KNOWING AND RESPONDING TO LEARNERS – A DIFFERENTIATED INSTRUCTION EDUCATOR’S GUIDE (2016)

REACH EVERY STUDENT
An important note to readers

Knowing and Responding to Learners – A Differentiated Instruction Educator’s Guide (2016) is the core component of the Differentiated Instruction Educator’s Package originally developed in 2010 and revised, in part, in 2016.

The components of the 2016 Differentiated Instruction Educator’s Package include:

1. Knowing and Responding to Learners – A Differentiated Instruction Educator’s Guide (revised, 2016)

2. The Differentiated Instruction Scrapbook (2010)
   - A collection of ready to use differentiated instruction tools and templates

3. Differentiated Instruction Reference Cards (revised, 2016)
   - Card 1—Side A: The Complexity of Learning and Teaching
   - Card 1—Side B: Differentiated Response – Planned and Adaptive
   - Card 2—Side A: Students, Structures and Strategies
   - Card 2—Side B: Key Features of Differentiated Instruction

Note: These Reference Cards are also included on pages 58-61 of the Knowing and Responding to Learners – A Differentiated Instruction Educator’s Guide (2016).

All components of the Differentiated Instruction Educator’s Package (2016) can be accessed on-line at www.edugains.ca or at www.learnteachlead.ca.

NOTE: This symbol indicates that the identified information is included in the Differentiated Instruction Scrapbook and ready for your use.

NOTE: This symbol indicates that the identified information is provided on the Differentiated Instruction Reference Cards.
Introducing Differentiated Instruction
1. Introduction to Differentiated Instruction
2. The Complexity of Learning and Teaching
3. Definition of Differentiated Instruction
4. Why Differentiate?
5. The Differentiated Instruction Continuum—Examining Your Practice
6. The Differentiated Instruction Commitment

Complexity of Learning and Teaching

Differentiated Response – Planned and Adaptive (in the moment!)

by using conversations, observations and products to find out about:

- INTERESTS
- READINESS
- LEARNING PREFERENCES

one or more of:

- THE WAY STUDENTS LEARN
- THE WAY STUDENTS DEMONSTRATE LEARNING
- THE CONDITIONS FOR LEARNING
- ENTRY POINTS FOR LEARNING or TOPIC
Differentiated instruction (DI) is not new. Concern for attending to the strengths and 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.

Effective differentiated instruction requires that educators take thoughtful and deliberate actions to address the particular needs of students. Differentiation allows us to see learning from a variety of perspectives and provides countless, unexpected teachable moments that we may otherwise miss.

**Underlying Principles of Differentiated Instruction**

Differentiated instruction is a cyclical process of finding out about the learner and responding by differentiating. As we continue to learn more about the learner, we respond by differentiating instruction with increased precision and effectiveness.

Unless students are on an Individual Education Plan (IEP) that has provisions for modifications to curriculum expectations or alternative learning expectations, all differentiated instruction is based on the same curriculum expectations and all students have opportunities to achieve the same high standards of performance.

Teachers consider many aspects of learning and teaching as they move from knowing the learner to responding by differentiating. The Complexity of Learning and Teaching graphic captures a variety of elements, including differentiated response, that contribute to effective and responsive classroom practice.

The Complexity of Learning and Teaching

Differentiated instruction is...

... adapting instruction and assessment in response to differing student interests, learning preferences, and readiness in order to promote growth in learning.

... not individualized instruction; it is responding to varying student strengths and needs by providing a balance of modelled, shared, guided, and independent instructional strategies.

When we respond to student needs, we differentiate, to some extent, some of the time. For optimal success, we need to be aware of the decisions that we make and take deliberate action to meet the needs of all learners. Ultimately, our aim is to shape the learning experience so that it is appropriate to the learning preferences, interests and/or readiness of each student.

“Differentiation is an organized yet flexible way of proactively adjusting teaching and learning to meet kids where they are and help them to achieve maximum growth as learners.”

Carol Ann Tomlinson, 1999
DEFINITION OF DIFFERENTIATED INSTRUCTION

<table>
<thead>
<tr>
<th>DI means…</th>
<th>DI does not mean…</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Flexible, short-term groupings that allow students to work with a</td>
<td>• Labelling students or grouping by ability</td>
</tr>
<tr>
<td>variety of peers with the same or different strengths and interests</td>
<td></td>
</tr>
<tr>
<td>• Engaging and interesting tasks (that address the same curriculum</td>
<td>• Confining some students to low level, repetitive or rote tasks while others</td>
</tr>
<tr>
<td>expectations) based on student learning preferences, interests and</td>
<td>engage in higher-order thinking</td>
</tr>
<tr>
<td>levels of readiness</td>
<td></td>
</tr>
<tr>
<td>• A reasonable number of well-constructed choices that address</td>
<td>• Unlimited freedom for students to choose whatever they would like to do on any</td>
</tr>
<tr>
<td>identified needs/ strengths of students</td>
<td>day</td>
</tr>
<tr>
<td>• Students working on the same curriculum expectations in various</td>
<td>• Different students working on different expectations with varying success</td>
</tr>
<tr>
<td>ways with common criteria for success</td>
<td>criteria (e.g., different rubrics)</td>
</tr>
<tr>
<td>• Students learning about themselves to help them make informed</td>
<td>• Teachers assuming the responsibility for making all decisions regarding</td>
</tr>
<tr>
<td>choices and ‘own’ their learning</td>
<td>student choice</td>
</tr>
<tr>
<td>• Routines, procedures, and classroom agreements are in place</td>
<td>• A chaotic or unstructured classroom environment</td>
</tr>
</tbody>
</table>

“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)
...To help all students learn

...We differentiate our instruction because doing so allows us as teachers to grow in our ability to “read our students” and then adapt our practice so we effectively reach all students.

...To increase student motivation and achievement

...We differentiate our instruction because when our students receive the appropriate levels of challenge and support, they are engaged, motivated and their achievement improves.

...To connect with adolescent learners

...We differentiate our instruction because doing so allows us to forge strong connections between our subject and our students, and that improves student learning.

...To help adolescents become independent learners

...We differentiate our instruction because when students find out about themselves as learners, they become more independent, and when they work as responsible members of a community, respecting and affirming the diversity of others, discipline problems decrease.

...To increase teacher satisfaction and efficacy

...We differentiate our instruction because some of the enthusiasm and pleasure we feel in teaching is renewed when we work creatively and see ourselves making a difference.
The first step in differentiating instruction is to examine current practice. The chart below describes effective teaching that ranges from whole class instruction to sustaining a differentiated instruction culture in the classroom. Consider where you are now and the steps you could take to increase your responsiveness to learners’ strengths and needs.

### A Differentiated Instruction Implementation Continuum

<table>
<thead>
<tr>
<th>Same for All Students</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developing Instructional Routines and Skills</strong></td>
<td><strong>Teachers</strong></td>
</tr>
<tr>
<td></td>
<td>• Design instruction, assessment, evaluation, and the learning environment for the class as a whole based on curriculum expectations and my own strengths and preferences.</td>
</tr>
<tr>
<td><strong>Expanding Instructional Routines and Skills</strong></td>
<td>• Design instruction, assessment, evaluation, and the learning environment based on curriculum expectations and a general sense of the learning needs of the class.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Different Options for Different Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developing the Routines, Habits and Skills for Differentiated Instruction</strong></td>
<td><strong>Teachers</strong></td>
</tr>
<tr>
<td></td>
<td>• Design instruction, assessment, evaluation, and the learning environment based on curriculum expectations and a general sense of the learning needs of the class.</td>
</tr>
<tr>
<td></td>
<td>• Try to design a variety of options for students.</td>
</tr>
<tr>
<td><strong>Sustaining a Differentiated Instruction Culture in the Classroom</strong></td>
<td>• Design instruction, assessment, evaluation, and the learning environment based on curriculum expectations and on the specific learning needs of the students in the class.</td>
</tr>
<tr>
<td></td>
<td>• Adapt plans ‘in the moment’ so that learning experiences provided are a “good fit” for each student.</td>
</tr>
</tbody>
</table>
A commitment to implementing differentiated instruction is a pledge to engage in the achievement of students, professional development and a collaborative process that ensures learning and success for all. Committing to differentiated instruction involves:

• Using assessment, including student voice, to learn 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

• Adjusting plans ‘in the moment’ to respond to unanticipated strengths and needs surfacing from assessment

“When I am able to have a choice in how to learn, I know that I am going to do better....”

