

Brahmkamal, Gulab, Suryamukhi... are names in Hindi of flowers commonly found in Uttarakhand. No, this is not a reference to a middle school botany class. As a matter of fact, these are names given to groups of children in class IV by the primary school teacher of a government school in a remote village of Uttarakhand. As group members, the children are expected to work on tasks assigned to them by their teacher on a weekly or biweekly basis. The tasks can range from helping each other read a storybook together, work on a chart illustrating the story, enacting it in the form of a role-play, writing their own story or answering questions and finding meanings of difficult words from a textbook lesson.

Methodology

The tasks are not given randomly, nor are children assigned to groups arbitrarily. Keen observation of each child's learning level, progress over a period of time, interest levels and peer dynamics are taken into consideration by the teacher before she decides the placement of children into groups and the tasks they will perform. The children are proud of the labels assigned to them and feel a sense of belonging and responsibility towards their peers in the group.

The teacher maintains daily/weekly records of the children's progress on the assigned tasks and considers the redistribution of children into groups and tasks based on that. Peer learning is key to this form of pedagogy where children with lower learning levels are supported and scaffolded by their peers in the group with higher learning abilities. A crowded, mixed-ability, under-resourced classroom in a government school in a remote village may hardly seem like a place to look for exemplars of 'good teaching practices' that others can seek inspiration from, but this classroom is exactly that!

Responding to individual needs

The practices followed by the aforementioned teacher are actually pretty good examples of *Differentiated Instruction* (DI), a form of instruction which makes use of a variety of strategies to respond to the individual learning needs of children in regular classrooms.

The teacher in the Uttarakhand school did not, of course, know this at the time. When she started to search for solutions to help the children in her classroom acquire basic literacy skills, she discovered that the children, though similar in age, were all at different levels of learning. She realised that no matter how 'well' she taught them, only some children would benefit from her teaching. Hence, she understood the need to adopt teaching practices that suited the individual learning needs of all the children in her class. This also happens to be the core premise on which Differentiated Instruction is based.

This article introduces the key principles of DI and provides some examples to illustrate its relevance and feasibility for classrooms in India.

Key elements of DI

Differentiated Instruction (DI) challenges the assumption that all children of the same or similar age can learn and be taught in the same manner. Proposed initially by Carol Tomlinson, DI rubbishes the idea of homogeneity of classrooms and draws the attention of teachers and educationists towards the diversity that pervades every classroom in any school, anywhere in the world.

All teachers are acutely aware that the children in their classroom differ from one another in their learning abilities, interests, readiness to learn and behavioural and emotional needs. Children also come from varied socio-economic backgrounds, show a diversity of language preferences and follow different social and cultural practices. Each of these factors impacts children's ability to cope in the classroom not just with the taught curriculum, but also with their social and emotional wellbeing and adjustment in school. As teachers, we are aware of these differences, but we assume that there is nevertheless only one way to teach the children: our way!

Challenging these assumptions, DI encourages teachers to proactively plan and adopt

varied approaches to teaching, learning and assessment that cater to the learning needs of every child in the classroom. In Tomlinson's words, 'Differentiation is classroom practice that looks eyeball to eyeball with the reality that kids differ, and the most effective teachers do whatever it takes to hook the whole range of kids on learning' (C A Tomlinson, 2001).

Emphasising that DI is not a recipe for *teaching* itself, but a philosophy or a way of *thinking about* teaching and learning, Tomlinson clarifies that there are no formulae for teaching that DI prescribes, but only a set of ideas that enable teachers to maximise the capacity of all the children in their classrooms. The essence of DI lies in creating a variety of opportunities for students to explore the curriculum and to demonstrate their learning through the different levels of task completion created by the teacher in the same unit or lesson. The teacher works towards this by assessing the individual capabilities and learning needs of all the children in her classroom and then modifying the content, process, product and the *learning environment*, where:

Content refers to what the teacher wants the students to learn and the materials and mechanisms needed to accomplish that.

Process is the set of instructional strategies that the teacher adopts to deliver the content effectively.

Product is the variety of ways in which children demonstrate their learning.

Learning Environment is a reference to the adaptations made by the teacher in her classroom to create a respectful and safe environment in which all children can engage meaningfully at their individual pace and levels of learning.

In doing all this, the teacher relies heavily on the collaborative support of all the students in her class, ensures flexibility in students' choice of materials, tasks and pace of working and, most importantly, makes certain that all the children feel equally respected and engaged in tasks considered to be of equal importance, by their peers as well as the teacher.

Practising DI in the classroom

As stated earlier, DI is not a prescription for a set of teaching strategies that can be adopted in a classroom. On the contrary, the essence of DI lies in its flexibility and the teacher's ability to recognise the specific needs of the students in her classroom and then adopting practices that subsume the key tenets of DI. In this section, some examples of DI

techniques are described. These can be applied in any classroom depending on the specific needs of the children, resources available to the teacher, size of the class, and the duration of time and amount of preparation that the teacher can put in.

