hearing, sight, or movement may be more limited, and they may learn at a slower pace, or in a different way than most of their non-disabled peers.

As the old saying goes, "I hear and I forget; I see and I remember; I do and I understand." This is very important! If we only teach children by having them listen to us, then only about one-third of our students are learning anything. The same is the case when we ask them only to copy something from the blackboard in their notebooks, it is not effective!

Razia understands that different children learn in different ways, so she varies her teaching: She doesn't just use the chalk and board method. She teaches her students by playing games, recitations, and acting. It is much more fun, and the children concentrate much better and have fun while learning.

This means that when we are planning our lessons, we need to use visual materials (posters, drawings, etc.), tasks that involve discussion (hearing and listening), and to provide opportunities for movement of some form (for example, drama or sports, that is possibly linked to the different cultures represented in your classroom).

Remember that some children may have sight or hearing difficulties and will therefore not receive the same sensory input as the other children. Ask yourself, "What activities will be relevant to them, and how can I as a teacher adapt an activity to make it more relevant so that ALL my students can learn?"



Multiple Ways of Learning

We know that some children learn best through reading and taking notes, others through studying visual materials, and still others through body movement (playing games, sports) or musical activities. Some like to work on problems individually, while others like to interact with others to find solutions.

If we can observe or discover the many ways by which children in our inclusive classrooms learn, we can help ALL children to learn better, and we will gain greater satisfaction from teaching.

Active and participatory learning can use the many ways that help children to learn. Seven pathways by which children learn include the following.

- **Verbal or linguistic**, where some children think and learn through written and spoken words, memory, and recall.
- **Logical or mathematical**, where some children think and learn though reasoning and calculation. They can easily use numbers, recognize abstract patterns, and take precise measurements.
- **Visual or spatial**, where some children like art, such as drawing, painting, or sculpture. They can easily read maps, charts, and diagrams.
- **Body or kinaesthetic**, where some children learn through body movement, games, and drama.
- **Touch**, children who are not able to see or hear well can learn better through touch (tactile learning).
- **Musical or rhythmic**, where some children learn best through sounds, rhyme, rhythm, and repetition.
- **Interpersonal**, where some children learn easily in groups through cooperative work. They enjoy group activities, they easily understand social situations, and they can develop relationships with others easily.
- **Intra-personal**, where some children learn best through personal concentration and self-reflection. They can work alone, are aware of their own feelings, and know their own strengths and weaknesses.

When children learn, they may use several pathways to help them to understand and remember. Therefore, it is important for us to use different teaching strategies that cover a combination of these learning pathways.

We need to develop lesson plans and manage classrooms in ways that ensure active and effective learning for all children. We'll learn more about lesson planning in the next Booklet on managing inclusive, learning-friendly classrooms.

Reflection Activity: Improving Your Lessons rework …

- Pick one lesson that you enjoy teaching but maybe your students are not performing up to your expectations, or a lesson that you would like to teach in a more enjoyable way.
- What are the major points (information) that you want the children to learn?
- What methods are you using to communicate this information?
- Why do you think they are not learning?
- What different activities can you use in your teaching so that children can use more than one of their senses (sight, sound, touch, movement) in learning?
- How can you incorporate these activities into your lesson plan?
- How can your children contribute to designing the lesson, especially those children who usually do not participate so much in class, or those children with diverse backgrounds and abilities?
- Try out the lesson! If you feel comfortable in doing so, ask your students if they enjoyed the lesson. What activities did they enjoy the most? Can you use these activities to teach other lessons?

Self Esteem as a Barrier to Learning, Development and Participation

Can you remember a child in one of your classes who was unusually shy, didn't like to participate, never raised his/her hand in class, and also was not learning well? One of the reasons for children behaving this way is that they have low self-esteem. They lack confidence in their abilities, or they think that they are not as valuable as the other children in the class. Studies have shown a close relationship between how children see themselves and their learning performance. They found that when children are given negative feedback (criticism) it lowers their self-esteem, and they soon learn that it is better not to try at all. Rather than failing, the children just avoid making an effort.

Action Activity: The Value of Self-Esteem

Take a piece of paper and draw a face, and pretend this is one of your students. Every time you observe someone say something to a child that makes her or him feel bad about him- or herself, tear a piece of the paper away.

It only takes three or four of these comments to tear away a child's sense of self-esteem.

NOTE: You can do this activity with your students to help them understand how their actions and words can affect the feelings of others.

Before they will fully participate in learning, children need to believe that they can learn. Children are developing their self-esteem and their identity as they grow, and adults have an important role to play in making sure that this happens.

Children feel hurt when their sex, ethnic backgrounds, or abilities are not valued, or they are used to make them feel inferior. We cannot give children positive self-esteem, but we can provide the right environment and conditions for it to develop. We should therefore make sure that ALL children;

- feel that they and their contributions are valued;
- feel safe (physically, socially and emotionally) in their learning environment, and;
- feel that they are unique and that their ideas are valuable.

In other words, children should be valued for who they are. This helps children to enjoy learning. Teachers can reinforce this by creating a more welcoming classroom; where children's self-esteem is promoted through praise; where cooperative and group learning is encouraged; and where children feel successful and have fun learning new things.

Building on Existing Knowledge

Children learn by linking new knowledge with knowledge they already have from before. Talking and asking questions together (social interaction) can improve learning, which is why learning in pairs and small groups is so important.

We should actively find ways to support learning that use information that the children already know (their prior knowledge).

A child might be slow to adjust to learning in school, and he/she doesn't know what to say when you ask a question. In this case, you will need to establish a good relationship with the child so that you can understand how the child learns best. For example, what tasks can this child do? What letters in the child's name does she or he know and can copy legibly? Which numbers does the child know and can associate with simple objects in the room? What are the special things the child likes and can talk about to the teacher, or to another child? Can the child sing, do sport, or play games?

In addition, how can relate what children learn in school to the child's home environment and life in the community? All children who come to school with some knowledge from home. Whether in school or out of school, children respond to new situations in many different ways. Some of these ways will be useful in school, while others will not. It is our responsibility to find out what the child knows and what skills he/she has learned already. We can then build upon their knowledge and skills in teaching them new things. In many cases, the experiences of girls will be quite different from those of boys.

In school, our children are faced with many tasks that may be very different from the tasks and problems they must solve at home or when they play. Some children may never have held a pencil before coming to school for the first time; or have never seen and held a book; while others may not speak the language that you and their classmates speak. Consequently, it is very important to build links between all the things your students already know, and can do well, and the new things they learn about in your classroom. How can this be done?

Action Activity: Building Links for Learners

In the first years of primary school children are supposed to learn basic literacy (to read and write) and numeracy skills (addition and subtraction). Here are some simple, but effective activities you can introduce to the children when they come to school for the first time. This will help them to begin the process of more "formal" learning, building on what they already know from home. Can you think of others?

- Ask the children to name the different objects around in the classroom in their own language. Label the objects (for example; desk, chair, bench, shelve, window, door, blackboard, wall, and floor) with the names the children are giving them - if children speak different languages you can

label the objects with different names reflecting the language diversity represented in your class. The children will learn to recognise that letters and words have practical meaning.

- Write down the words of the national anthem that the children sing every morning before starting school, another song, or a poem that the children know. Singing and reciting poems is an important part of learning because it; helps children to breath properly; builds vocabulary; rhythm, and rhyme; and develops unity within the class. Ask the children if they can guess which words are which.
- Make sure you praise each child for at least one thing that they can do well.
- Be clear and specific when you give directions.
- Organise the older or more mature children to help younger children to understand the directions that you give.
- If you have any children in your class who cannot speak the language of instruction, speak to them in their own language, if you do not speak their language try to find other children in the class who are bilingual. If no one in the class is bilingual, you have to find another teacher in the school who is, if that cannot be found, you need to seek help from the community.
- If you have children from different language backgrounds in the class, try to teach all the children in your class a small poem or a song from all the different languages spoken by your students. This will teach your students about the value of language diversity?
- These simple tasks that children can successfully achieve, especially at the beginning of the school year, will help even the shyest child off to a good start. Your students will become confident, and understand that school is a good place to be, a place where they can feel safe, feel welcome, and learn. In other words, an INCLUSIVE, LEARNING-FRIENDLY ENVIRONMENT!