Student
Knowing the Learner
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**Complexity of Learning and Teaching**

Differentiated Response – Planned and Adaptive (in the moment!)

- ASSESS to KNOW THE LEARNER
- READINESS
- INTERESTS
- LEARNING PREFERENCES
- ACCESS STUDENT VOICE

-複雜度學習和教學

差異化反應 – 計劃和適應性（當事時！）

- ASSESS to KNOW THE LEARNER
- READINESS
- INTERESTS
- LEARNING PREFERENCES
- ACCESS STUDENT VOICE
When we find out who our students are, we can support them in their learning.

Differentiation involves using assessment to gather information about student:
  • Readiness
  • Interests
  • Learning preferences

Differentiated instruction is teaching with student differences in mind. It requires us to have an understanding of our students as learners so that we can purposefully plan instruction, assessment and evaluation to best meet their diverse strengths and needs.

When students and teachers work together to find out about readiness, learning preferences and interests, students come to know themselves better. Students who have a clearer understanding of themselves are prepared to make more informed choices when differentiated options are available. Students who know themselves as learners are better able to advocate for their learning needs.

“… it is paramount to be able to discover where students are at in terms of their understanding of the subject material … in order to be able to tier assignments.”

Teacher
Student Readiness

Knowledge of a student’s readiness to learn a particular concept is critical when preparing to differentiate instruction. For example, some students may be ready to work with complex fractions; others may require more practice with simple fractions before moving on. Readiness is different from ability and much more helpful to our work. If we have some prior knowledge, a point of connection, or even a positive feeling about the new material, our potential to learn is enhanced. Readiness varies for each of us whenever we are learning something new.

When we know a student’s readiness for a particular concept, we can introduce and work with that concept according to student need. When we differentiate tasks according to a student’s readiness, we are creating tasks that are a closer match to the student’s skills and understanding of the topic than we would be if we assume that all students come to a new concept with the same background knowledge.

To determine students’ readiness for a concept, we assess for learning (i.e., diagnostic and formative assessment). We might administer a quick pre-assessment to determine what our students understand about the topic or we may observe students as they brainstorm or complete a carousel activity. Other options include examining student work such as prior assignments, anticipation guides or concept maps. We may use exit cards (e.g., an index card or sticky note) to simply ask students what they know and can do or to provide a response to an assessment question.

“The primary benefit that we’ve seen in our classrooms through the readiness activities, is that the students are able to self-assess… the students are engaged in their learning and on a day-to-day basis they come to class and are excited.”

Teacher
We can use the results of assessment to create short-term flexible learning groups that allow each student to develop new understandings about the topic from his or her point of readiness. When differentiating by readiness, it is important to ensure that all tasks are interesting, engaging and respectful of all learners.

Some ways we can differentiate based on readiness include varying the:

- Pace
- Level of complexity
- Degree of independence
- Amount of structure provided

We may also choose to have some students start at a different entry point (e.g., reviewing for some and extending learning for others).

“Ensuring challenge is calibrated to the particular needs of a learner at a particular time is one of the most essential roles of the teacher and appears non-negotiable for student growth.”

Tomlinson, in Hattie, 2012

“(Assessing) before learning unveils the student’s prior knowledge and experiences... to determine the individual’s readiness level and to identify the appropriate entry point for instruction.”

Chapman and King, 2005
Student Interests

A second piece of information that helps us in our teaching is knowledge of our students’ interests so that we can plan for engaging and meaningful learning opportunities. Attending to students’ interests ignites their motivation to learn. Meaningful learning happens when new ideas are personally relevant, and relevance occurs when new information links to something the student already knows.

Student interests are relatively easy to determine. Questions asked before new learning begins allow us to group students according to aspects of the learning that are of particular interest, and beginning of year or semester interest questionnaires will help us guide students when they are selecting material for personal and project-based investigations.

Other ways to find out about the interests of students include surveys, exit cards, partner introductions, asking questions, and asking students to connect their interests with topics of study. Some examples of differentiating by interest include providing a choice of topic, novel, or context for application (e.g., problem-solving in sports, design, or construction).

When teachers consider the interests of their students and provide relevant connections to the learning, students feel that their diversity is recognized and valued.

See Differentiated Instruction Scrapbook: Knowing the Learner—Student Interests

“Attention to students’ interests enhances the relevance of learning by linking new information to students’ experience and enthusiasm.”

Teacher
Knowing the Learner—Student Interests

Responding to differences in readiness helps students feel capable and increases their motivation to learn. Addressing student interests and learning preferences (e.g., through flexible grouping and providing choice) provides relevance and autonomy—factors key to student engagement.

Willms and Friesen (2012); Marzano and Pickering (2010)

“There is absolutely no need to teach a concept in eight or nine different ways. At the same time, it is equally unreasonable to expect that all students will learn all concepts through the two intelligences that dominate our educational system, namely verbal-linguistic and logical-mathematical.”

**Student Learning Preferences**

Learning preferences refer to tendencies towards particular ways of processing what is to be learned. They include learning styles as well as intelligence and environmental preferences. Since our learning preferences differ from context to context, it is important that students are not ‘labeled’ based on a preference and grouped accordingly over periods of time. When students have ongoing opportunities to think and talk about the ways they learn best, not only do they become more aware of their strengths and needs but we as teachers become sensitive to our students’ individual differences.

**Learning style preferences** describes how we prefer to acquire, process, and remember new information. We often think of learning style preferences according to the senses – we may be predominantly visual, auditory or kinesthetic learners, we may choose different styles for different tasks, or we may opt to use a combination of styles.

As teachers, we need to think about how we present information and learning opportunities for our students. Try sorting a couple of days of activities into whether they were predominantly visual, auditory, kinesthetic, or a combination of styles. If there is one preference that is receiving less emphasis than others, experiment with adding some whole-class activities in the missing style.

**Intelligence preferences** are based on the multiple intelligences work of Howard Gardner and the triarchic intelligences work of Robert Sternberg (2001). While learning styles are how we like to work with information, intelligences are what Gardner calls the formats in which our mind thinks. (For further information on intelligence preferences, see Differentiated Instruction Scrapbook— Knowing the Learner.)

**Environmental preferences** involve the conditions in which students learn best. Some students prefer silence when working; others prefer sound. Some prefer a structured, brightly lit environment; some prefer a casual corner with subdued lighting.

**Other learning preferences:** Preferences may also be influenced by gender or culture. However, as much as there may be patterns that emerge within particular groups, there is always great variance as well. For this reason it is important to develop an understanding of the students that we teach so that we can create a classroom flexible enough for them to work in ways in which they are most productive.

**Learning Preferences Inventories**

Talking with students on an ongoing basis and observing their response as they engage in different learning experiences provides valuable learner and context-specific information. Alternatively, a number of free inventories are available on-line.

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See Differentiated Instruction Scrapbook: Knowing the Learner—Learning Preferences and Learning Preferences Inventories and Surveys
Differentiated instruction depends on the ongoing use of assessment to gather information about student readiness, interests and learning preferences. Teachers use this information to differentiate the learning environment, their instruction and their assessment and evaluation.

If teachers have accurate, timely and reliable information about what their students know and are able to do, and about optimal conditions that will foster and support their learning, then teachers can adjust the teaching and learning process to help students learn effectively.

Assessment for learning that takes place at all stages of the learning process provides the foundation for purposeful differentiation.

