Differentiated instruction

"If academic learning does not engage students, something else will."

- John Goodlad, Educational researcher and theorist

Students sometimes misbehave in school because they find the instruction too difficult or because the tasks and/or materials are not meaningful or relevant for them. Differentiated instruction offers a flexible and *intentional* approach to better meeting the diverse learning needs of all students. Carol Ann Tomlinson (2001) calls it "shaking up what goes on in the [school] so students have multiple options" (p. 1).

A differentiated approach to instruction considers the individual learning needs of students and creates learning opportunities that match students' current abilities, interests, learning preferences and specific needs. Differentiated instruction also stretches students' abilities and encourages new ways of thinking and learning.

Key principles

Before a introducing a school-wide approach to differentiated instruction, all teachers in the school need to agree to provide instruction and support that embodies three key principles.

- Students learn at different rates and in different ways.
- Fairness sometimes calls for differences. All students do not need to do the same work in the same way.
- The key to motivation is interest, and all students have different interests.

Effective differentiated instruction:

- addresses varied learning styles so students have opportunities to learn in their preferred style, as well as enlarge their repertoire of skills in their less-preferred styles
- uses ongoing and frequent assessment to inform planning and instruction
- provides opportunities for students to reflect on their own learning and develop self-monitoring and self-assessment skills
- promotes personal responsibility for learning and nurtures skills related to independence and self-directed learning
- builds feelings of personal competence and confidence in learning

- is based on student-centred activities
- encourages exploration of each student's interests, strengths, learning preferences and unique learning needs
- provides opportunities for student choice
- recognizes students' gender-based and cultural differences, and includes a variety of learning opportunities to accommodate those differences
- provides the support needed for all students to succeed
- is an invisible, seamless part of everyday teaching practice, and of learning and teaching resources.

Universal strategies for effective instruction³

These universal strategies will help all students to learn successfully:

- a strong focus on teaching and learning
- clear learning goals and a known purpose
- maximum class time spent on learning and minimum time off-task
- frequent feedback on learning and achievement
- instructional supports for academic deficits or difficulties
- pre-teaching and review of key concepts
- assessment for learning
- differentiated instruction to meet individual students' needs.

To prevent students from developing behaviour problems, teachers need to know, understand and model effective instructional practices. Instructional organization that contributes to successful teaching and learning includes planning, managing, delivering and evaluating instruction.

When instruction is effective:

- clear goals for learning are set and communicated
- expectations are high
- success is demanded.

^{3.} Adapted with permission from Karen Bain and Brenda Sautner, *BOATS: Behaviour, Observation, Assessment, Teaching Strategies*, 2nd edition (Edmonton, AB: Special Education Council, The Alberta Teachers' Association, 2007), pp. 14, 15, 16.

Effective instruction takes into account students' learning strengths and preferences. This goal is achieved by:

- analyzing the demands of classroom tasks and assignments
- grouping students for instructional purposes
- connecting activities to "real life" or student interests
- connecting activities and assignments to instructional goals
- expecting high rates of student success
- frequently checking students' understanding.

To make lessons and instructional procedures efficient:

- include demonstration, prompts and practice in teaching sequences
- ensure that concepts are clear and students know what the learning involves
- consistently reinforce learning through practice, attention, praise and personal acknowledgement.

To provide instructional support:

- monitor and adjust instruction as required
- model and practise thinking strategies
- directly teach learning strategies
- provide sufficient time for learning and for applying what is learned
- guide and reinforce practice.

To effectively allocate sufficient time to academics and instruction:

- actively engage students in learning
- interact with students frequently and positively
- select tasks and activities to match learners' needs and levels of understanding.

To maximize students' opportunities to participate in learning:

- frequently provide opportunities to respond
- use effective questioning techniques
- correct errors immediately
- organize for cooperative group work.

To increase students' progress and understanding, provide feedback that is:

- frequent
- constructive
- diagnostic
- task-specific
- performance-based.

To effectively evaluate student performance, use ongoing assessment for learning that is:

- appropriate
- frequent
- student-specific
- directly related to the program of studies or selected learner outcomes.

Identifying school-wide strategies

When a school commits to differentiated instruction, the teaching staff have to develop a repertoire of research-based strategies for adapting instruction. School-wide use of a common repertoire of strategies ensures that students have access to these adaptations across grade levels and subject areas. Cole et al. describe 12 sample strategies for adapting instruction to increase the academic success of all students.