One such technique is students working on different tasks at the same time. By assigning children to mixed ability groups, the teacher can create tasks that appeal to different interest levels as well as which require different skill sets to accomplish. Children can be encouraged to complete either all or some of these tasks, at their own pace, through peer support and whenever they are interested in doing them. For instance, for a class VI history lesson, the teacher can create a set of tiered tasks. One task may involve children looking up facts related to the lesson in the textbook and then, together creating a conceptual map of the chronology of events stated in the text. Another task may require them to search for additional facts outside the textbook on a particular topic and put together a presentation for the whole class. Yet another task may be related to note-making and summarising the chapter or may encourage students to present the lesson in the form of a role-play or a cartoon strip!

By creating these different set of tasks, the teacher ensures that children with varying levels of interest and capability get an opportunity not only to participate in the tasks that most interest them but also display their skills and capabilities in different ways. The assessment, closely linked to the tasks, ensures that children's learning is evaluated in different ways as well.

It is important to note here that while all this may seem daunting to a teacher to plan and accomplish, it is actually not that hard. It requires some planning and preparation initially, but after that, such classroom practices require minimum intervention on the part of the teacher, as the essence of it lies in peer learning and cooperation. At the same time, when such tasks are initially introduced, they may lead to some chaos and loss of decorum which the teacher should be prepared to handle. However, once students get used to the idea of a classroom pedagogy that is not didactic and necessarily teacher-led, they learn to take charge of their own learning and become self-disciplined. Another point to note is that such practices can be adopted even in classrooms that are not particularly rich in resources. Creating a learning environment by reimagining furniture arrangements and using spaces in and around the school optimally can go a long way in conducting such tasks successfully.

Adopting DI in the classroom

The following are some DI principles/strategies that all teachers can keep in mind while planning their lessons, in any subject, at any level:

Identify the key concepts

By identifying and highlighting the key concepts to be learned from any topic, the teacher can substantially reduce the content to be taught. This benefits those students who struggle with reading large volumes of text, such as those with learning difficulties. Highlighting, underlining, listing keywords and displaying flashcards with key ideas, are some ways this can be done easily for every lesson to be taught.

Present content in different modes and encourage experiential learning

By reducing time spent on teacher-led, lecture-based pedagogy, teachers can adapt content and present it in visual, kinaesthetic and auditory modes. This could take the form of models, videos, charts and posters or audio clips. Alternating modes appeal to students with different interest levels and learning profiles. It also allows students to experience learning first-hand and making meaning of things on their own. One way this can be done is by setting up stations at different corners in the classroom. Students can be encouraged to visit the stations one after the other and actively engage with the material displayed.

Vary the pace of student learning and introduce different rubrics for assessment

By gaining an understanding of each child's strengths and weaknesses and focusing on developing that area of weakness, the teacher can create a tiered set of assessments for any topic. These can be given to students depending on their readiness levels and the pace at which they are comfortable to work. Once the child achieves a learning objective, the next level of assessment can be given. It should also not be necessary for all students to achieve all levels of assessment.

References

Tomlinson, C. A. (2001). How to Differentiate Instruction in Mixed Ability Classrooms, ASCD.



Ankur Madan teaches at the Azim Premji University. Her teaching and research areas are in Child Development and Inclusive Education. She may be contacted at ankur.madan@apu.edu.in

Scaffold learning to varying degrees

Children at different levels of readiness and learning require one-on-one instruction and support to varying degrees. Teachers can save time and effort by focusing their energies on providing an intensive, one-on-one mode of instruction only to those students who require it. Others, who can learn through self- and peer- support, should be encouraged thus. Such mechanisms help teachers manage their time better in the class and encourage students to become independent learners. They also help to build empathy and peer relations among children.

It is important to understand that at the heart of each such practice or recommendation lies a strong commitment to inclusion and a belief that individual differences in children's ability and interests are an inevitable reality of every classroom, in every context.

Conclusion

One may argue about the feasibility of adopting DI practices in the Indian context, given the poor conditions of a majority of schools in the country. It is, however, important to understand that DI is a multifaceted approach and a way of reimagining classroom pedagogy and not a set of watertight prescriptions. Just as one size does not fit all when it comes to children's learning, there is no reason for us not to adapt the principles of DI according to our conditions and in cognisance of the reality of our poorly resourced and overcrowded classrooms. Which is why the classroom in the Uttarakhand school where every inch of every wall and every scrap of paper and chalk available had been used optimally to set up tasks and assessments for the children to work on, is indeed the exemplar that classrooms in India need to look for inspiration and motivation to embrace the ideals and practices of differentiated instruction.