**Differentiated Response – Planned and Adaptive (in the moment!)**
Assessment for Learning

Assessment for Learning is designed to give teachers information to adapt and differentiate teaching and learning activities. It acknowledges that individual students learn in unique ways, but it also recognizes that there are predictable patterns and pathways that many students follow. It requires careful design on the part of teachers so that they use the resulting information to determine what students know as well as how, when, or whether students apply what they know.

Teachers use this information to streamline and inform instruction and resource selection and to provide precise feedback to students to help them advance their learning. Assessment for Learning occurs before and during learning.

Assessment before instruction (diagnostic assessment) provides teachers with information about students’ readiness to learn new knowledge and skills and about their interests and attitudes. This information establishes the starting point for the new learning and helps teachers to plan differentiated learning tasks and assessments that meet students’ needs, interests and learning preferences. Teachers and students use this information to set appropriate learning goals.

Examples:

• Students complete a mind map or exit card to demonstrate their prior learning for a particular concept.
• Groups create a graffiti board of various concepts related to a topic or of ways to solve a particular mathematics or physics problem.
Assessment during instruction (formative assessment) is intended to give teachers and students precise and timely information so teachers can adjust instruction in response to individual student needs and students can adjust their learning strategies or set different goals. This use of assessment differs from assessment of learning (which occurs near or at the end of a period of learning) in that the information gathered is used for the specific purpose of helping students improve while they are still gaining knowledge and practising skills. The emphasis is on feedback and suggestions for improving. Teachers who view assessment as integral to learning engage students as collaborative partners in the learning process.

**Examples:**

- Students summarize their learning in a Think, Write, or Sketch-Pair-Share. As pairs share, the teacher clarifies and provides feedback as needed.
- Groups of students complete a task (e.g., presentation, demonstration, or illustration) and share with the class for feedback and clarification.

**Assessment as Learning**

Assessment as Learning is a process of developing and supporting metacognition (i.e., thinking about our thinking). Assessment as Learning focuses on the role of the student as the critical connector between assessment and learning. It occurs when students monitor their own learning and use the feedback from this monitoring to adjust, adapt, or change what they understand.

Teachers help students develop, practise and become comfortable with critically analyzing their own work and with reflection. When students are taught how to self-assess and provided with opportunities for self-assessment, they learn to articulate and advocate for the conditions that support their learning.

**Examples:**

- Students use a written log or a voice recording app to reflect on their work.
- Students use a checklist to self-assess their work, based on previously established success criteria.
Two tools designed to facilitate planning for differentiated instruction are the class profile and the individual student profile. Class and student profiles are ways to organize the ongoing collection of information about your students. Profiles are “living documents” in that they are both a reference tool for planning as well as a tracking tool to monitor progress, record additional information and plan subsequent instruction. Profiles can be updated as the school year, semester, or term progresses.

**Class Profiles**

A class profile provides the teacher with a snapshot of the strengths, needs, interests and/or readiness of the students in the class. It is a resource for planning that conveys a great deal of critical information at a glance.

*Examples:*
- *Class profiles can capture a single aspect (e.g., multiple intelligences) or a range of achievement data and characteristics.*

**Class Profile 1: Learning Preferences**

<table>
<thead>
<tr>
<th>Student</th>
<th>Learning Style</th>
<th>Multiple Intelligences</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>visual, kinesthetic</td>
<td>visual-spatial, logical-mathematical</td>
<td>works best in small groups</td>
</tr>
<tr>
<td>B</td>
<td>visual, kinesthetic</td>
<td>verbal-linguistic, interpersonal</td>
<td>works best individually or in pairs</td>
</tr>
<tr>
<td>C</td>
<td>visual</td>
<td>logical-mathematical, intrapersonal</td>
<td>works best individually</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Class Profile 2: Markbook or Spreadsheet Highlighting Mark Distribution

<table>
<thead>
<tr>
<th>Student</th>
<th>Task 1 Test</th>
<th>Task 2 Project / Demonstration</th>
<th>Task 3 Report / Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>55</td>
<td>65</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>75</td>
<td>70</td>
<td>68</td>
</tr>
<tr>
<td>C</td>
<td>95</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>D</td>
<td>40</td>
<td>40</td>
<td>55</td>
</tr>
<tr>
<td>E</td>
<td>60</td>
<td>58</td>
<td>55</td>
</tr>
<tr>
<td>F</td>
<td>68</td>
<td>65</td>
<td>60</td>
</tr>
</tbody>
</table>

- **Below Level 1**
- **Level 1**
- **Level 2**
- **Level 3**
- **Level 4**

## Class Profile 3: Secondary Sample Class Profile

<table>
<thead>
<tr>
<th>Student</th>
<th>Learning Profile</th>
<th>Strengths/ Areas of Need</th>
<th>Instructional Strategies, Resources; Assessment Tools; Accommodations</th>
<th>Evidence of Improved Learning</th>
<th>Adjustments in Instruction/ Other Interventions, if Needed</th>
<th>Available Supports and Resources</th>
<th>Other Relevant Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from *Learning for All, K–12, 2013*, p. 41, Ontario Ministry of Education)
Student Profiles

An individual student profile is a tool for compiling information that provides a comprehensive and precise picture of an individual student’s strengths and needs, as well as of the assessment and instruction practices that best suit the student’s learning preferences, interests and readiness. A profile may include items such as report card information, EQAO results, interests and aspirations, reading level assessments, and credit summary.

Student profiles are commonly used for students as they make the transition from Grade 8 to Grade 9.

Student Profile: Sample Grade 8 to 9 Transition Student Profile

<table>
<thead>
<tr>
<th>Grade 8 to Grade 9 Transition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student: D.O.B.: Elementary School: Secondary School: Transition Planning Team: Date:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENT’S STRENGTHS</th>
<th>STUDENT’S CHALLENGES</th>
<th>INTERVENTIONS TO DATE</th>
<th>Suggested Future Interventions (school)</th>
<th>Suggested Future Interventions (classroom)</th>
</tr>
</thead>
<tbody>
<tr>
<td> Attendance/ Punctuality</td>
<td> Attendance/ Punctuality</td>
<td> Attendance counsellor</td>
<td> Attendance counsellor</td>
<td> Class seating</td>
</tr>
<tr>
<td> Submitting assignments</td>
<td> Submitting assignments</td>
<td> Remedial support</td>
<td> Student Success Team</td>
<td> Clear expectations</td>
</tr>
<tr>
<td> Learning skills and work habits</td>
<td> Learning skills and work habits</td>
<td> Peer mentor</td>
<td> Peer mentor</td>
<td> Monitoring of homework</td>
</tr>
</tbody>
</table>

Note: A student profile template may have been previously developed at your school or in your board for teacher use and adaptation.
Responding by Differentiating
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   • Ways of Organizing for Differentiation—DI Structures
   • Key Features of Differentiated Instruction

4. Lesson Design

5. Getting Started
   • Implementing Differentiated Instruction
   • Creating an Environment to Support Differentiation
   • Providing Choice
   • Making the Most of Planning Time

Complexity of Learning and Teaching

Differentiated Response – Planned and Adaptive (in the moment!)

one or more of:

THE WAY STUDENTS LEARN

THE WAY STUDENTS DEMONSTRATE LEARNING

THE CONDITIONS FOR LEARNING

ENTRY POINTS FOR LEARNING or TOPIC
The What and How of Differentiation

When we know the learner’s strengths and needs (readiness, interests and learner preferences), we can respond by differentiating:

| What students learn about and where they begin learning (e.g., topic, entry point) | CONTENT |
| The ways we help students learn—through instruction and assessment (e.g., researching a topic at a learning centre, participating in a jigsaw, identifying similarities and differences) | PROCESS |
| The ways students demonstrate their learning—through assessment and evaluation (e.g., creating a product from a choice board, oral or written presentation) | PRODUCT |
| Conditions for learning (e.g., quiet or busy, alone or with others) | LEARNING ENVIRONMENT |

Responding by Differentiating involves:

Using appropriate, evidence-based strategies for instruction, assessment and evaluation;

Using structures or ways of organizing that facilitate student learning; and

Providing opportunities for choice and personal response, respectful tasks, a shared responsibility for learning and flexible learning groups (key features of differentiated instruction).

