Reach Every Student Through

Differentiated Instruction

WINDOWS OF OPPORTUNITY

As students enter adolescence, they are making what some researchers assert is the most challenging transition of their lives. To send them on that transition equipped with self-knowledge of what they are good at, what they enjoy, how to learn something that is challenging for them, and conditions under which they can do their best work, is to provide the best possible support for their success in school and beyond.

When we find out who our students are, we can support them in their learning, and everyone benefits. Differentiated instruction (DI) allows us to see learning from a variety of perspectives and provides countless, unexpected teachable moments that we may otherwise miss.

This brochure is intended to support all educators who are new to DI and those who are refining their DI skills. It is just one of several resources in a multi-faceted professional learning strategy. Our objective is that the brochure will serve as an introduction to differentiated instruction as an effective way to support all students by providing opportunities that assist them in taking more responsibility for how they learn and, in turn, what they learn.

The Ministry of Education would like to acknowledge the Teachers' Federations for the ongoing input and feedback that helped to create this brochure. Thank you to the educators who provided their expertise and experience to ensure that this is a rich and practical resource.

Essentials

DIFFERENTIATED INSTRUCTION: A DEFINITION

Differentiated instruction is effective instruction that is responsive to students' readiness, interests and learning preferences.

All three characteristics of the learner—readiness, interests and preferences—allow educators and students to build new learning through connections to existing knowledge and preferred ways of working.

The process of differentiating instruction for students depends on the ongoing use of assessment to gather information about where students are in their learning and about their readiness, interests and learning preferences. Teachers use this information to vary the learning environment, instruction, and assessment and evaluation.

Readiness refers to the student's starting point for learning, relative to the concept being studied.

Attention to students' *interests* enhances the relevancy of learning by linking new information to students' experience and enthusiasm.

Learning preferences are the many different ways in which learners prefer to acquire, process and work with information. Learning preferences are influenced by gender, culture, the classroom environment, learning styles and multiple intelligences.

By attending, at various times, to a learner's readiness, interests and learning preferences, we increase the likelihood that students will be able to build new learning through connection to existing knowledge and preferred ways of working and that they will be engaged in the learning.

A LONG HISTORY

Differentiated, or responsive, instruction is not new. Concern for attending to the needs of particular students is captured in writings about teaching in ancient Greece and Egypt, in descriptions of life in the one-room schoolhouse and in every instance where instructional plans are adjusted to better meet the needs of an individual learner.

Of course, if it were easy to address individual needs, there would be no need for this brochure! Effective differentiated instruction requires that educators take thoughtful and deliberate actions to address the particular needs of students and keep in mind a number of essential concepts:

Essentials of Differentiated Instruction

- √ Knowledge of students' readiness to work with concepts, their interests and their learning preferences and seeing all preferences as equally valid.
- √ Teachers use a repertoire of instructional and assessment strategies to meet the needs of different learners.
- √ All differentiated instruction activities are equally engaging and respectful and take approximately the same amount of time.
- √ Unless students are on an IEP, all differentiated instruction is based on the same curriculum expectations and all students have opportunities to achieve the same high standards of performance.
- √ Students are assessed before, during and after their learning. Assessments inform next steps for both teacher and student.
- √ Even if students have choices in the ways that they demonstrate their learning, teachers are able to use a common assessment tool (e.g., a rubric) so that all student work is judged against the same assessment criteria.
- √ A defining characteristic of a differentiated classroom is flexibility. Students work in short-term, flexible learning groups and educators are flexible in creating and altering instructional plans in response to learners.
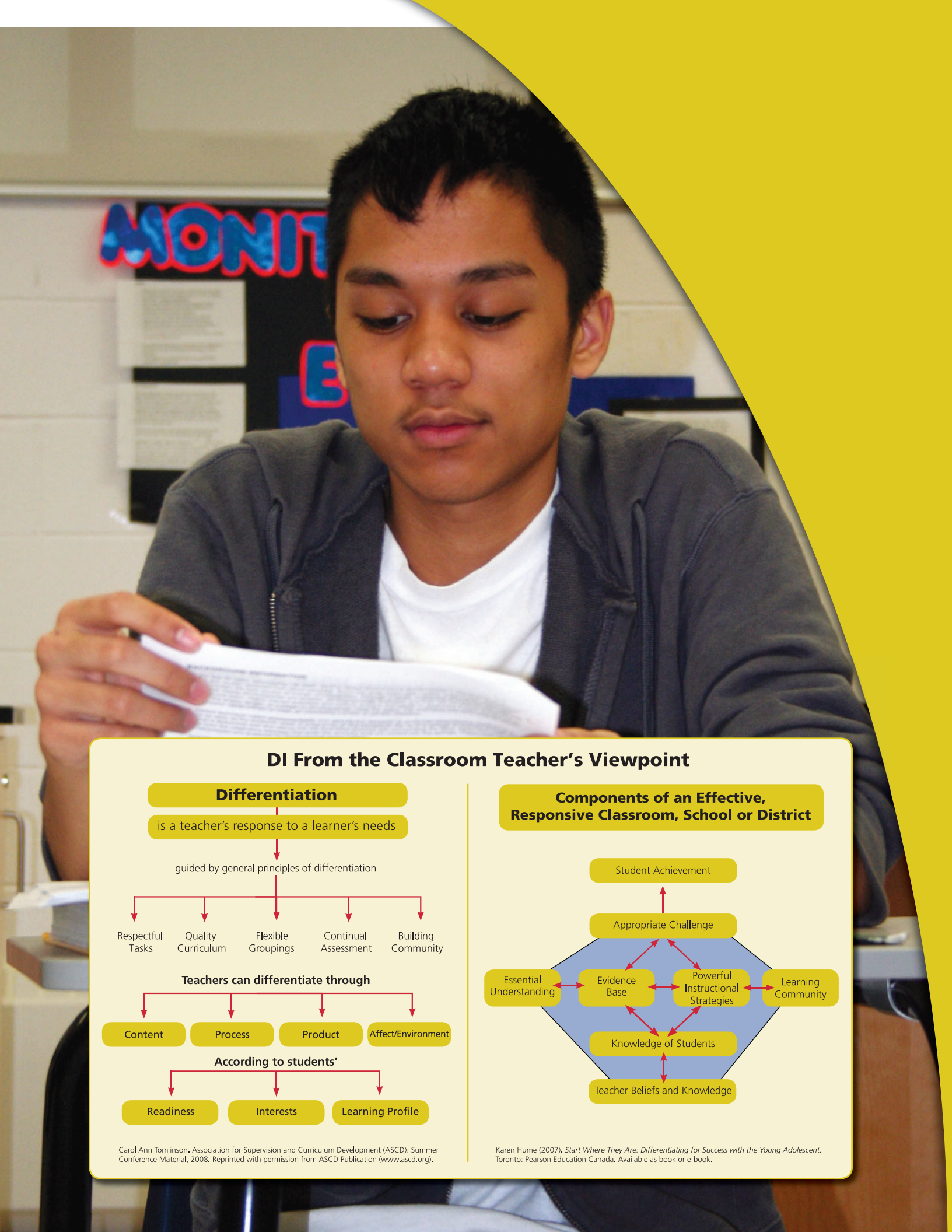
Significance

EXAMPLES OF RESEARCH SUPPORT FOR DIFFERENTIATED INSTRUCTION
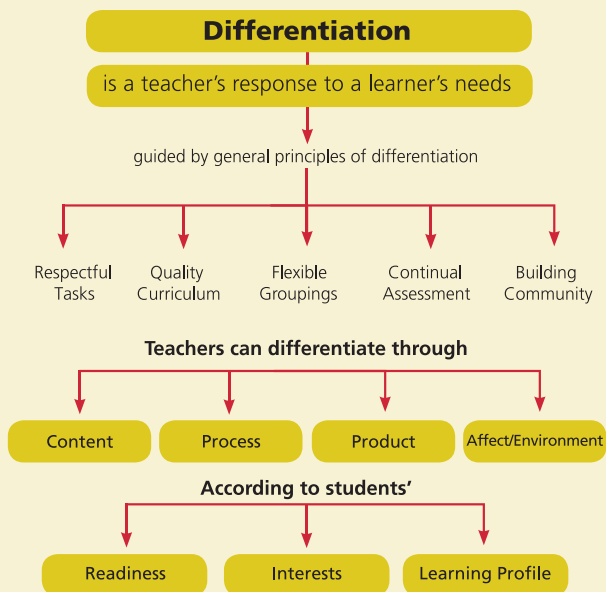
The following are the findings of researchers related to the importance and effectiveness of differentiation in our classrooms.