Tips for Teaching and Learning

- Lessons need to be structured around daily or weekly "themes" rather than unconnected pieces of information. A "theme" can for example be "water," and daily topics related to water can be;
  1) learning about how to keep water clean and prevent pollution - science;
  2) writing stories (essays) about rivers and lakes - language;
  3) measure water by using different containers (centilitre, decilitre, litre) and learning about factions (1/10, 1/4, 1/2, 1) - math;
  4) finding quotes about water in Al-Quran - religious studies and reading;
  5) make drawing, collages or paintings related to water - art, and;
  6) organise a competition where the students have to run 100 metres with water glasses (measuring how much they water they had in the glass when they started, how much was left in the glass when they reached the goal, to see how much they had spilled, the one who had run the fastest (1/2 the score) but with the least water spillage (the other 1/2 of the score) had won) - sports, life skills (logical thinking), and math.
- We need to realise that some children will need more time to learn and progress than others. When we use theme (project) based learning as in example above we can give different children different tasks (some more easy or difficult than others), based on their individual abilities and stage of development.
- We need to plan activities that encourage children to work in teams (in pairs, or small groups).
- The teams (pairs and groups) should be put together in such a way that they reflect the diversity of abilities and backgrounds in our classrooms (not all the "smart" students in one group, and the "not-so-smart" in another! This will foster child-to-child teaching and learning, which will benefit ALL the children, both those who learn fast and those who need more time to learn and understand.
- Students must be able to find the curriculum useful and relevant to their life (situations and circumstances).

- Students must be encouraged to ask questions and consider information, and be able to construct their own understanding of the subject matter.
- We need to ask good questions to allow students to explain their ideas. Rather than asking questions that require a "Yes" or a "No" answer only, we need to ask open-ended questions to allow children to express their views, ideas, and opinions.

REMEMBER: Before starting a new "theme", and "topic," you need to ask all of your children what they already know about it. Asking this question will help children to relate to the themes and topics, if it is a familiar one, and help them to understand and learn more quickly. Some children may be "experts" on certain topics, such as fishing or growing vegetables, and these children should be given opportunities to present their knowledge for the benefit of others in the class.

Tool 4.2
Dealing with Diversity in the Classroom

Embrace and Value Diversity

All classrooms are diverse because all children are unique and different. Added diversity in classroom brings added benefits to ALL students. Children with different abilities and backgrounds have different experiences, skills, and knowledge, which benefit ALL. It is our duty, as teacher, to create the right environment and opportunities for ALL children to learn and develop to the best of their abilities.

In Booklet 2 under Tool 2.2, we learned what it means to be excluded, and why inclusion is important for everyone. Similar activities, like the following, can be undertaken to help children and parents understand the value of diversity.

Action Activity: Gift Giving - Getting to Know Each Other
Teachers in a cluster group can use this activity when they meet for the first time. They can also use it when they meet their students at the start of a school year or even at the first Parent-Teacher Association meeting.

For this activity, participants work in pairs. They should ask each other open-ended questions to find out what special qualities each person has that would benefit the group. The final statement should be written on a small "gift card" and state something like:

"My friend's name is ..... and he brings the gift of patience."

"My friend's name is ..... and she brings the gift of a sense of humour."

Each pair of participants then takes turns in presenting each other's skills to the entire group. They should talk about how these skills can benefit everyone.

This activity can highlight the need for teachers to value all children in their class, and that many personal qualities are not obvious to the casual observer. Our responsibility is to scratch the surface and discover the unique quality that each child possesses. We can then develop learning environments that allow these qualities to be developed, valued, and used.

Introducing Different Ways of Thinking, Learning, and Knowing in the Classroom

In the previous Tool, we learned that **children learn in many different ways and at many different levels**; that is, there is diversity in learning. Consequently, we as teachers need to devise different ways of learning using different teaching methods, so that all children can understand the information we are teaching and can learn in a meaningful way, especially those with diverse backgrounds and abilities.

The range of teaching-and-learning activities in the classroom runs from memorisation and repetition all the way to solving problems and thinking creatively.

Memorisation, Analysis, Synthesis, and Problem Solving
In our classrooms, we can look for ways to address this entire range. For example, we can;

- **use blocks, bottle caps, models, and other objects to teach mathematics**, which taps into the fine motor skills and visual understanding of children;
- **invite children to talk about (or write about) ideas and processes in mathematics**, which links their verbal thinking to understanding mathematics concepts;
- **ask children to draw pictures for the stories that we read to them, which connects their visual thinking to the words and events** in the story, and;
- **guide children in making maps of the area around school**, which links their experience of movement in space to visual and mathematical concepts. When children survey their community, identify problems within it, and use their skills cooperatively to suggest solutions to these problems, they are learning how to apply what they learn in school. Apart from being good education, this process helps the community to understand the work of the school, and they may be more motivated to support the work of teachers (see Booklets 3 and 6).

For your classroom to be fully inclusive, you need to make sure that the curriculum is accessible to and relevant for ALL children in terms of what you teach (content), how you teach it (method), how the children learn best (process), and how it relates to the environment in which the children are living and learning.

We also need to consider children who experience learning difficulties. Are we planning for children who may have difficulties following the standard curriculum, such as children with physical, sensory Hearing and vision), or intellectual impairments, or children from income-poor families, working children, or children who do not speak the language of instruction? Will the curriculum still be accessible to these children as well? How can make learning accessible to ALL?

Action Activity: 7 Steps of Observing Diversity
1. Write down the children in your class who have clear strengths in certain subjects (such as mathematics, writing, discussion skills, etc.)
2. Describe how these strengths are demonstrated in class.
3. Write down the children who have other talents that may be indirectly related to classroom learning. Is a child good in arts? Is another child good in sports? Or, have good social skills? For instance, children with Down's syndrome often have good social skills.
4. Now draw a circle on the page to represent the rest of the children in the classroom that you haven't linked to special skills or talents. In the next week, observe these children more closely.
5. If you notice that one of them likes a certain activity, write it down.
6. How does this activity or how the child performs it reflect his/her ways of learning?
7. How can these ways be incorporated into your lessons?

In observing and dealing with diversity, we need to identify what provisions we can make, that is, the positive ways of helping children to learn, especially children who experience learning difficulties. We should not focus on what we have to "give up," such as our time, but on the learning benefits for our students. For instance, we can ask one child who is good in reading, but not so good in sports, to teach a friend? At the same time, we can ask his friend who is good in sports but struggle with his reading, to help his friend with playing football. In other words, we need to establish a relationship where both children are able to contribute to each other's learning, development and participation.

Challenges to Diversity

All societies are diverse. Having children with many different backgrounds and abilities in a single inclusive classroom is merely a reflection of society. However, it does have its challenges. We need to consider what each child needs to learn and how he/she learns best. We need to discover how to get ALL children to want to learn together.

Three challenges that can prevent children from learning together are; bullying, prejudice, and discrimination. Learning how to deal with these challenges in an inclusive classroom is one of the most important jobs a teacher must do. You will learn about how to deal bullying, teasing, and discrimination in Booklet 6.

Bias in the Curriculum and Learning Materials

Prejudice and discrimination can be reflected unintentionally in our curriculum and learning materials. This is the case especially for girls, children with different abilities, disabilities and backgrounds, as well as children affected by disabling health conditions (including allergies, asthma, and epilepsy, but also hepatitis and HIV). For instance, children working on the streets may be depicted in school books or story books as uneducated, or as pickpockets and thieves. If our curriculum materials are inclusive of children with different backgrounds and abilities, they will be more sensitive to these diversities and circumstances. They also will be more relevant to children's life and better at facilitating learning, development and participation.

The same situation applies to materials that are inclusive of girls. As we learned in Booklet 3, the social roles assigned to women and men ("gender roles") may be different within a society. Traditional beliefs about the status and roles of men versus women can restrict girls' access to schooling. As a result girls are often kept at home and away from school to do domestic work. Such roles, beliefs, and actions that discriminate against girls may be reflected in the teaching materials we are using. If an active girl who likes to do sports and play outside reads about other girls in schoolbooks and they are portrayed as being quiet and passive and spending most of their days indoors, she may start to think that she too should be passive, just like the girls she read about in her books. This often leads to poor performance especially in mathematics and science. For example, girls may be discouraged or afraid to use mathematics materials or engage in science investigations because these may be regarded as "boys' activities."

Equity in curriculum design is therefore important for ensuring inclusiveness in the classroom. The teaching materials we use are inclusive when they:

- include ALL children, including those with diverse backgrounds and abilities;
- are relevant to the children's learning needs and abilities, as well as their way of life;
- are appropriate to the culture;
- value social diversity (for example, socio-economic diversity; poor families can be very good families for children; they may come up with creative solutions for problems, and they could be depicted as inventive);
- are useful for their future life;
- include males and females in a variety of roles, and;
- use appropriate language that includes all of these aspects of equity.

How can you assess whether or not the materials you are using reflect gender and ethnic equity?