See Reference Cards: Differentiated Response – Planned and Adaptive
Core Questions

The following questions guide our decision-making as we plan instruction to meet the learning needs of our students.

The Learning Environment

• How can I set up the classroom for differentiation?
• What elements of the learning environment can I differentiate to help all of my students learn?

Instruction and Assessment

• How can I differentiate the ways that I help students learn new concepts?
• How can I differentiate the ways I assess student progress towards their learning goals?

Evaluation

• How can I differentiate the ways that students demonstrate what they understand and can do?

The questions serve to focus our thinking as we plan a differentiated approach—for a single task, a lesson or an entire unit.
When we plan for teaching and learning, whether we are planning for differentiation or not, it is critical to ensure that the focus for instruction, assessment and evaluation is aligned with the knowledge and skills related to the curriculum expectations chosen for that particular lesson or unit.

Wiggins and McTighe, in *Understanding by Design*, provide a sequence of questions as part of their framework for designing instruction, assessment and evaluation:

- What do I want students to learn?
- How will I know they have learned it?
- How will I design instruction and assessment to help them learn?
- What will I do when students are not learning?

This up-front planning of evaluation tasks is essential to the design of differentiated instruction and assessment. These evaluation tasks include:

1. Clear descriptions of “what it looks like when students demonstrate the intended learning”, as well as,
2. Success criteria that help us judge how well students demonstrate this learning.

Although demonstrations of learning may differ from student to student in a differentiated classroom (e.g., one student may demonstrate understanding of a concept through an oral presentation; another through a written summary), the curriculum expectations on which they are based and the criteria on which the demonstrations are judged are the same.

“Beginning with the end in mind” guides the overall design of instruction, assessment and evaluation for a unit or lesson.

“Teaching is not a one-way street. (...) Students are our partners in education... . No one should expect us to know how to differentiate instruction and assessment for all students every day. We’ll get closer to the ideal when we realize that good solutions often come from the collective wisdom of both teachers and students.”

Rick Wormeli, 2007
What helps us differentiate instruction, assessment and evaluation is the knowledge we have acquired about our students’ learning preferences, interests and readiness to learn new concepts.

The differentiated instruction unit planner is a template that guides teachers through the process of beginning with the end in mind to design differentiated instruction, assessment and evaluation based on selected curriculum expectations and a knowledge of their students.

### Differentiated Instruction Unit Planner

<table>
<thead>
<tr>
<th>Subject/Course Code/Title/Curriculum Policy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration: Number of X-minute periods</td>
</tr>
</tbody>
</table>

**WHAT DO WE WANT STUDENTS TO LEARN?**

Overall Expectation(s)/Specific Expectation(s): Students will:

**PRIOR LEARNING**

Prior to this lesson, students will have:

**HOW WILL WE KNOW STUDENTS HAVE LEARNED IT?**

Assessment/Success Criteria

- Achievement Chart Category
- ... criterion

Assessment Tool(s) (e.g., checklist, rubric, rating scale, anecdotal comments, marking scheme)

Evaluation: Culminating Task(s)

### HOW WILL WE DESIGN INSTRUCTION AND ASSESSMENT TO HELP STUDENTS LEARN?

**DIFFERENTIATED INSTRUCTION DETAILS**

- Knowledge of Students
  - Differentiation based on student:
    - Readiness
    - Interests
    - Preferences:
      - Learning Styles
      - Intelligences
    - Other (e.g., environment, gender, culture)
  - Need to know:
    - Students’...
    - How to Find Out:
      - ...

- Differentiated Instruction Response
  - What to learn: Topic, entry point (content)
  - Ways of learning (process)
  - Ways of demonstrating learning (product)
  - Learning environment

**POSSIBLE LEARNING EXPERIENCES:**

- Whole Class or Groups: Learning Experience—Strategy and/or Structure

**NOTE:** THE DI THREE-PART LESSON PLANNER MAY BE USED HERE TO OUTLINE INDIVIDUAL LESSONS.

**Materials and Resources—Teacher**

**Materials and Resources—Student**

---

“We believe that it is our students who are the starting point for lesson planning, not the course content or textbook. We try to live that belief by getting to know our students, their learning needs and preferences, and then responding to that knowledge through the opportunities we provide.”

Teacher
Instructional strategies such as questioning, anticipation guides, reciprocal teaching, jigsaws, and simulations serve a variety of functions in the teaching and learning process. They can be used to introduce, assess and consolidate learning and to gather evidence to evaluate learning.

Instructional strategies can involve all students in the same way (e.g., think-pair-share) or differentiate the way students are involved (e.g., think-pair-share orally or think-pair-write).
Evidence-based Instructional Strategies

Robert Marzano reviewed 35 years’ worth of educational research studies using a statistical technique called meta-analysis, which allowed him to combine the results of a number of studies and determine the impact of specific instructional strategies (Marzano, 2001). What he and his colleagues found were nine categories of instructional strategies with a significant, positive and demonstrable impact on student achievement.

John Hattie, in Visible Learning (2009) analysed over 50,000 research articles and completed over 900 meta-analyses to identify approaches and strategies that improved student learning. Many of the strategies that Hattie identified as having significant impact fall within Marzano’s nine categories of instructional strategies.

Think about your own instructional practice. You probably have some favourite strategies that you use more regularly than others (because they work!) such as descriptive feedback, mind maps, jigsaw or Venn diagrams. Examine Marzano’s nine categories of instructional strategies below, then see if you can find a category for some of your favourite strategies.

Marzano’s review of the research also noted that for instructional strategies to have a positive, visible impact on student achievement, it was necessary to provide students with ongoing explicit instruction and feedback in the use of strategy.

See graphic: Students, Structures and Strategies, p.60.
### Categories of Instructional Strategies that Impact Student Achievement

<table>
<thead>
<tr>
<th>Category of Instructional Strategies</th>
<th>Sample Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Identifying similarities and differences</td>
<td>Venn diagram, metaphors</td>
</tr>
<tr>
<td>2 Summarizing and notetaking</td>
<td>Reciprocal teaching, outlines, webs</td>
</tr>
<tr>
<td>3 Reinforcing effort and providing recognition</td>
<td>Goal-setting with teacher and peer feedback</td>
</tr>
<tr>
<td>4 Homework and practice</td>
<td>Application of learning (e.g., in simulations, problem-solving)</td>
</tr>
<tr>
<td>5 Nonlinguistic representations</td>
<td>Graphic organizers (e.g., concept maps, pictures, physical or kinesthetic models, for example role play)</td>
</tr>
<tr>
<td>6 Cooperative learning</td>
<td>Think-pair-share, jigsaw, three-step interview</td>
</tr>
<tr>
<td>7 Setting objectives and providing feedback</td>
<td>Rubrics or checklists with clear learning goals and previously established success criteria</td>
</tr>
<tr>
<td>8 Generating and testing hypotheses</td>
<td>Inquiry processes (e.g., labs, problem solving, decision-making)</td>
</tr>
<tr>
<td>9 Questions, cues and advance organizers</td>
<td>Anticipation guides, exit cards, teaching vocabulary, thinking routines</td>
</tr>
</tbody>
</table>

(Adapted from Marzano, Pickering and Pollock 2001)
While there are no approaches or processes that belong to differentiated instruction exclusively, there are a number that work especially well when differentiating. The DI structures outlined below allow teachers to easily vary the complexity or the form of the task for different learners. It is important that students and parents understand that all tasks are designed to address the same learning goals.