DI PRINCIPLE	SUPPORT — RESEARCH
Differences in how students learn have a significant impact on achievement.	"When teachers recognize diversity in their students, in terms of how and what they identify with and how they learn, and when this recognition is reflected in how teachers teach, students are free to discover new and creative ways to solve problems, achieve success, and become lifelong learners." (Ferguson et al., 2005)
Learning begins from a student's point of readiness.	"We know that learning happens best when a learning experience pushes the learner a bit beyond his or her independence level. When a student continues to work on understanding and skills already mastered, little if any new learning takes place. On the other hand, if tasks are far ahead of a student's current point of mastery, frustration results and learning does not." (Howard, 1994; Vygotsky, 1962)
A safe, non-threatening and respectful learning environment is vital to student achievement.	"A student's 'functioning' in school is inextricably linked with his or her sense of belonging and connection to the school environment and his or her relationships with peers and teachers within it." (Schonert-Reich, 2000)
High expectations of success by all are matched by tasks that provide a high degree of challenge for the individual.	"When goals are clear, feedback relevant, and challenges and skills are in balance, attention becomes ordered and fully invested." (Csikzentmihalyi, 1997)
Essential concepts can be effectively presented in a variety of forms.	"One is struck by the superior findings reported for visual and dramatic instruction over verbal instruction in terms of the percentage of information recalled by students one year after the completion of the unit." (Marzano, 2003, reporting on research by Nuthall)

A wide variety of research studies point to differentiated instruction as a manageable, creative, practical and proactive response to the quest for enhanced student engagement and achievement in the face of significant student diversity.
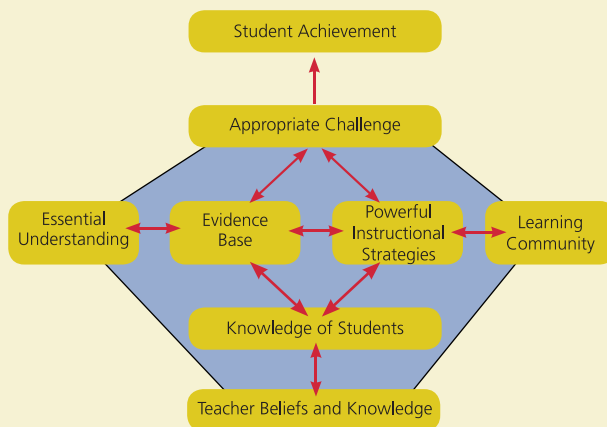
Csikzentmihalyi, M. (1997). *Finding Flow: The Psychology of Engagement with Everyday Life.* New York, NY: Basic Books.
Ferguson, Bruce, Tilleczek, K., Boydell, K., Anneke Rummens, J. (2005). *Early School Leavers: Understanding the Lived Reality of Student Disengagement from Secondary School.* SickKids Toronto.
Howard, P. (1994). *An Owner's Manual for the Brain.* Austin, TX: Leonian Press.
Marzano, Robert (2003). *What Works in Schools: Translating Research Into Action.* Alexandria, Virginia: ASCD.
Schonert-Reich, K.A. (2000). *Children and Youth at Risk, Some Conceptual Considerations.* Prepared for the Pan Canadian Education Research Symposium, Children and Youth at Risk, Council of Ministers of Education, Canada.
Vygotsky, L. (1962). *Thought and Language.* Cambridge, MA: MIT Press.

DI From the Classroom Teacher's Viewpoint

Differentiation

is a teacher's response to a learner's needs

guided by general principles of differentiation

| Respectful Tasks | Quality Curriculum | Flexible Groupings | Continual Assessment | Building Community |

Teachers can differentiate through

Content — Process — Product — Affect/Environment

According to students'

Readiness — Interests — Learning Profile

Carol Ann Tomlinson. Association for Supervision and Curriculum Development (ASCD): Summer Conference Material, 2008. Reprinted with permission from ASCD Publication (www.ascd.org).

Components of an Effective, Responsive Classroom, School or District

Student Achievement

Appropriate Challenge

Essential Understanding — Evidence Base — Powerful Instructional Strategies — Learning Community

Knowledge of Students

Teacher Beliefs and Knowledge

Karen Hume (2007). *Start Where They Are: Differentiating for Success with the Young Adolescent*. Toronto: Pearson Education Canada. Available as book or e-book.

DI in Action

DIFFERENTIATED INSTRUCTION IN THE CLASSROOM

Differentiated instruction is *not* individualized instruction. Instead, it involves considering and selecting from a variety of instructional approaches and making frequent use of flexible, short-term groups to address a variety of learner needs and preferences.

Some DI involves prior planning and formalized structures (e.g., designing a choice board or a tiered assignment); some DI requires less prior planning or results from decisions made on the spot based on emerging student needs (e.g., choice of group size, think-pair-share, note-taking options such as a web or outline).

SOME EXAMPLES[‡]

DI in Geography
Students work in small, readiness-based groups to sort images and written statements into two piles; one representing the characteristics of urban environments, the other of rural environments. Students complete a graphic organizer where, depending on readiness, they either use the sorted images and text to deduce the criteria that distinguish one environment from the other (e.g., differences in population density, types of employment), or they give examples for provided criteria.