1. **Check the illustrations.** Look for stereotypes, that is, images or ideas about people that are widely held and accepted though they may not necessarily be true (such as men as "breadwinners" and women as "child care providers"). In the illustrations, are people of one cultural group, or are men, the dominant characters? Who is doing what? Are children with disabilities passive watchers, or are they actively involved, such as playing ball with others? Do they look enthusiastic?
2. **Check the story line.** How are problems presented, conceived, and resolved in the story? Does the story line encourage passive acceptance of "minority" characters (such as tribal peoples or persons with disabilities)? Are the successes of girls and women based on their own initiative and intelligence, or are they due to their "good looks"? Could the same story be told if the actions or roles given to men and women in the story were reversed?
3. **Look at lifestyles.** If the illustrations and text attempt to depict another culture, do they simplify or offer genuine insights into other lifestyles?
4. **Look at relationships.** Who has the power? Who makes decisions? Are women depicted only in supportive and subordinate roles?
5. **Note the heroes.** Are the heroes usually from a specific cultural group? Are persons with disabilities ever heroes? Are women ever the heroes? Are poor persons ever heroes?
6. **Consider effects on child's self image.** Are there any suggestions that might limit the aspirations of any particular group of children? This might affect children's perceptions of themselves. What happens to a girl's self-image when she reads that boys perform all of the brave and important deeds, while girls don't?[1]

One way to begin looking at these issues is to use the following checklist to assess your learning materials in terms of equity and inclusiveness.

[1] Council on Interracial Books for Children. (1980) Guidelines for Selecting Bias-Free Textbooks and Storybooks. New York.

Checklist for Assessing Equity in Learning Materials

Criteria	Content		Illustrations	
	Yes	No	Yes	No
Are the roles of men and boys as well as women and girls balanced (such as being depicted as doctors, nurses, teachers, field workers, and shop keepers)?				
Are the types of activities for boys and girls equal (such as sporting activities, playing, reading, talking, working, and studying)?				
Do both boys and girls have similar behaviours (such as active, helping, caring, happy, strong, and productive)?				
Do girls sometimes take the role of leader?				
Are girls shown as confident and able to make decisions?				
Do girls act as "intelligent" as the boys?				
Are girls included in outside activities as much as boys?				
Are girls and boys solving problems in the texts?				
Are girls and boys working together in a way appropriate to the culture?				
Are the topics interesting to girls?				
Are the topics interesting to minority children?				
Is there a gender balance in stories about animals?				
Are women described in history?				
Are women included in literature and art?				
Are ethnic minority people included in history, literature, and art?				
Does the language include girls (or are terms, such as "he" or "his", usually used)?				
Is the language appropriate for use in the local community (such as objects or actions that can readily be recognised)?				
Does the language encourage ethnic minority boys and girls to be interested in the text?				
Are the words not discriminating against ethnic minority people?				

Books should reflect the diversity of gender roles, racial and cultural backgrounds, individual needs and abilities, as well as a range of occupations, income levels, ages, and family structures (for instance, some single parent families).

If you have little choice when it comes to the books that are available in your school, then you must "correct" the books you have, and add details that are missing from the text. Perhaps you, your colleagues, and your children can draw additional illustrations to add to books to make them more balanced in terms of the roles of women, minority groups, and others with diverse backgrounds and abilities.

Gender and Teaching

Teachers and schools may unintentionally reinforce gender stereotypes. We may:
- call on boys to answer questions more often than we call on girls;
- assign housekeeping tasks to girls, and tool-using tasks to boys;
- reward boys for right answers, and withhold praise from girls;
- criticise girls for wrong answers;
- give more responsibilities to boys than girls (such as being the head of the class or head of a group), or;
- make use of textbooks and other learning materials that reinforce negative gender stereotypes.

Moreover, many teachers may be completely unaware that they treat girls and boys differently. As teachers, we have a clear responsibility to create equal opportunities for all children, boys and girls, to learn, develop and participate to the best of their abilities.

Remember that it is not necessary to oppose ideas that are important to a local culture or community. However, it is necessary to understand how such ideas influence our teaching practices and the opportunities for learning that all children should have.

Action Activity: Gender Equity
Either working alone or as a classroom activity; Make a short survey to get a better understanding of your own school and community. In the table below, write down those jobs that are normally done by boys and girls in the home or local community (such as fetching water, cooking, looking after other children, or tending animals) and those jobs that teachers expect children to do in school (such as sweeping the floor or moving desks).
- Are the jobs we are giving boys and girls in school the same as those at home or in the community?
- Do these jobs reflect traditional beliefs about the roles of men and women?
- Do these jobs stop girls from doing activities that they are fully capable of undertaking?
- Do these jobs prevent boys from learning how to become caring, companionate, responsible and empathetic?

	Boys	Girls	Comments
Home			
School			
Community			

Based on your survey, what can you and your students do to ensure that all children have the opportunity to learn how to do certain jobs and to take responsibility?

What can you and your students do to encourage school staff and community members to allow all children to participate equally and to contribute to their own, their schools', and their community's development?

Diversity and Disability

Strategies for Students with Disabilities[2]

When we are creating inclusive classrooms and are trying to include children with different abilities and disabilities, we need strategies to help these children learn to their fullest potentials. Some of these strategies include the following.

- **Sequence.** Break down tasks and give step-by-step instructions.
- **Repetition and feedback**. Use daily "testing" of skills, repeated practice, and daily feedback.
- **Start small and build.** Break down a targeted skill into smaller parts, and then help children to develop this skill step-by-step.
- **Reduce difficulty.** Sequence tasks from easy to difficult, and provide hints and help only when necessary.
- **Questioning.** Ask process-related questions like; "how to?", or content related questions like; "what is?"
- **Graphics and illustrations.** Emphasize pictures or other pictorial representations.
- **Group instruction.** Provide instruction or guidance for small groups of students instead of the whole class.
- **Group learning.** Grouped to facilitate interaction between children with different abilities and disabilities, as well as from different backgrounds (each group should be "heterogeneous" in other words reflect the diversity of abilities and backgrounds found in the classroom, school and community).
- **Supplement teacher and peer involvement.** Use homework, parents, siblings, or others to assist in instruction.

In addition, you can encourage other children (boys and girls) to take responsibility for classmates with disabilities by pairing each child who has a disability with a child without a disability. Ask the partner to help with important activities; for example, assisting the child with a disability to get where he/she wants to go, such as the library, latrine, and so on, as well as assisting them on field trips or during team games. Explain to the partners that they might sometimes need to protect a child with a disability from physical or verbal harm, and tell them how best to do this.

To help children without a disability accept and appreciate children with disabilities, tell stories about all the things people with disabilities can do, not only on what they cannot do!

[2] Excerpted from: Swanson HL. (1999). Instructional components that predict treatment outcomes for students with learning disabilities: Support for a combined strategy and direct instruction model. Learning Disabilities Research and Practice, 14 (3), 129-140.

Children Who Have Difficulty Seeing

Identifying Children Who Cannot See Well

Some children cannot see as well as others. If this is discovered early, we can do a lot to overcome the challenges these children may face.

Some of the signs of a child who may not be seeing well are when the child:[3]

- bumps into things easily;
- has difficulty in seeing objects that are close, or far away;
- has difficulty reading words in his/her book (holding it very close to the face when reading), or on the blackboard;
- has difficulty writing in straight lines;
- has difficulty threading needles;
- may complain of headaches or itchy eyes;
- fails to catch balls when playing;
- wears clothes inside out;
- arranges items incorrectly, or;
- brings the wrong objects when asked to bring something.

Checking Children's Eyesight by Developing a Simple Eye Chart

Step 1

Make a poster with six shapes with either three horizontal or three vertical black lines, one shape that is 6 cm in height, and the others that are 4.5 cm, 3 cm, 1.5 cm, 0.5 cm, and 0.25 cm.

Step 2

It is very important to give each letter the correct shape. Each horizontal line should be the same size, and the space between the lines should be the same.

Step 3

Let the children test each other. Hang the chart where the light is good. Make a line on the ground six metres from the chart. The child being tested stands behind this line and holds a copy of the figure on the chart. Test each eye separately while the other eye is carefully covered. Another child points to the shapes on the chart. The child should point to the larger figures first and then to smaller and smaller figures. **The child being tested must hold up his "figure" in the same direction as the one being pointed to by his friend.**

Step 4

When the children know how to give the test, help them to think of ways to give the test to young children, especially those who will soon be going to school. At school, the children in higher grades can test the sight of those in the lower grades.

[3] This section on "Children Who Have Difficulty Seeing" was adapted from: Baily D, Hawes H and Bonati B. (1994) Child-to-Child: A Resource Book. Part 2: The Child-to-Child Activity Sheets. London: The Child-to-Child Trust.