Some of the more common differentiation structures include:

**CHOICE BOARDS**—A choice board is a common differentiation structure used to provide students with choice. It is sometimes called a Tic-Tac-Toe assignment because of its design.

Choice Boards can be used to help students learn (i.e., instruction and assessment) or as a way for students to demonstrate their learning (i.e., evaluation). When designing a choice board and any other differentiated instruction structure, all choices must address the same learning goal and may be based on interest (e.g., sports, music, art) or learning preferences (e.g., learning styles or multiple intelligences). Each choice is assessed or evaluated against the same assessment criteria.

**CUBING**—Students roll a cube and do the activity on the side that comes up. We can differentiate a cube according to any of student readiness, learning preference, or interest.

So that the cubing is truly differentiated, it is important to provide some opportunities for choice with each roll such as two or more options per side, or the choice of consulting the group or a partner prior to responding.

Cubes can be designed for specific activities such as perspectives on a novel or different aspects of a history unit. Different cubes can be given to different groups and the activities varied to support readiness or learning preference. We can make cubes and write the activities on the sides, or we can simply use a standard die accompanied by a set of index cards with the matching numbers and activities recorded on the cards.

**LEARNING CENTRES OR STATIONS**—Centres provide different activities at various places in the classroom or school. Learning centres are not a differentiated structure if all students go to all centres and everyone does the same thing at a centre. In order to be differentiated, learning centres either need to be attended only by students who need or are interested in the work that is at the centres, or the work at the centre needs to be varied according to student readiness, interest or learning preference.
LEARNING CONTRACTS—Teacher and student make a written agreement about a task to be completed. The agreement includes the learning goals and criteria for evaluation in student-friendly language, the format of the work, how it will be assessed, and organizational details such as the deadline and check in points.

RAFT—A RAFT is an acronym for Role, Audience, Format, Topic. These headings are written across the top of a grid and a number of options are created. Students choose an option or the teacher selects it for them. Students read across the columns to learn the role they are going to assume, the audience they will address, the format in which they will do the work, and the topic they are going to explore. For example, a student might assume the role of a historical figure addressing an audience of a particular era. The student might develop a speech or an essay on a topic relevant to that point in history.

RAFTs can be created to address student interests (especially in the “topic” and “role” columns), student learning preferences (in the “format” column) and various readiness by altering the difficulty of some of the rows or creating separate RAFT assignments for different groups of learners.

TIERING—When we tier an assignment, we are creating more than one version of a task so that we can respond to students’ varied levels of readiness. To create a tiered assignment, choose or create an activity that is what you would normally provide for your grade level, then create additional versions of that activity to meet the readiness needs you identified through pre-assessment. Remember that all tasks need to be respectful—engaging, interesting and challenging for all learners. Tiered assignments are often referred to as parallel tasks – particularly in mathematics.

See Differentiated Instruction Scrapbook:
• Students, Structures and Strategies
• Differentiated Instruction Structures Cards

See Reference Cards:
• Students, Structures and Strategies
1. Flexible Learning Groups

In a differentiated classroom, students are grouped and regrouped, frequently and flexibly based on their:

- Readiness to learn a concept
- Interest in a concept
- Learning preferences in working with or thinking about a concept; or
- Environmental or social sensitivities

Flexible, short-term groups are sometimes determined by the teacher, sometimes by the students, and sometimes they are random, all depending on the purpose for grouping. When students learn in a variety of short-term groupings, they become comfortable working with all members of the class and a supportive community develops.
2. Personal Response and Choice
Students have opportunities for personal response when questions are open-ended and when tasks have more than one right answer or allow multiple entry points for learning. We give students choice in their learning because choice, as brain researchers confirm, is a great motivator. We cannot know all that students bring to our classrooms, so choice provides students with personalized opportunities to connect with their prior knowledge, interests and learning preferences. When students, particularly adolescents, have some choice, they feel a sense of ownership for and commitment to their learning that is not possible when it is being directed by us.

Choice-based differentiation needs to be carefully constructed so that all choices address the same curriculum expectations (with the exception of students on an Individual Education Plan (IEP) whose task may focus on modified curriculum expectations), take approximately the same amount of time, and require all students to work at the edge of their current readiness. It is far more important to develop a few high-quality choices than to provide students with lots of choice. Too many choices are time consuming for to create, monitor and assess and can prove to be overwhelming and confusing for students.

3. Respectful Tasks
In a differentiated instruction classroom, all students focus on their learning goals and learn in ways that are motivating and challenging. Tasks are respectful when students are engaged in learning opportunities that are just as interesting and appealing as those of other students. Respectful tasks support risk-taking in students at a time when they may be reluctant to take chances in learning for fear of appearing foolish in front of their friends. Students are more likely to feel secure in beginning and persevering with a task when everyone in the class is working on something that they find personally demanding and challenging.

4. Shared Responsibility for Learning
As educators, we not only have a responsibility to help our students achieve curriculum expectations, we also need to support students in developing the knowledge and skills required for them to learn independently. Students who are aware of how they learn best and who know how they are progressing towards a particular learning goal can inform our next steps as teachers. In addition, they develop a sense of responsibility for their own learning and for the conditions that support their learning.

It makes sense, especially in a differentiated classroom that is based on responding to student learning needs, that we help our students develop the skills and habits they need to be their own best assessors—by presenting and modelling opportunities for students to assess themselves.
Any assessment opportunity requires knowledge of the learning goal and a set of criteria to help gauge progress towards the goal. It is important that students be involved in the development of success criteria so that they understand what a “quality demonstration” looks like and so that they “own” the results.

Once the success criteria are determined, a variety of strategies can be used to gather the assessment information from students such as exit cards, journals, checklists or simply listening to students share self-assessments after a think-pair-share.

The reflective learning skills and the knowledge of their own thought processes (i.e., metacognition) that students develop by self-assessing not only serves to inform our instruction but helps students clarify and advocate for their learning needs. A shared responsibility for learning is fostered and students become increasingly independent in their learning.

See graphic: Key Features of Differentiated Instruction, p.61.
Lesson Design

The differentiated instruction lesson design template helps us:

- Plan with the end in mind
- Determine the elements of the lesson that will be differentiated
- Outline the strategies, structures and processes that will focus the teaching and learning

Once the expectations and criteria for success have been determined, most frameworks for lesson planning converge on three main parts:

- An initial phase to focus and engage students by activating prior knowledge and experience, sometimes by generating questions and investigating current understandings (Minds On)
- A middle phase to introduce or extend learning, and provide opportunities for practice and feedback (Action)
- A final phase to consolidate learning and provide opportunities for reflection (Consolidation and Connections)

The length of the lesson may vary from one to a few periods. Differentiation can be built into any phase of the lesson.

The Differentiated Instruction Lesson Planner is a template to guide teachers through the process of beginning with the end in mind as they plan for differentiation based on their knowledge of students. The template is not intended to be restrictive or sequential but reflective of prompts for the DI planning process.
Consider each of the Core Questions when developing differentiated instruction lesson plans.

### Core Questions

<table>
<thead>
<tr>
<th>Core Questions</th>
<th>Sample Three-Part Learning Design Framework</th>
</tr>
</thead>
</table>
| How can I set up the classroom for differentiation? | **1. Minds On**
  - establish a positive learning environment
  - connect to prior learning and/or experiences, sometimes generating questions and investigating current understandings
  - set the context for learning |
| What elements of the learning environment can I differentiate to help all of my students learn? | **2. Action**
  - introduce new learning
  - provide opportunities for practice (e.g., shared, guided, independent), application of learning and feedback |
| How can I differentiate the ways that I help students learn new concepts? | **3. Consolidation and Connections**
  - provide opportunities for consolidation and reflection |
| How can I differentiate the ways I assess student progress towards their learning goals? | |
| How can I differentiate the ways that students demonstrate what they understand and can do? | |
Implementing Differentiated Instruction

One Step at a Time...