DI in English
Students studying effective presentation techniques individually choose to focus on a speaker's use of images; inflection, pitch and pace; level of language and use of written text; or body language. After listening to and viewing an oral–visual presentation, students work in like groups (e.g., interest, learning style) to prepare a list of what they observed. Students then meet in mixed groups to prepare a comprehensive list, graphic organizer, or brief presentation summarizing effective presentation techniques.

DI in Business
Students choose an area of personal interest to develop a fictitious business. The various forms of ownership are explained (e.g., sole proprietorship, partnership, corporation, cooperative, franchise) and students are asked to select the form they think would be best suited to their business. Students then work individually, with a partner or in a small group to research their particular form of ownership and respond to the questions on a provided template. This task might also be differentiated by readiness if questions of greater or lesser complexity are scaffolded according to each learner's needs.

DI in Science
Students participate in a class brainstorm of the possible factors that affect soil composition and fertility. Students individually select the factor that most interests them and then design and conduct an investigation to examine their chosen factor. Mini-lessons are provided on experimental design along with investigation recording forms that support learners according to their needs for more or less structure.

[‡]Other subject specific examples and resources are currently under development and will be shared with educators across the province.

Offering Choice

ENGAGING STUDENTS BY OFFERING CHOICE

"Choice makes the young adolescent's desire for control and freedom possible—without the power struggle. Choice builds confidence and fosters independence. Choice tells students their interests are important and allows them to demonstrate responsibility." – Hume

Manageable Choice Is the Goal

All learners want to feel they have some control over their lives and will make more of an effort when their desire for choice is addressed. It is important that educators clearly define and model choices so that neither students nor educators become overwhelmed. Young adolescents need practice and experience working with a prescribed range of choices before they will be able to make informed choices independently.

Teach Students to Make Good Choices

√ Explicitly teach students the skills necessary to work effectively in a group or with a partner.
√ Help students know their learning strengths and preferences by using inventories, observation and discussion.
√ Encourage and provide opportunities for students to reflect on the outcome of their choices, so they can get better at making good ones. For example, use learning stations to have all students try all choices, then ask, "Which one helped you to learn?" *instead* of "Which did you enjoy the most?"
√ Introduce choices in small ways at first:
  • Ask if students prefer to work individually or with a partner.
  • Let them decide the order of completion when multiple tasks need to be done.
  • Allow them to answer one of the test questions by writing or by drawing.

Provide Appropriate Choices

All choices need to satisfy the same expectation, take roughly the same amount of time and be equally respectful of all learners. Create or select two, three or four well-constructed choices that address both the demands of subject disciplines *and* the readiness, interests or learning preferences of students. Remember to ensure that students know how to accomplish the process skill for any choice offered (e.g., writing a script, creating a role play, filming a documentary). Also, ensure that all choices are assessed using the same assessment criteria.

Differentiated instruction involves:
  • *Using assessment to gather information about students' readiness, interests and learning preferences*
  • *Using this information to differentiate the learning environment, instruction, and assessment and evaluation*
  • *Selecting from a varied repertoire of strategies to meet the particular needs of students*

A Differentiated Instruction Continuum

Developing Instructional Routines and Skills	Expanding Instructional Routines and Skills	Developing the Routines, Habits and Skills for Differentiated Instruction	Sustaining a Differentiated Instruction Culture in the Classroom
I design instruction, assessment, evaluation and the learning environment for the class as a whole based on curriculum expectations and my own strengths and preferences.	I design instruction, assessment, evaluation and the learning environment based on curriculum expectations and a general sense of the learning needs of the class.	I design instruction, assessment, evaluation and the learning environment based on curriculum expectations and a general sense of the learning needs of the class. I try to design a variety of options for my students.	I design instruction, assessment, evaluation and the learning environment based on curriculum expectations and on the specific learning needs of the students in the class. I try to ensure that the learning experiences I provide are a "good fit" for each of my students.
All students learn and demonstrate their learning in the same way all or most of the time.	Students experience, over time, a variety of ways to learn and/or ways to demonstrate their learning.	Students have a choice of ways to learn and/or ways to demonstrate their learning on an ongoing basis.	Students are routinely provided with, or choose when appropriate, ways to learn and/or ways to demonstrate their learning that are designed for their particular learning needs.
Examples: Anticipation guide, exit card, graphic organizers, supplementary materials	Examples: Activities for all that address different learning styles or intelligences on different days, multiple entry points for all Over time, varied supplementary materials	Examples: Differentiation structures that offer choice: centres, choice boards, RAFT* assignments Choice of supplementary materials * Role, audience, format, topic	Examples: Differentiation structures such as RAFT* and tiered assignments Provision for student choice of supplementary materials based on their needs, as appropriate * Role, audience, format, topic