Practical Tips for Helping Children Who Do Not See Well (who are blind or have low vision):

- When a child, who has difficulty seeing, first comes to school, meet him/her and the parents alone. Let the child know who you are by talking with the child and explaining that you are the teacher, and what a teacher does.
- Introduce the child to his/her classmates. Explain to the other children that a child who cannot see well can do many things using his/her other senses, such as touch, hearing, and smelling. Suggest that while the child may need help with some tasks, he/she can all learn from each other.
- Introduce the classmates to the child. If the child cannot see them (if he/she is blind), tell the child the names of the other children in the class. Let the child speak with each one of them until the child remembers all their voices and names, so that he/she will begin to know all the others.
- Children who are blind usually do not know when people are near them, who they are and how many they are. So, when you are with a child who cannot see well, speak to him/her, so the child will know that you are there. Tell the children in your classroom to do the same.
- Use large letters when writing on the blackboard (if the child is not blind, but have low vision), and teach the other children to do the same.
- Read out instructions; never assume that everyone can read them from the blackboard.
- Allow children to touch the teaching devices if they cannot see them; for example, maps can be outlines with string.
- If you do not have Braille books, blind children need readers to help them. The reader will read and explain books to the child and help the child to learn. The reader can be a classmate, an older child, a friend, a parent, or a volunteer teacher.
- A child who has low vision (who cannot see well) may be able to learn to read and write in the same ways that other children learn. Teach the child first to write letters and numbers. You can start to teach the child to write with chalk on a slate. Fix pieces of string across the slate so that the child can touch and use them as guidelines while writing. When a child begins writing on paper, fix the strings in the same way on a piece of wood. Teach the child to place the paper under the strings.

Children Who Have Difficulty Hearing or Speaking

Children who have difficulty hearing or speaking often have difficulties communicating with others. This is because we use hearing and speaking most often when we communicate, even if we also use other forms of communication.

Identifying Children Who Cannot Hear Well

Some of the signs that can tell us if a young child has difficulties with hearing:[4]

- The child does not notice voices or noises if he/she does not see where they are coming from.
- The child is disobedient or is the last person to obey a request.
- The child's ears are infected (among others if liquid or pus is coming out).
- The child watches people's lips when they are talking.
- The child has more difficulties understanding you when it is dark or when he/she cannot see the mouth of those who speaks properly (both face wails and bears (facial hair) obstruct the view).
- The child turns his/her head in one direction in order to hear.
- The child speaks rather loudly and not very clearly.
- Sometimes the child appears to be quiet and prefers to be alone.
- The child may not do as well at school as he/she should.

[4] Adapted from: Baily D, Hawes H and Bonati B. (1994) Child-to-Child: A Resource Book. Part 2: The Child-to-Child Activity Sheets. London: The Child-to-Child Trust

Practical Tips for Communicating with a Child Who Has Difficulty Hearing

- Some children who are born without hearing may not learn to speak. They should be taught how to use Sign language when expressing their thoughts, needs, and feelings
- If there is a child in your class who cannot hear or speak, use different forms of communications, such as; signing; speaking slowly and clearly with visible mouth movements; hand, face, or body movements; or writing. Teach the other children to do the same.
- Before speaking to the child, get the child's attention, so he/she will know that you are speaking. Make sure that the child can see you clearly. Stand in the light so that it falls on your face.
- Children who have difficulty hearing or speaking will sometimes have difficulties with concentrations. They may not always pay attention, or they may not listen carefully to what is being said. Observe them carefully. If they do not pay attention, find ways to make them interested in what you are saying.
- Seat yourself and your children in a circle so everyone can see each other's faces. This will help listening and understanding. Use visual clues to introduce the lesson, such as a picture, object, or key word.
- Some children who have difficulty hearing can hear more clearly if others speak close to their ear. Find out if this helps the child you teach. If it does, tell the other children to do the same.
- When you communicate with the child give him/her time to listen and to think. If the child responds by making sounds that are not proper words, repeat patiently, correctly and slowly the words the child has tried to say. Make sure that the child can see your face when you do.
- Use facial expressions, mimics and body language to underline what you talk about.
- Use your hands when you speak; for example, you may use your hands to show the size of objects.
- Teach the other children to use expressions and movements to communicate with the child who has difficulty hearing.
- Try to understand the different ways in which the child expresses himself/herself. Also continue using different methods of communication with the child to make him/her understand what you want.

Children who can hear some words should be taught to speak. Some children learn to speak clearly; others try to but only succeed in making certain sounds that can be understood. You may be able to get some help in developing sign language skills from non-governmental organizations, foundations, or educational institutions that specialize in assisting children with hearing impairments.

If hearing-aids are used, be aware that they amplify all sounds including background noise. It can also be hard to distinguish between voices if several people speak at the same time. Encourage children with hearing difficulties to sit with a friend who can take notes for them, so they can concentrate on lip-reading

Action Activities: Games and Exercises

Games and exercises can be ideal opportunities to create a more inclusive classroom. Try to introduce ones that everyone can enjoy, such as the following.

Physical exercise helps all children to be healthy. When you organise exercise periods for your class, make sure that children with various backgrounds and disabilities join in as much as they can. For example, for children who cannot see to play ball games, put a bell inside or on the outside of the ball so that the children can hear the ball as it moves.

Some children are not able to play very active games. Include games for them which can be played with less effort or which are played sitting down. Moreover, most children enjoy music even if they

cannot move or sing because of a disability. In addition, children who have difficulties in learning often enjoy music. Even children who cannot hear may enjoy music, especially if it has a rhythm that can be seen through body movements (such as dance), or if the instruments with which the music is played give off rhythmic vibrations that they can feel.

Examples of Games

Game 1 - Learning by Looking
One child closes his/her ears with their fingers, while another child tells a funny story to the group.

Then one of the other children pretends to be the teacher. The "teacher" asks each child to answer questions about the story.

When the "teacher" has finished asking questions, he/she asks the child who had his/her ears closed to open them and listen. The "teacher" asks this child to tell the group what it felt like not to be able to hear the story very well. The child is asked to explain what he/she was able to understand from the faces and gestures of the teacher and the other children.

The child who can tell most of the story from reading the faces and gestures wins the game. Each child should have the chance to have his/her ears closed. This will help the children to understand the problems of a child who has difficulty hearing. They will then be able to understand the child's problem.

Game 2 - Learning by Touching
One child has his/her eyes covered and stands in the middle of a circle made by the other children.

One-by-one, the children in the circle go to the child with the covered eyes. This child touches the faces of each one of the others and tries to guess who each person is. Only one minute is allowed to guess the name of each child.

The child who can recognise the most faces of his/her friends wins the game.

Each child should have the chance to have his/her eyes closed. This will help the children to understand the problems of a child who has difficulty seeing.

Tool 4.3
Making Learning Meaningful for ALL!

Learning for Life

Earlier in this Toolkit we learned that one potential barrier to inclusive learning and getting all children in school is "relevance of education." On the one hand, parents and children may not see how the information learned in school is meaningful for their daily lives. For parents that depend on their children to help earn an income, they and even the children themselves may feel that "learning to work" is more important than being in school.

Even for children who do not need to earn an income to support their families, they may feel bored in the classroom if they don't see the connection between what they are learning in school, as well as what they need to know and want to work with in future. They may therefore not value school, or attend regular on a regular basis, if at all.

Our challenge, therefore, is to create a learning-friendly environment that motivates children to learn by linking what they are learning in school to their personal interests, to what knew before they came to school, and what they what they may need in their daily lives in future. How can we create this linkage? Let's look at a case example.

I was walking down the street in Kabul. I saw a lot of young children running here and there trying to get the attention of the people. They offered passersby to wash their cars, polish their shoes, offering incense (which is supposed to heal and drive away bad spirits), selling chewing gum, and begging for money or something to eat. I couldn't walk by without talking to these children. I ask them; why are you not going to school? They said; we are working, we don't have time to go to school, our families need money. From morning till evening we are on the street. Most people see us as a "bad children", so the school will not accept us as students, so who could help us to go to school? I told them; I am teacher in one of the schools nearby, so I can talk to the school right now. Some of them got afraid and said; ok but who will help us with money for our family? I said; first we should agree to go school and talk with the principle, then we will make a plan on how you can both work and study.

The day after, some of the children came with me to the neighbourhood school, we talked with Principal and he agreed to enrol them into his school. However, their language problem, most of them spoke Pashto, and the school was teaching in Dari, so we put them in a class where the teachers knew Pashto. The principal asked them when it was most suitable for them to come to school. They said; in the afternoon, so that they work in the morning, so as a temporary solution they were enrolled in the afternoon shift. Next year we will see how we can find even better solutions for the children concerned. It is not just about money, it's about flexibility and proper planning.

Their teacher was part of the pilot programme on inclusive education, she used different methods to support these children in school, and she tried to make the lessons related to their daily lives. It was very interesting, both for the children and the teacher.