The first step in differentiating instruction, assessment and evaluation is to start with examining your current practice. This means examining how well you are providing challenge and variety in learning, identifying who among your students is best served by the current plans, and modifying those plans as needed (sometimes ‘in the moment’) so that more students achieve success.

Begin planning your approach to differentiation by referring to the Differentiated Instruction Implementation Continuum (Differentiated Instruction Scrapbook, p. 25). Consider where you are now and the steps you could take to increase your effectiveness and your responsiveness to learners’ needs.

<table>
<thead>
<tr>
<th>A Differentiated Instruction Implementation Continuum</th>
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</thead>
<tbody>
<tr>
<td><strong>Same for All Students</strong></td>
</tr>
<tr>
<td><strong>Developing Instructional Routines and Skills</strong></td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
</tr>
<tr>
<td>• Design instruction, assessment, evaluation, and the learning environment for the class as a whole based on curriculum expectations and my own strengths and preferences.</td>
</tr>
<tr>
<td><strong>Students</strong></td>
</tr>
<tr>
<td>• Learn and demonstrate their learning in the same way all or most of the time</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
</tr>
<tr>
<td>Anticipation guide, exit card, graphic organizers, supplementary materials</td>
</tr>
<tr>
<td><strong>Expanding Instructional Routines and Skills</strong></td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
</tr>
<tr>
<td>• Design instruction, assessment, evaluation, and the learning environment based on curriculum expectations and a general sense of the learning needs of the class.</td>
</tr>
<tr>
<td><strong>Students</strong></td>
</tr>
<tr>
<td>• Experience, over time, a variety of ways to learn and/or ways to demonstrate their learning.</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
</tr>
<tr>
<td>Activities for all that address different learning styles or intelligences on different days</td>
</tr>
<tr>
<td>Multiple entry points for all over time</td>
</tr>
<tr>
<td>Varied supplementary materials</td>
</tr>
<tr>
<td><strong>Different Options for Different Students</strong></td>
</tr>
<tr>
<td><strong>Developing the Routines, Habits and Skills for Differentiated Instruction</strong></td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
</tr>
<tr>
<td>• Design instruction, assessment, evaluation, and the learning environment based on curriculum expectations and a general sense of the learning needs of the class.</td>
</tr>
<tr>
<td>• Try to design a variety of options for students.</td>
</tr>
<tr>
<td><strong>Students</strong></td>
</tr>
<tr>
<td>• Have a choice of ways to learn and/or ways to demonstrate their learning on an ongoing basis.</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
</tr>
<tr>
<td>Differentiation structures that offer choice (e.g., Learning Centres, Choice Boards, RAFTs*)</td>
</tr>
<tr>
<td>Choice of supplementary materials</td>
</tr>
<tr>
<td>* Role, Audience, Format, Topic</td>
</tr>
<tr>
<td><strong>Sustaining a Differentiated Instruction Culture in the Classroom</strong></td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
</tr>
<tr>
<td>• Design instruction, assessment, evaluation, and the learning environment based on curriculum expectations and on the specific learning needs of the students in the class.</td>
</tr>
<tr>
<td>• Adapt plans ‘in the moment’ so that learning experiences provided are a “good fit” for each student.</td>
</tr>
<tr>
<td><strong>Students</strong></td>
</tr>
<tr>
<td>• 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.</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
</tr>
<tr>
<td>Differentiation structures such as RAFT* and tiered assignments designed in response to student needs</td>
</tr>
<tr>
<td>Student choice of supplementary materials based on their strengths and needs</td>
</tr>
<tr>
<td>* Role, Audience, Format, Topic</td>
</tr>
</tbody>
</table>
Developing Instructional Routines and Skills
Identify your own learning preferences and those of your students by using inventories, and by observing and listening to students in a variety of learning situations. 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 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 an open-ended task or 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 want to use their areas of strength. Design learning opportunities with multiple entry points so that students at different stages of readiness can engage. Reflect, with your students, on what helps to engage them and respond by refining your instructional approaches.
<table>
<thead>
<tr>
<th>Do I see:</th>
<th>Is my classroom:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoughtful use of space so that desks and tables can be quickly and easily grouped in various configurations?</td>
<td>Welcoming, inviting and engaging?</td>
</tr>
<tr>
<td>Spaces where people can sometimes work alone if they prefer?</td>
<td>A place where all learners have agreed upon ways of working and learning together so that their work is enjoyable and productive?</td>
</tr>
<tr>
<td>Various resources—a classroom library, interesting objects and images that students have contributed and small group sets of a variety of texts?</td>
<td>A place where all learners know what is expected of them—in their learning and in their interaction with others?</td>
</tr>
<tr>
<td>Spaces/shelves that are well-labelled for organization, flow of traffic and developing learner independence?</td>
<td>A place where all learners have a voice that regularly informs my instructional practice?</td>
</tr>
<tr>
<td>Visible and clear instructions or directions for group or individual tasks?</td>
<td>A place where the teacher attends over time, to individuals, small groups, and the whole class, and is always aware of everyone in the room?</td>
</tr>
<tr>
<td>Appropriate use of technology, including assistive technology?</td>
<td>A place where students have choices in their learning?</td>
</tr>
<tr>
<td>Evidence of student understanding of learning goals and success criteria?</td>
<td>A place where all learners respect and value individual differences?</td>
</tr>
</tbody>
</table>

See Differentiated Instruction Scapbook: Creating an Environment to Support Differentiated Instruction
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.

Students benefit from practice and experience working with a prescribed range of choices before they are able to make informed choices independently—when learning or when they demonstrate their learning.

Teach students to make informed 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.
- 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 centres 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.
  - Have them answer one of the test questions by writing or by drawing.

“I gave them a choice—I had more students hand in their work and more students were excited and enthusiastic about their products. The learning and their achievement improved.”

Teacher
As educators, we have very real concerns about finding the time to deal with all curriculum expectations under any circumstance, never mind in a differentiated classroom where we recognize the importance of working with concepts using a variety of strategies, structures and processes. To have the time that we need and to more easily differentiate for our students, there are a number of actions we can take when planning for learning and teaching:

• Identify the big ideas or essential understandings of the unit; clustering the specific expectations to the related overall expectations. Overall expectations in Ontario’s curriculum policy documents describe, in general terms, the knowledge and skills that students are expected to demonstrate by the end of the grade. They speak to the big ideas or essential understandings at the core of the discipline. When we cluster curriculum expectations from the curriculum policy documents and identify the big ideas of the unit, we can focus on those big ideas rather than on a list of specific expectations.

• Take an inquiry-based approach to learning whenever possible. When students inquire, they read, experiment, research and discuss, constructing knowledge by pursuing what Wiggins and McTighe (2005) call “essential questions” based on the big ideas. Differentiation is inherent to the inquiry process because students engage at various entry points and demonstrate their learning differently during the inquiry.

“For differentiation to be effective, teachers need to know, for each student, where that student begins and where he or she is in his or her journey towards meeting the success criteria of the lesson.”

John Hattie, 2012

“The point is not to become overwhelmed by a myriad of instructional and assessment strategies but to be selective and purposeful in our use of them. In this way, we can provide opportunities for our students to take more responsibility for how they learn and in turn, what they learn.”

• Plan collaboratively, in interdisciplinary or cross-curricular teams, as often as possible.

• Pre-assess students’ understanding, knowledge, skills, and/or attitude prior to planning to know where to start. This is particularly important to help surface any misconceptions students may harbour. Research shows that misconceptions, left uncorrected, will seriously hamper understanding (Wiggins & McTighe 2005).

• Be flexible in lesson design—plans will need to be adjusted based on assessment data gathered during instruction to support students who are struggling and those who learn more successfully than expected. Anticipate these varying needs so that differentiation can happen ‘in real time’ in class when they occur.