Same for All Students		*Different Options for Different Students*	

LITTLE DIFFERENTIATION   **MUCH DIFFERENTIATION**

Implementing DI

IMPLEMENTING DIFFERENTIATED INSTRUCTION IN THE CLASSROOM

Begin planning your approach to differentiated instruction by referring to the continuum on the left. Consider where you are now and the steps you could take to increase your *effectiveness* and your responsiveness to learners' needs.

Developing Instructional Routines and Skills

Identify your own learning preferences and those of your students by using inventories, observations in a variety of learning situations and discussion. Deliberately plan part of a lesson so that it appeals to a learning preference that you do not usually address.

Expanding Instructional Routines and Skills

Determine ways of learning that motivate your students the most. Over several days, provide the class with learning experiences that introduce them to different ways of learning and allow you to observe which opportunities work for which students. For example, using a multiple intelligences approach, engage students in learning that is primarily visual/spatial, follow up with opportunities that are kinesthetic and interpersonal, and then provide experiences that focus on logical/mathematical, intrapersonal and verbal/linguistic intelligences. This may be done using a centres/stations approach in which all students have experiences at all centres over a period of several days.

Developing the Routines, Habits and Skills for Differentiated Instruction

Begin by providing a single alternative to a standard assignment, making sure that each alternative is equally respectful, takes roughly the same amount of time and satisfies the same expectations. Later, provide a few alternatives/options, supporting students as necessary as they work at their choices. Create an assessment that will allow you to give meaningful feedback to the student regardless of the choice made, and the student to engage in meaningful assessment as learning.

Sustaining a Differentiated Instruction Culture in the Classroom

Routinely encourage student reflection and involve students in activities that require them to engage in assessment as learning. Talk with students about times they will want to use areas of strength. Challenge students to stretch beyond their comfort zone and experiment with other ways of learning when they are working on concepts that they understand.

Along with your students, reflect on what helps to engage them and respond by refining your instructional approaches.

Resources

FURTHER READING RESOURCES ON DIFFERENTIATED INSTRUCTION

Benjamin, Amy (2005). *Differentiated Instruction Using Technology: A Guide for Middle and High School Teachers.* New York, NY: Eye on Education. How to use electronic conferencing, databases, PowerPoint presentations, and the Internet to create differentiated activities and tests.

Earl, Lorna (2003). *Assessment As Learning: Using Classroom Assessment to Maximize Student Learning.* Thousand Oaks, California: Corwin Press. Looks at ways to involve students in the assessment process in order to motivate, monitor and extend learning.

Hume, Karen (2008). *Start Where They Are: Differentiating for Success with the Young Adolescent.* Toronto, Ontario: Pearson Education Canada. Combines theoretical and practical information about differentiation as the framework for an effective classroom for young adolescents; includes learning preference inventories and several dozen modifiable blackline masters.

Marzano, Robert (2003). *What Works in Schools: Translating Research into Action.* Alexandria, Virginia: ASCD. Provides a synthesis of the research into the school, teacher and student factors affecting student achievement and summarizes implications for classroom practice.

Northey, Sheryn Spencer (2005). *Handbook on Differentiated Instruction for Middle and High Schools.* New York, NY: Eye on Education. Tips are organized according to differentiation of content, process or product; examples are provided from a variety of subject areas.

Tomlinson, Carol Ann (2001). *How to Differentiate Instruction in Mixed Ability Classrooms.* Second Edition. Alexandria, Virginia: ASCD. Practical examples that demonstrate how to use students' readiness levels, interests and learning preferences to address student diversity.

Tomlinson, Carol Ann (1999). *The Differentiated Classroom: Responding to the Needs of All Learners.* Alexandria, Virginia: ASCD. Sets out Tomlinson's model and provides the rationale for differentiated instruction. Includes differentiation structures, with classroom examples.

Wormeli, Rick (2006). *Fair Isn't Always Equal: Assessing & Grading in the Differentiated Classroom.* Portland, Maine: Stenhouse. Deals with the assessment issues in our classrooms, including whether to grade homework, how to respond to requests for redos and how to record grades in a differentiated classroom.

The ability to systematically and thoroughly meet the needs of the individual learners in your care is central to the important work you do as an educator. Thank you for that work. We look forward to supporting you in your continuing efforts to reach every student.

Ontario