Master Trainers for the Pilot Schools on Inclusive Education in Kabul
Ministry of Education with support from UNESCO and UNICEF

When teachers get to know their children better, and are aware of the backgrounds of the children, and the environment they live in, they can start to adapt the curriculum to include more local topics and examples. Many working children handle money as part of their jobs; this can easily be linked to mathematics. Linking subject matters to the practical experiences and lives of the different children in the school will help them to become more motivated to come to school, and their learning would be more meaningful for them and for their parents.

Action Activities: Linking Learning to Community Life
Review the national curriculum and list its important topics on the basis of what your children have already learned and what you think they should know in relation to their daily lives. Try to link topics that fit with the annual cycle of the community, such as the agricultural or migration calendar, or topics that will help them survive, such as topics related to health, drug prevention and emergency preparedness.

Think about the children in your class and their community. Do you know what kind of work their parents are doing? Do you know where most of the children live? Are many children absent from school? When are they absent? Do you know why? Does your school have a child learning profile containing this information (see Booklet 3)?

Consider the topics that you will teach this term and complete a table like the one shown here. List the topics, see how relevant the topics are to children's daily lives, and think of ways of making them more meaningful.

Subjects & Topics	Links to children's daily lives	Ways to adopt the topic
Example: Topic: Forests &Trees	*There are quite a few trees on the hill sides surrounding the village as well as near the river in the valley, but the nearest forest is far away.*	*First study the local trees by observing and doing practical activities that link science, history, mathematics, and language. Then make the connection to nearest forests in the region and then finally globally issues like the preservation of rainforests.*
Your Example:		

Creating a Learning-Friendly Environment Where Learning is Meaningful and Relevant

Preparing for Learning That is Meaningful
"Meaningful Learning" means that we link what the children are learning in school (topic and content), and what the children are taught to through their everyday lives in their families and communities.

Teaching is a complex activity. We must consider many things when preparing for meaningful learning. Above all, no one can force a child to learn. Children will learn when they are motivated to learn. They will learn when given opportunities to learn effectively and when they feel that the skills they will

learn will lead to success. They will learn when they receive positive feedback from friends, teachers, and parents who compliment them on how well they are learning. How can we prepare for meaningful learning? Here are some questions you should ask yourself in preparing your lessons.

- **Motivation.** Is the topic meaningful and relevant to the children? Are they interested in what they are expected to learn?
- **Opportunities.** Are the opportunities suited to the developmental level of the children? For instance, is the topic too hard or too easy for many of the children? Are the activities appropriate for both girls and boys? Are they appropriate for children with diverse backgrounds and abilities?
- **Skills.** Do the children have the skills to achieve the expected result?
- **Feedback.** Is the type of assessment and feedback given to the children designed to increase motivation to continue learning?

Action Activity: Linking Learning with the Lives of the Children in your Class
Try again to think of a topic that you will be teaching. Add it to the table above. Can you make connections with any of the children's daily activities? For example:

- housework (preparing food, collecting fire wood, looking after brothers and sisters, taking care of older family members, or cleaning);
- looking after animals;
- finding food by hunting, fishing, or gathering, or;
- growing food and working in the fields.

Creating a Meaningful Learning Environment
Classroom should be learning-friendly, as they encourage students to ask open questions, identify problems, start conversations, and discuss solutions with teachers, friends, and family. All children (boys and girls, as well as children from diverse backgrounds and abilities) must be made to feel confident and comfortable to participate actively, without fear.

In a learning-friendly classroom, we as a teacher must play different roles. In the past, our role has been that of an "information giver." But in order to help children learn to the best of their abilities, we must expand our role to that of a facilitator, classroom manager, observer, and learner. What do these new roles entail?

- **Facilitator.** We need to provide appropriate learning opportunities for all the children and encourage them to freely present ideas and talk about important issues in a constructive manner.
- **Manager.** To be a successful facilitator, we must plan well and carefully guide the discussions, giving every child a chance to express their own views.
- **Observer.** Observe the children while they work in a group, in pairs, or alone. This will help us to understand them better and to plan even more meaningful learning activities in future. For instance; can an activity that a pair of children is doing well be expanded into a group activity? Can the two children be group leaders together?
- **Learner.** We become learners when we reflect on our lessons and how well the children have been learning. We can then develop ways to make our teaching even more meaningful and effective. For instance, was one activity effective in helping children to understand a difficult topic or concept? Can this activity be applied to other topics and concepts?

Making Learning Gender Responsive

We learned in this Toolkit's Introduction that "gender" refers to the social roles that men and women are assigned within a given culture, such as "men as breadwinners" and "women as child caregivers." Gender roles are created by society and are learned from one generation to the next as part of the society's culture. Gender roles are not static because they change over time, similar to other cultural traditions and perceptions. Unfortunately, these roles can harm the learning of our children because they often restrict how girls and boys behave and what they are allowed to learn. The following case study is an example of how this can occur.

Sima is 14 years old and lives in Kabul. Her parents are very poor. Their house is surrounded brick making factories, so the environment is extremely polluted because smoke from all the ovens. Black smoke and dust is coming into her house day and night, making everything dirty. Because her family is very poor they cannot afford to move away, because the rent for this house is very cheap, and rent elsewhere is very expensive. Sima was in 5th grade in school, she has many other brothers and sisters, and because she is the oldest girl she has to take care of all her siblings, and other members of her family. She wakes up every morning at 05:00, after she says her prayers she wakes up her younger brothers and sisters, and start working with carpet weaving. At the same time she is responsible for cleaning the house and preparing breakfast for all family, as well as getting her sisters and brother ready for school. Her brothers had time to do all their homework but she couldn't because she was busy with all her chores at home.

The school is very far from their house, so by the time they reach school they are tired, both from work as well as from walking to school. If they reach the school late the guard becomes angry; he says bad and insulting words, and sometimes even beats them. They feel shameful and discouraged from going to school. However, Sima loves school, so she tries to overcome all the difficulties she faces, but the school environment creates barriers for her. Once she decided to not go any more to school, however she missed school so after a few days she went back to school again. When she came back, her teachers and the school management did not treat her well. She was upset and finally decided to stop coming to school and continue doing her chores and work at home. However, her brothers could continue their studies and are doing well in school.

Sima is just one example of how gender roles and duties can lead to marginalization and drop out both among girls and boys. Moreover, girls and boys are socialised into a way of thinking about themselves and what they can do. For example, you might hear "boys don't cry" or "girls shouldn't play rough games."

If we want to include all children in our inclusive, learning-friendly classrooms, we need to ask ourselves: "Do all of the children have the time and energy to complete the tasks I have assigned?" One of the ways to help answer this question is to conduct a small classroom project on how much work girls and boys do at home. Ask your children to talk about or write a short story on "What I Do At Home." You might be surprised at how much work your children, especially girls, have to do for their families. You can then adjust your learning plans to fit the needs of all the children in your classroom.

To help girls feel more at ease in school and to ensure equal opportunities for them, work with your colleagues and school administrators to undertake the following actions.

- Support the revision of learning materials and the elimination of gender and other biases (see Tool 4.2) or the stereotyping of children with minority or from poor economic backgrounds, as well as street children and working children. This is a task for the whole school to undertake, but all the teachers in your school need to be aware and know how to take action.
- Introduce a more flexible curriculum and self-directed learning materials, since some girls may have many demands on their time, such as domestic work and care for siblings. Both boys and girls from poor economic backgrounds often find little time to do school work, since the family needs everyone to help out in order to survive. Try to complete learning activities during school time, and allow a choice when homework is being given.
- Give enough time ("waiting time") for children to answer your questions. If you do not have a colleague to observe you in the classroom, you can try a participatory activity with the children to assess whether you treat boys and girls differently. For instance, ask each child to collect five stones (you may already have a collection for use in mathematics). Ask each child to put one stone to one side of his/her desk every time you speak to him/her, ask them a question, or allow them to answer. Together you can assess the pattern of interaction and discuss why this might be happening. What other strategies can you use to treat children more equally? What skills will the children need to learn so that they can participate equally?

All of these components will strengthen your ability to create a learning-friendly environment for boys and girls. Many of the above activities will need the support of parents or other caregivers. For this reason, these issues should be discussed at school committee meetings, and a practical action plan should be developed. It will help all teachers if school policies on such matters as discipline and gender bias are discussed and agreed upon by all teachers and parents.

Active and Participatory Learning

Inside and outside the classroom, children are learning all the time. They should be active in their learning in order to practice what they have learned and gain competence. They should also be encouraged to work with all of the other children in their class, including those with diverse backgrounds and abilities. Cooperation encourages understanding and acceptance. Pair and small group work allow better participation and interaction amongst children and help to build independence as well as the ability to work constructively with others. Examples of good learning opportunities include field visits and games for learning.