Sample school-wide strategies for adapting instruction⁴

Change the context	Change the presentation	Change behavioural expectations or consequences
Precorrect errors Directly give extra practice for skills needed, before the skills are required. Ask Mitch to sit down and practise "stay in seat" and "keep hands and feet to self" before the lesson starts.	Task difficulty To increase accuracy, adapt the skill level, problem type or rules. Jeff is allowed to use a calculator to solve math problems to decrease difficulty and his motivation to escape difficult tasks.	Time to complete Adapt the time allotted for task completion and testing. Stephen can complete his math test with few errors but it takes him longer than other students. His teacher gives him extra time, and he doesn't lose any credit.
Level of participation Adapt how a learner is involved in a task or activity. Pam is very shy about raising her hand in class, so the teacher allows her to write down the answer on a card. This makes Pam less anxious and more willing to participate.	Task size Adapt the number of items that a learner is expected to complete or master. Joe has difficulty completing the entire social studies assignment, so his teacher allows him to complete half. This maintains Joe's motivation to participate.	Output method Adapt how the learner can respond to instruction. Leslie's verbal explanations are often difficult to understand when she is asked to speak in front of the class. Her teacher allows her to write her comments and read them privately to the teacher.
Alternate goal Adapt goals or expectations while using the same materials. In social studies, Ceci is expected to locate just the provinces while others locate the capitals as well. When she is successful, she can work well during cooperative group activities.	Input method Adapt the way instruction is delivered. Tom has a hard time tolerating morning circle, often getting up and running away. He is allowed to sit at his desk to listen to circle activities or he can choose to review the wall schedule with a peer.	Increase rewards for acceptable behaviour Make positive behaviour more valuable than negative behaviour. Kendle dislikes completing math worksheets and often tosses them on the floor. She is allowed to earn extra minutes of recess for math work completion.
Alternate materials Provide different instructional materials and methods. John is in high school and at risk of early school leaving. He is introduced to a self-paced online course that allows him to see his accomplishments clearly. He is more motivated to earn high school credits.	Level of support Increase the amount of assistance provided. José works with a peer tutor for extra practice in reading gradelevel material.	Remove or restrict Take away desired objects or activities when problem behaviour is observed. George has difficulty with math but can do the grade-level work if he is motivated. He and his teacher agree that he will lose five minutes of computer time any day he refuses to complete the end-of-class quiz.

^{4.} Adapted with permission from Sandi Cole et al., *Adapting Curriculum and Instruction in Inclusive Classrooms: A Teacher's Desk Reference*, 2nd edition (Bloomington, IN: Indiana Institute on Disability and Community, 2000), p. 39.

Choosing adaptations

When choosing instructional adaptations, consider these types of questions.

- Will this adaptation improve the student's level of participation in class?
- Is this adaptation the least intrusive option (i.e., least interfering or restrictive)?
- Will this adaptation give the student a variety of options, or will the same adaptation be used for all or most activities (e.g., always do fewer number of tasks or work at different level of difficulty)?
- Does the adaptation ensure an appropriate level of difficulty and challenge?
- Can the student use this adaptation in other classes or activities?
- Can the adaptation lead to self-management or future independence?

Developing school-wide supports

School-wide supports and policies assist students who are struggling academically. For example:

- learning centres with assigned staff and flexible hours where students can receive extra teaching as needed
- tutorials and seminars on specific topics such as study skills, managing test anxiety, keyboarding skills
- homework policies and related supports such as after-school homework clubs and homework hotlines or Web sites
- access to assistive technology for learning such as scan-and-read software and video equipment
- peer tutoring programs
- community volunteers and mentors.

Building staff capacity

Teaching staff need to work together to develop and enhance the school's capacity to meet the diverse learning needs of all students. To build their understanding of and skills in differentiated instruction, teachers need access to research, resources, professional development and opportunities for professional dialogue with colleagues.

The Professional Learning Communities (PLC) model offers a framework that schools can use to build the staff's capacity to meet students' diverse needs. PLCs provide a means for staff to collaborate and explore questions such as the following.

- What are our current school-wide goals to improve learning for all students?
- What professional development activities will help us achieve our goals?
- How will we work together to achieve the goals?
- What will we implement in our school's instructional programming?
- When will we meet to plan, share and assess?
- How will we assess our success in enhancing student learning?
- How will we refine, share and celebrate our efforts to meet students' diverse learning needs?