• Continue to use favourite lesson plans, refining them based on the Core Questions (page 30), the lesson design framework and the knowledge acquired about students.
Finding Your Way: Differentiation Resources, Supports and References
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2. Ministry of Education Related Resources and Publications
3. Frequently Asked Questions
4. Bibliography
5. Graphics:
   • Differentiated Response – Planned and Adaptive
   • The Complexity of Learning and Teaching
Differentiated Instruction Print and Video Resources

*Grades 7 & 8 Differentiated Instruction Educator’s Package (2007)*
- Includes Teacher’s Guide, Poster, Strategy, Structure and Student Cards, DVD with Grades 7 and 8 classroom examples and a Facilitator’s Guide

*Secondary Differentiated Instruction DVD and Facilitator’s Guide (2010)*
- DVD of secondary classroom examples consisting of 16 clips from 10 subjects
- Facilitator’s Guide designed to support differentiated instruction professional learning

**Overview of the 2010 Secondary DVD**

<table>
<thead>
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<th>Region/Board</th>
<th>School</th>
<th>DI Focus</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
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<td></td>
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<tr>
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<td>St. Mary’s Secondary School</td>
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<td>Mathematics</td>
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<td>Hamilton-Wentworth District School Board</td>
<td>Delta Secondary School</td>
<td>Readiness: • Tiering</td>
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<td></td>
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<td>Interests and Learning Preferences: • RAFT</td>
<td>Understanding Canadian Law</td>
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<td></td>
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<td>Learning Preferences: • Choice Board</td>
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<td></td>
<td>Learning Preferences: • Learning Centres</td>
<td>Science</td>
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### Overview of the 2010 Secondary DVD (cont.)

<table>
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<th>Region/Board</th>
<th>School</th>
<th>DI Focus</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
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<td>Ottawa</td>
<td>Centennial Secondary School</td>
<td>Learning Preferences:</td>
<td></td>
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<tr>
<td></td>
<td>[• Choice Board]</td>
<td>Learning Preferences:</td>
<td>Career Studies</td>
</tr>
<tr>
<td></td>
<td>[• Learning Centres]</td>
<td>Learning Preferences:</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Sudbury/North Bay</td>
<td>St. Joseph-Scollard Hall Catholic Secondary School</td>
<td>Learning Preferences:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[• Choice]</td>
<td>Learning Preferences:</td>
<td>Food and Nutrition</td>
</tr>
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<td></td>
<td>[• Choice Board]</td>
<td>Learning Preferences:</td>
<td>Religious Education</td>
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<td></td>
<td>[• Choice of Product]</td>
<td>Readiness:</td>
<td>Visual Arts</td>
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<td>[• Exit Card]</td>
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<td>Mathematics</td>
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<tr>
<td>Thunder Bay</td>
<td>Westgate Collegiate and Vocational Institute</td>
<td>Learning Preferences:</td>
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<td>[• Learning Centres]</td>
<td>Learning Preferences:</td>
<td>Technological Education</td>
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<td>Learning Preferences:</td>
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<tr>
<td>Toronto</td>
<td>Bishop Macdonell Catholic Secondary School</td>
<td>Readiness:</td>
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<td></td>
<td>[• Learning Centres Tiering]</td>
<td>Readiness:</td>
<td>Science</td>
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<td></td>
<td>St James Catholic Secondary School</td>
<td>Readiness:</td>
<td>Geography</td>
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<td>[• Learning Centres]</td>
<td>Readiness:</td>
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<td></td>
<td>[• Tiering]</td>
<td>Readiness:</td>
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</tr>
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<td></td>
<td>Our Lady of Lourdes Catholic Secondary School</td>
<td>Learning Preferences, Interests and Readiness:</td>
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<td></td>
<td>[• Tiering]</td>
<td>Readiness:</td>
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<td></td>
<td>[• Choice of group size and question]</td>
<td>Readiness:</td>
<td>Mathematics</td>
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Differentiated Instruction Print Resources

Differentiated Instruction Educator’s Package – Revised (2016)
  • Includes Educator’s Guide, Reference Cards, Differentiated Instruction Scrapbook (2010) and CD

Knowing and Responding to Learners in Mathematics

Knowing and Responding to Learners in History, Geography and Canadian and World Studies

Knowing and Responding to Learners in FSL – Core French (Summer 2016)

Reach Every Student through Differentiated Instruction Brochures

Differentiated Instruction Grades 7 & 8 Educator’s Package Enhancements
  • Includes Facilitators’ Guides and Strategy Cards for Mathematics, Literacy and Assessment for Learning

Differentiated Instruction Teaching/Learning Examples (2009–10) for:
  The Arts, Grades 7 and 8
  Business Studies, Grades 9 and 10
  Civics, Grade 10
  Computer Studies, Grade 10
  Cooperative Education, Secondary
  Geography, Grades 8 and 9
  Guidance and Career Education, Grades 7-10
  History, Grades 7 and 10
  Language/English, Grades 7-10
  Mathematics, Grades 7-10
  Science, Grades 9 and 10
  Science and Technology, Grades 7 and 8
  Technological Education, Grades 9 and 10

NOTE: See www.edugains.ca to access these resources. Many of the more recent resources are also posted at www.learnteachlead.ca.
Q: I have been addressing learning preferences using centres set up by multiple intelligences. Small groups visit each of four or five centres over two days so that they can experience the learning in various ways. Is this an example of differentiation?

A: Addressing different learning preferences with all students over a period of time or rotating all students through multiple intelligences centres is not differentiated instruction. However, whenever we provide the same rich range of experiences for all students, we are increasing the likelihood of student achievement and enhancing our own understanding of how our students learn. This gives us the information we need to provide individual or groups of students with experiences that address their particular strengths and needs – which is differentiated instruction.

Q: Some of my students who excel in class always choose the alternatives to writing just so they will finish quickly, yet they are capable of so much more. When should I limit a student’s choice? Am I being unfair to students if I limit their choice of options?

A: Differentiation is about extending every student’s learning a bit beyond where they are comfortable. That space, the difference between what they can do now and what they could do with a little pressure and support, is called the zone of proximal development (ZPD) (Vygotsky, 1978) and it is the place where learning happens. When students stay with what is comfortable, they can practice, consolidate and feel good about themselves, but they do not learn. When they are pushed too far into work they can’t manage even with support, they will reach a frustration point. No learning occurs there either; it is the place where students, again particularly young adolescents, shut down in order to protect their sense of self.

You are being unfair to students if you allow them to coast. Encourage students to choose differently and re-examine your selection of activities. In a differentiated classroom, all activities are respectful of learners. This means all activities take approximately equal amounts of time and they all require students to demonstrate understanding or skill to equally high levels. If your writing assignments take longer to finish than anything else, you need to think about how you can craft them so they are appealing and not onerous.

In addition, some tasks may be non-negotiable because the topic, way of learning or way of demonstrating learning is specifically required as part of curriculum expectations.
**FREQUENTLY ASKED QUESTIONS**

**Q:**  Are we being fair to students when we give them choice in how to complete an assignment and know they are not always going to have that choice?

**A:**  If our students know who they are as learners, they will be better able to prepare for final evaluation tasks of all types. As adults, we know what works for us and we automatically do what works when we are in a situation that requires our best. Our students are still learning about their strengths and need opportunities to discover what works for them. This information is important throughout their educational career and beyond as they enter the world of work.

**Q:**  How do you ensure that assessment is fair when students are performing different tasks?

**A:**  Curriculum expectations are the same for all students, or are appropriate to the individual in the case of a student with an IEP. Think of the different tasks as being different routes to the same destination. It does not matter if individual students took the scenic route or the highway as long as they end up in the same place. The key is to be very clear about the expectations and the specific knowledge, skills or understandings a student will demonstrate in achievement of them, and then create a common assessment tool that measures those three. That way one student can build and describe a three-dimensional model of a cell, another can create a slide presentation and a third can write a report. As long as they are all assessed using the same criteria, the assessments will be fair.