Action Activities: Field Visits
In field visits, children go outside of the classroom, to parks or farms, to a well or a community dam, or to a river or a hillside. They can observe specific organisms or natural phenomena, as well as learn from farmers; herders and other experts (learn more about how such visits can promote better health and hygiene in Booklet 6).

Field Visits to Support Group Work
In a visit to a community dam, for example, each group in a fifth-grade class can be given a set of assignments. Before going to the dam, group members can learn about the importance of water to human life and agriculture. At the dam, each group can be asked to: estimate the width of the dam; map the area immediately affected by the dam; draw the different kinds of trees around the dam; or formulate questions while they listen to information offered to the class by a government engineer.

When the class returns from the dam, each group can use the information that they have gathered to prepare presentations or reports of their observations. They can also discuss the importance of the dam with their families.

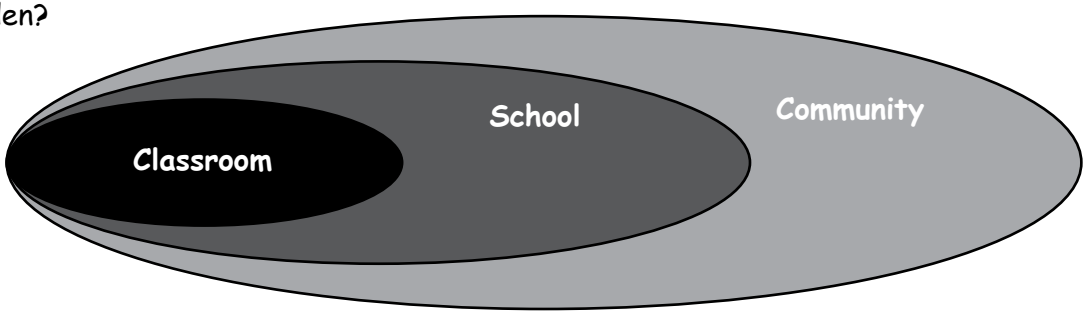
Depending on the nature of the field visit, you can undertake various actions before the field trip so that children will learn better while they are on the field trip. The actions that you can do in advance include:

- conducting preparatory research, whole-class discussion, or inquiry about what the children might see during the field trip;
- obtaining assistance from helpers or family members to organise the field trip and participate in it;
- finding opportunities to listen to and interview experts, and;
- assigning specific activities for groups, pairs, or individual students that will help them to understand what they will see during the field trip.

The field visit allows for meaningful learning. It also is an example of integrated learning where, for instance, research on the dam or garden involves mathematics, science, language, and social studies.

Circles of Learning
This is a good activity to do by yourself in order to plan your lessons. It is also one that you can do with your students!

Identify all of the different opportunities for field visits within a short distance from your classroom. In the middle of a piece of paper, draw a small circle or oval to represent your classroom. Around it, draw a circle to represent your school. Around the school circle, draw a larger circle to represent your community, town, or district. Start with the school circle. Does the school keep farm animals or other types of animals? Is there a garden plot or a park? Are there trees or fields? Are there bird nests or ant hills? Within the school circle, list the names of every learning opportunity outside the classroom. Are you able to create a new learning environment for children, for instance, a school garden?



Move on to the circle for your community, town, or district. Consider the shops and businesses that might be interesting for the children to study. Is there a farmer with special crops, or special animals? Is there a museum, a forest, park, or a field? Write the names of these learning opportunities in the circle.

Use the sites on your school grounds to help your class learn about appropriate behaviour outside the classroom and to learn how to work together in groups.

Remember those children who have walking difficulties or impairments. How will they have access to these learning opportunities? You may need to survey the route first. You also may need the help of parents or other students.

Action Activities: Games for Learning

Children love to play games and, given the opportunity, they will make up rules for new games. In these games, they may use balls, bottle caps, stones, string, leaves, or other low cost or waste materials. Games that involve role-playing, problem solving, or use of specific skills and information are good ways to get children interested in what they are learning.

Games can incorporate active learning which can improve communication skills, as well as analysing and decision-making skills. Examples of such games include dominoes, bingo, and "five questions" (where children try to guess what an object is by asking only five questions). You and your students can design the materials for many games, and you can adapt the same game for different purposes and different grades.

These games and their materials can be changed to connect more directly to the curriculum. You can, for example, create domino cards with geometric shapes that can be matched with each other. For example, a square shape on one domino can be paired with a domino with the name of the shape in words (square).

Can you and your students create learning activities based on simple games? Here's how!

- Observe or discuss with your students what games they play outside. What rules do they use for keeping score? Do they sing songs or use rhymes? Are there different games for girls and boys? Why?
- Ask children to develop a book of games from which other children can learn. Can children research games that their older family members may have played when they were at school, or those that are a part of the local culture or cultures?
- Connect any of these games or activities to a topic that you teach, for example, mathematics.

Both field trips and games can motivate all children to learn. Here are some more ways to increase motivation.

- Use concrete examples from the local area that are meaningful to boys and girls as well as children with diverse backgrounds and abilities.
- Provide opportunities for these children to use what they have learned in their daily activities, such as fishing, growing wheat, raising chickens, or collecting water.
- Use a variety of teaching methods that are interesting and involve children's active participation in learning.

Making Mathematics, Science, and Language Meaningful for All

Mathematics, science, and language (reading and writing) are the core subjects in all our schools. They are also the most challenging for children. In all of these subjects, children learn abstract concepts that may be difficult for them to understand, unless children can link these concepts to their daily lives. Once they make this connection and can understand abstract concepts, they can start applying them when learning skills related to the following subjects:

Learning-Friendly Mathematics
We use mathematics when we guess how long it will take us to walk home. We use mathematics to estimate how much water will fill a bucket, and how much three kilograms of potatoes will cost at the market. We use mathematics when we are selling fish at the side of the road. We use mathematics when we play sports, make music, and when we sing (use of rhythm and time).

In school, however, mathematics often seems to be unrelated to the activities we do every day. If we try, we can help children make the connections between mathematical skills, mathematical concepts and thinking, and the mathematics of daily life, such as buying and selling goods at the local market. For instance, role-playing, where children pretend to go to the market, can be fun and meaningful for children in learning mathematics. It is also an opportunity for children to develop confidence when speaking in front of a class.

Build Basic Skills Using Concrete Objects
Young children can more easily understand addition, subtraction, multiplication, and division when they use objects, such as small stones, bottle caps, dried beans, shells, thin sticks, or fruit seeds. These objects can help make mathematics something that students can see or feel (for instance, for those children with visual impairments), not just think about.

When children see or touch and then move the objects themselves, they experience the processes physically, step-by-step, as well as mentally. Both visual learners, and those who learn by touch, can benefit greatly by using practical materials.

Use Objects with Different Shapes
Differently shaped objects help children understand volume, dimension, and geometry. These objects can include cubes, pyramids, rectangular blocks, cylinders, and other shapes carved from wood or made by folding thick paper. Ask groups of children to explore the school and its environment to discover the range of shapes that are used in everyday life.

For example, a tin can is a cylinder, a brick has rectangular sides, triangles make the shape of roof supports, etc.

Linking Mathematics to Daily Life
By making mathematics practical, you enable children to draw connections between simple operations and more complex ones. Focus on mathematical functions in daily life, such as calculating time and distance for walking from home to school, estimating the amount of space needed for a sports field, and estimating the cost of vegetables bought at the market. Because they are practical tasks, and because they focus on elements that are familiar to students, such problems develop mathematics skills using real objects, not just abstract ones.

Children can further build their understanding of mathematical concepts when they use language to describe the ways that they are applying mathematics. Give the children frequent opportunities to write down or describe verbally, in their own words, each step in their solutions, and what each step means. As in other subjects, you need to observe children working, and talk with them about how they found their answers. You need to be patient and try different methods if a child is having difficulties.

You can help children with different learning styles and needs by basing their mathematical understanding on a wide range of different activities, such as those they do regularly during the day. You can help them by using concrete objects and by describing mathematical concepts verbally, visually, and through touch. Consequently, we are ensuring that learning mathematics is meaningful for all children.

Action Activity: Mathematics and the Community
List the different ways that your community uses mathematics; for instance, ask your children to undertake a simple survey on how mathematics is used in their homes. This is a good way to get them thinking. Begin with your own routines and activities, and list every way that you have used mathematics over the course of the last week.

Talk with your children or community members and find out if there are any local stories or legends that involve time or distance, or if there are any songs or dances with an interesting rhythm or timing. Incorporate these into your lesson plans.

Use local names and places so that children can better understand your questions. For instance, Aziz walks 1 kilometre from his home to his grandfather's house to help him to collect, from there he walks for 2 kilometres to collect water from the community well. His bucket can hold 5 litres of water. He carries the water to his grandfather's house. How far does Aziz have to walk in order to help his grandfather as well as reach home before night? (Using this example, there could also be a discussion about the tasks boys and girls do within their families and communities).

Action Activity: Mathematics and Health
There are many opportunities for children to learn about their health and development through practical mathematical activities.

- Children can measure their height and weight. These measurements are recorded on graphs for all the children and updated frequently (see Booklet 6).
- An illness survey can be carried out in the class or school. For instance, children can record the number of their classmates who have had measles, ringworm, malaria, or another health problem during a certain time period. The results are given as a ratio or percentage. Actions can then be taken to prevent some of these illnesses.

Learning-Friendly Science
When we study science, we explore the smallest building blocks of matter and life, such as atoms, as well as the farthest reaches of space. The difficulty is that we know that atoms and galaxies exist. However, we don't see them every day, and we don't think about them regularly. We also do not talk about them on a daily basis. Consequently, to make science learning-friendly, we need to strike a balance between what is real (what we regularly see, touch, or smell), and what is known (abstract things, such as atoms and galaxies). By starting with what is real and linking science to what children see or do every day, children can develop better communication skills. They can more easily talk about science and "real life." They can then work towards understanding and talking about ideas or concepts that are more abstract scientifically.

As in mathematics, learning science can be encouraged through concrete activities about such topics as: plants and animals, the human body, water and landforms, natural and man-made environments, sound and music, the solar system, etc. Moreover, labelling a drawing of a plant is a way of integrating writing and drawing skills, and it is an excellent form of communication in science. It is also a good step towards labelling other, more abstract, things like planets or internal organs of the body.

In all of these areas, the key is to discover ways that children can explore their own experiences with these topics. For example, to learn about sound and music, they can experience pitch and vibration using stringed instruments, even home-made ones. To learn about the solar system, they can observe the phases of the moon, or they can chart the movement of the sun by using a stick and measuring the angle of the shadow every hour of the day.

These kinds of concrete experiences can be supported by good introductions to scientific processes. In learning about science, students can practice their observation and questioning skills, and they can design experiments to answer their own questions.

Children can be introduced to the roles that science and the scientific method play in society. For example, when girls and boys experiment with how to dry fruit in a simple solar drier, or to make compost, they are learning good science while also finding practical solutions to community problems.

It is important that we as teachers learn important scientific concepts so that we can easily relate our children's daily activities to those concepts and help them to learn. For example, classifying is a key concept in science. Classification of living and non-living things is a good starting point. You can use rocks and vegetables as practical examples. One model for helping children to understand classification goes like this.

Steps for Helping Younger Children with Classification

1. What do I want to classify?
2. What things are alike that I can put into a group?
3. In what ways are these things alike?
4. What other groups can I make? How are the things in each group alike?
5. Does everything fit into a group now?
6. Would it be better to divide any of the groups or to combine them together?
7. Can I draw a diagram to represent how I have classified the objects?

Other Ways of Thinking

In many communities and cultures, people have developed other ways of understanding nature and the world around them. These ways of understanding may be linked to social experiences or observations rather than scientific experimentation. Some children may become confused because the way that things are explained in school may be different from the stories that they have heard at home. These stories are an important part of a community's culture and are taught from one generation to the next. It is important that the children learn these stories as part of their cultural heritage, but at the same time understand that they are part of subjects like; history and language, but not necessarily of science.

Inclusive learning means embracing a diversity of ideas as well as a diversity of children and their learning styles. Children need to understand that there are many different ways to explain objects or events, and we are willing to accept different explanations without judgement. As teachers, we need to find ways to respect these ways of thinking, while helping learners to gain an understanding of science as a specific form of knowledge.

Action Activity: Science and Daily Life
Identify some of the ways that scientific knowledge can contribute to our understanding of the ways we live our lives. For example, water is a topic that can be explored in many ways, and it is vital for every person's life. By studying water, we can integrate different forms of scientific knowledge as well as link with other subjects, such as mathematics, language, and social studies. When we boil water to purify it; for instance, we are killing invisible micro-organisms that were unknown before scientists discovered them. When we use a hand-pump to pump water out of a well, we are using a simple machine, the lever, to create a vacuum. When clouds form, lightning strikes the earth and rain falls, we experience the forces of nature.

Design one new lesson that connects scientific knowledge and investigation to daily life.
- What resources will you use in teaching your students?
- Will learners be asked to frame a question? For instance, will the shadow formed by the stick when you pray at midday, than when you say your afternoon prayers?
- What activity can they do to test their questions?
- What information resources, such as a textbook, can they use?
- How will you assess their understanding of the activity?

Lesson Planning and Teaching
Practical science needs careful planning so that all children can take part in a safe way. Consider some of the topics within your science curriculum that can relate closely to daily lives of children.

When planning lessons, it is important to plan how the children will participate in their learning. Usually, this depends on the different teaching methods we select. One example of an effective teaching method is:

- Ask children an open question, such as one that asks them to decide on something or express an idea.
- Ask them to think about their answer.
- Ask them to write notes about their answer (for children who are blind a Braille slate is a useful tool for writing short notes like this).
- Ask them to exchange their views with a partner.
- Ask for volunteers (girls and boys) to share the results of their discussions with the entire class.

This method ensures that all children have the opportunity to answer and discuss their ideas or answers. This is very important. Ask yourself, "In my classroom, are there children who almost always raise their hands first to answer my question?" The problem is that as soon as these children's hands are raised to answer you, other children stop thinking. They may need a longer amount of time to prepare their answers, or they assume that other children will answer your question. Moreover, many children are afraid to express themselves, particularly if their mother tongue is not normally used in the classroom. The pair work presented in the teaching method above allows all children to practice correct vocabulary and to express their views with one other person. This exchange builds their confidence and encourages their participation in answering your questions or those asked by their classmates.

Learning-Friendly Language Skills
Language skills are extremely important because they affect the abilities of children to learn in all other subjects. Meaningful learning will take place if the language of instruction is meaningful. Sometimes the home (local) language will need to be used so that all children have access to information, can communicate their ideas, and can be understood in a meaningful way.

You can create opportunities for children to listen by reading stories out loud to the class. You can also invite people from your community to visit the class and tell about their jobs, their lives, or the history of your area. Be sure to invite older people; they often have more stories to tell and more time to tell them. When people are invited, prepare the visitor first by explaining the purpose of his/her visit. Help girls and boys develop their social skills. Who will welcome the visitor? How do we welcome someone we do not know? How do we talk to an elder? Where will the visitor sit? How do we thank someone who has helped us? These are also good ways of practicing communication as well as social skills.

Reading Approaches

Many parents worry about their child learning to read. This anxiety sometimes puts pressure on children and may make learning to read a punishment instead of a pleasure. Reading is complicated, and there are many different ways of helping children to learn to read. Two approaches that are used are the Phonics approach and the Whole Language approach.

In the Phonics approach, a written word is broken down into its component letters. These written letters are matched with their corresponding sounds and then blended together to produce the word.

The Whole Language approach involves forming the meaning between the whole word and the spoken one, normally in the context of how the word might be used. The word might be presented in a short phrase, such as "One blue ball…".

Both approaches should be used because different learners will learn to read in different ways. To teach reading to a variety of learners, with different learning styles and backgrounds:

- use a variety of approaches;
- never separate skills from meaning
- remember that readers learn to read and write because they want to communicate;
- know that learning to read takes place in a supportive environment where children build positive attitudes about themselves and the language, and;
- read daily to small children to introduce them to reading for information and entertainment, and to show them that you enjoy reading too.

Other Ways to Support Reading

Children should have appropriate books and articles to read, and these can be available in a special reading and writing area. If books are not available, you may be able to create your own books that present local stories and folk tales. (You can also create big books for reading to groups of students.) Other ideas include the following.

- Invite the children to tell stories about their observations of the world around them and about events in their lives such as holidays or family celebrations. They will learn how to sequence events in a story, as well as how to change the type of language they use depending on the story's purpose and its audience. If they have difficulties in writing, someone (such as an older child or a parent) can write down the story as the child speaks. The child can then illustrate his/her own story.
- Create a classroom "reading-and-writing" environment by posting charts of alphabets, pictures, word lists, and other information. These may come from stories, lessons, or the children's own work. You can also label different objects around the room. If there is little wall space, you can hang letters, words, and pictures on a string across the room. If there is a local newspaper, headlines, articles, and pictures can be displayed to illustrate the different uses of language.