The Complexity of Learning and Teaching

A Complexity of Learning and Teaching Graphic

To address the diverse needs of all learners, educators consider varied components of instruction to refine their practice. Recent research (e.g., Leithwood, 2013; Hattie, 2012) investigating the learning and teaching process makes frequent reference to the importance of each of the components illustrated in the graphic below. Responsive, effective and coherent practice includes all of the following components:

**Reflective Stance** that includes:
- Evidence-informed thinking about the current state, the ideal state, how to bridge the gap, and how to gauge progress along the way
- Seeking feedback on impact of teaching to inform next steps

**Learning Environment** that is culturally responsive and based on:
- A belief that all students can learn
- An understanding of ‘how we learn’
- Our needs as we learn: affirmation, relationships, challenge, contribution, power and autonomy, purpose, student voice

**Pedagogical Content Knowledge**
- Knowledge of the learner, curriculum and program within and across subject disciplines: content and pedagogy (e.g., organizing and connecting content, cognitive and metacognitive skills), and related learning skills and work habits

**Differentiated Response** that addresses the needs of different learners:
- **Know the Learner** – assess to gather information about student readiness, interests and/or learning preferences, and
- **Respond** to the particular needs of different groups of learners by differentiating ways of learning and ways to demonstrate learning

**Assessment** to inform instruction and learning by identifying learning goals and success criteria, providing effective feedback as part of assessing for, as and of learning, and making thinking and learning visible

**Evaluation** based on a variety of evidence (e.g., observations, conversations and products) documented over time and focusing on the achievement of overall expectations

**Instructional Strategies** that are engaging and strategic – based on where learning needs to go and targeted to the level of support required
- Educators use a repertoire of instructional strategies that are responsive to student learning interests, preferences and assessed needs
- **Practice is adaptive** – selecting and fine-tuning strategies based on what works – for the student, the context and the intended area of learning
- Educators ask themselves: Why this learning, with this student at this time, in this way? What is the impact?

**Design for Learning** that is based on the concepts of universal design for learning and an understanding of how learning happens:
- **Focus and engage** students by activating prior knowledge and experience, helping generate questions and discussing current understandings related to the learning goals
- **Engage in learning opportunities** that are relevant, authentic and appropriate to needs, monitor progress, adapt or extend the learning with opportunities for shared, guided and independent practice
- **Consolidate, connect and reflect** on the process as well as the new learning and understandings
Differentiated Response – Planned and Adaptive (in the moment!)

**ASSESS to KNOW THE LEARNER**
by using conversations, observations and products to find out about:

- **INTERESTS**
  including goals and assets

- **READINESS**
  prior learning

- **LEARNING PREFERENCES**
  ways of learning and demonstrating learning

**RESPOND by DIFFERENTIATING**

One or more of:

- **THE WAY STUDENTS LEARN**
  (e.g., guided practice, collaborative talk)

- **THE WAY STUDENTS DEMONSTRATE LEARNING**
  (e.g., writing, speaking)

- **THE CONDITIONS FOR LEARNING**
  (e.g., working alone or small groups)

- **ENTRY POINTS FOR LEARNING or TOPIC**
  (e.g., open ended or parallel tasks, choice of novel)

**INCLUDE the KEY FEATURES of DI**

- **Flexible Learning Groups**
  (e.g., based on interests, readiness – varied over time)

- **Opportunities for Choice and Personal Response**
  (e.g., choice of topic; personalized approach to solving a problem)

- **Shared Responsibility for Learning**
  (e.g., enabled by student voice and student self-assessment)

- **Respectful Tasks**
  (e.g., tasks that are equally engaging)
**Students, Structures and Strategies**

## Differentiated Instruction

### Core Questions

#### The Learning Environment
- How can I set up the classroom for differentiation?
- What elements of the learning environment can I differentiate to help all of my students learn?

#### Instruction and Assessment
- How can I differentiate the ways that I help students learn new concepts?
- How can I differentiate the ways I assess student progress towards their learning goals?

#### Evaluation
- How can I differentiate the ways that students demonstrate what they understand and can do?

### Strategies*

- Identifying similarities and differences e.g., Venn diagram, metaphor
- Summarizing and note taking e.g., mind maps, concept maps
- Reinforcing effort and providing recognition e.g., goal-setting
- Homework and practice e.g., simulations
- Non-linguistic representations e.g., graphic organizers, tableaux
- Cooperative learning e.g., jigsaw, think-pair-share
- Setting objectives and providing feedback e.g., exit card, rubrics with previously established success criteria
- Generating and testing hypotheses e.g., inquiry processes
- Questions, cues and advance organizers e.g., anticipation guides, thinking routines

### Students

- Readiness
  - Prior knowledge, skills—including learning skills and work habits, experiences
- Interests
  - Personal, social and career interests
- Learning Preferences
  - Environmental preferences
  - Learning styles
  - Intelligence preferences
  - Other...

### DI Structures

- Choice Boards
- Cubing
- Learning Centres
- Learning Contracts
- RAFTs
- Tiering
- Other...

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## Key Features of Differentiated Instruction

<table>
<thead>
<tr>
<th>1. Flexible Learning Groups</th>
<th>2. Personal Response and Choice</th>
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<tbody>
<tr>
<td><strong>Sample Indicators:</strong></td>
<td><strong>Sample Indicators:</strong></td>
</tr>
<tr>
<td>❑ Groupings are based on prior assessment of student learning, interests and/or learning preferences</td>
<td>❑ Choices provided are based on prior assessment of student learning, interests and/or learning preferences</td>
</tr>
<tr>
<td>❑ Groupings are sometimes determined by the students, sometimes by the teacher and sometimes randomly</td>
<td>❑ Students are taught how to make choices (e.g., an assignment or task) based on their readiness, interests, and learning preferences</td>
</tr>
<tr>
<td>❑ Students are comfortable working in groups and follow collaborative group norms</td>
<td>❑ Students have opportunities for personal response (e.g., open-ended questions or tasks) and choice (e.g., selecting an appropriate task or resource based on their readiness, interests or learning preferences).</td>
</tr>
<tr>
<td>❑ Students are grouped and regrouped, frequently and flexibly, based on their:</td>
<td>❑ Students have opportunities to select preferred conditions for learning (e.g., individually, in a quiet location away from others, in an active area of the room, as part of a group)</td>
</tr>
<tr>
<td>❑ Readiness to learn a concept</td>
<td>❑ All choices address the same curriculum expectations (Some tasks, designed for students on an IEP, may address modified curriculum expectations)</td>
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<tr>
<td>❑ Interest in a concept</td>
<td>❑ All choices are designed to take approximately the same amount of time</td>
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<tr>
<td>❑ Learning preferences in working with or thinking about a concept</td>
<td>❑ The amount of choice being offered is reasonable, not overwhelming</td>
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<tbody>
<tr>
<td><strong>Sample Indicators:</strong></td>
<td><strong>Sample Indicators:</strong></td>
</tr>
<tr>
<td>❑ All choices/tasks are interesting and engaging</td>
<td>❑ Students have opportunities to think/talk about/identify the ways they learn best</td>
</tr>
<tr>
<td>❑ All choices/tasks require the students to work at the edge of their current readiness</td>
<td>❑ Students have opportunities to think/talk about/identify their interests</td>
</tr>
<tr>
<td>❑ All choices/tasks are based on the same learning goal</td>
<td>❑ Students can articulate the learning goal</td>
</tr>
<tr>
<td>❑ All choices/tasks can be assessed using the same success criteria, which have been co-constructed with students</td>
<td>❑ Students co-construct the criteria for assessment with the teacher</td>
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<tr>
<td>❑ Students having difficulty with a concept are engaged in learning opportunities that are just as interesting and appealing as those of other students</td>
<td>❑ Students are taught how to self-assess</td>
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<tr>
<td></td>
<td>❑ Students are provided with opportunities to self-assess</td>
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<td></td>
<td>❑ Students advocate for conditions that support their learning</td>
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<td>❑ Students seek feedback and respond to suggestions</td>
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