- Mix language practice with other subjects. For instance, when children have developed skills in writing, they can write descriptions of plants or sources of clean water for science class. Invite them to write story problems for each other in mathematics, or they can write about how they solved a scientific question. Guide older learners in small group discussions, as well as dramatizations of stories from class, to give them an opportunity to frame ideas in their own language. By role-playing situations from school or by using puppets to focus on social issues, such as bullying, the children will also be developing their "emotional wellbeing" and how to handle difficult situations well.
- Give all learners the opportunity to write, to share their writing out aloud, and to talk about their writing. All writers benefit from reading their work to themselves while they are working on it as well as to others. Working in "writing pairs" can help your students to try out ideas and decide on the best vocabulary to be used. All except the earliest writers (young children who are just starting to write) can benefit from peer editing groups in which they read their work, share constructive criticism, and plan revisions.

Tips for Teaching Writing

Teaching writing is important, but it is also difficult. If you give your children the chance to write often, and the chance to revise and refine their writing, you will be building the foundation for successful writing. Above all, make writing meaningful! Young writers, both girls and boys, can express themselves about topics that are important to them. These can include their families, special events in the community, topics in social studies, and so forth.

Children's writing should have a specific purpose and an audience. Children often are writing just for the teacher, but in life we use writing for many different types of audiences. We need to alter our writing style to suit the purpose and the audience; for example, a list, a letter, or a note for ourselves; or a poster or a story for younger children. This is meaningful writing. Here are a few more tips:

- Invite young writers to write freely without worrying about correctness (spelling and grammar should be dealt with separately). Children who are just learning to write can build language structures and expression even if they use imaginary spellings and strange punctuation. Imagined or made up spelling is a normal part of writing development. The child is "hearing" and trying to decide on what the word could look like. They need to use their own strategies first. Children need to try and work out spellings on their own. At the same time, they should be learning how to memorise and how to use a dictionary.
- Words should be learned in context either with a picture of the word, such as a "door or ball,"' or using the word within a phrase like "the green door" or "the yellow ball."
- You can teach young children to spell in many ways, such as spelling out loud, spelling games, and crossword puzzles. However, when they write and become too concerned with correct spelling and punctuation, they may have difficulty building a deeper relationship with the language. Rather than correcting spelling, you need to be observing and writing down children's writing problems. You can then diagnose their difficulties and provide them with specific support in that area, such as how to use adjectives effectively or create meaningful comparisons (analogies).

The goal of writing is to communicate an idea well so that everyone understands it. The central rule for teachers of writing is to create opportunities for meaningful communication, such as the following.

- Invite young children to dictate stories to a "scribe" who could be an older student who needs to practice his/her writing. (Remind the learner to be patient and speak slowly to the person who is writing.) The young storytellers can then illustrate their stories. This exercise builds a bridge between speaking and writing. This is also an activity we can use to help children who can see to learn about those who cannot see.
- Ask children to write about their lives and experiences. Whether it's a visit to their grandparents or any other experience outside the classroom, young writers write best when they write about something they know well.
- Conduct short writing periods. For children under the ages of 8 or 9, they may become very tired holding a pencil or piece of chalk to make the letters, while they are also trying to focus on the message they want to communicate. Writing often, for brief periods, is much more effective than trying to write for a long period of time.
- Encourage young writers to keep journals or diaries to help them structure their thoughts. Journal writing is important because it's not public. For the writer, it can be a chance to write in a very free way. For this reason, if you are planning to collect and review children's journals, you tell them so in advance.
- Give writers the chance to revise their writing. Professional writers may spend up to 85 percent of their time revising their first drafts. In classroom writing assignments, it's important to encourage students to write freely and in their own words. They should try to cover all of their thoughts on a topic. (Revision is more important for students over the ages of 8 or 9 who have begun to write more naturally to express themselves.) Give comments on their ideas and the sequence of their story. Show them how to use a dictionary so that they can learn to correct their own spelling or perhaps with a spelling partner.
- Allow opportunities for every imaginable kind of writing. When older learners write about how they solved a mathematics or science problem, or about how the weather affects the lives of their family members, they are using writing as an effective tool.
- Publish writing to make it meaningful. Girls' and boys' writing can be "published" on classroom walls or made into simple books. It can also be shared with learners in other classes, with families and the community, and with friends. When learners write letters to a community leader to ask questions, offer opinions, or simply express appreciation, they have the opportunity to write about things that are important to them and that have a real purpose and an audience.

Reflection Activity: Teaching Language Meaningfully

Think about your current teaching practices and your children.

- Which ways of using language receive minimal attention in your classes? How can you improve this situation?
- Do you give opportunities for children to talk together in pairs and discuss in groups of four?
- How can you make learning and using language more interesting, relevant and meaningful?

Tool 4.4
What Have We Learned?

Learning About Learning and Learners

- All children can learn, but they learn in different ways, and at a different pace.
- As teachers, we need to provide a variety of learning opportunities and experiences for children.
- Children learn by linking new information with what they already know.
- We must make sure that the learning is relevant to the lives of children, their families and the community.
- We must also help parents and other caregivers to support children when they learn.
- Talking and questioning together (social interaction) strengthens learning, which is why pair and small group work, if well organised, is very important.

As well as knowing more about how children learn well, we reviewed some of the barriers to children's learning. One major barrier is low self-esteem. Low self-esteem reduces children's motivation to learn and can have damaging effects on their cognitive and social development. Self-esteem can be promoted through an improved learning environment. This environment is one where appropriate praise is given when children are successful, where efforts count as much as results, where cooperative and friendly grouping is encouraged, where children know that they are cared for, and where they will be supported when learning.

Dealing with Diversity in the Classroom

In this Booklet, we explored ways to make the curriculum accessible and relevant for all children in terms of what you teach (content), how you teach and how children learn best (process), and the environment in which the children are living and learning. When planning lessons it is necessary to think of these three areas: **content, process** (such as teaching methods), and **environment**.

We also looked at **threats** to children's learning and at bullying in particular. We must remember that:
- threats from and fear of others (teachers, parents, and other children) can prevent children from learning;
- differences, such as ethnicity, religion, and social class, can be used by bullies to justify their bullying;
- observation is a key skill for any teacher, and we need to observe children during play and in the classroom to identify poor social relationships between children that could threaten their learning; and
- once teachers have assessed their situation, they need to be proactive in preventing opportunities for bullying rather than reacting to a situation after it has already occurred.

Prejudice and discrimination are also barriers to learning. They can be reflected unintentionally in our curriculum and learning materials. This is the case especially for girls as well as children with diverse backgrounds and abilities.

We have included a checklist to analyze textbooks for bias. Are you able to review your textbooks and learning materials for bias or unintentional discrimination? What actions will you take when you find it; for example, can you provide new illustrations?

Children with learning difficulties can be provided with an environment where they learn how to help themselves. Are you aware of those children who, for whatever reason, have difficulty learning? What actions can you take to help them? Some will need understanding and support from other children, but the goal is to provide learning activities that they can have easily access without asking for help.

Making Learning Meaningful for All

The key idea in this Booklet is how to make learning more meaningful for all children. We need to make learning meaningful so that all children will want to come to school, will be motivated to learn, and will know that what they learn is relevant to them.

You will need to link issues in your local area with the curriculum and topics you are teaching. Allow children to bring into the classroom the knowledge that they and their parents already have.

Meaningful activities include pair and small group work outside of the classroom, where children can explore and understand their own environment.

Making learning meaningful may require adapting the national curriculum to fit the local context of your school. This can be done more effectively through work with other teachers.

Have you been able to adapt textbook examples and activities to relate better to your local area?

The core subjects in school are mathematics, science, and language. You can motivate children to want to learn these subjects by developing and playing games. Mathematics and language games can make learning fun as well as meaningful. If you are able to work with a group of teachers or parents, then several games can be developed for use in the classroom.

Mathematics can be made more meaningful by using practical materials and solving problems that are common in everyday life. These problems can relate to measurements and calculations around the school, at home, or at the market.

In **science**, concrete experiences help children to understand scientific concepts. In learning about science, students can practice their observation skills. They can be encouraged to ask questions and plan experiments to explore different answers to their own questions.

By investigating their local area, children can be introduced to the role that science plays in society. They can find practical solutions to community problems while learning valuable scientific concepts and skills.

Have you been able to find time to allow children to investigate problems rather than just learn the answers from the textbook?

We considered different teaching methods, such as "Do, talk, and record" and "Think, ink, pair, share." These methods help children interpret their ideas together, improve understanding, and increase their participation in class.

Are you able to use different teaching methods in science and mathematics? Do you have practical materials in your classroom for children to explore scientific and mathematical concepts?

Language is not just a subject; it is a range of skills that children need in order for them to access the curriculum and to help them think and learn. They need to be able to talk, listen, read, and write in as many situations as possible. We can develop these skills in all subjects.

Are you able to make language learning meaningful by providing opportunities for language learning in science and mathematics?