

Reaching Every Student Through Differentiated Instruction

Introduction

As students enter adolescence, they are making 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 in life. When you find out who your students are, you can support them in their learning, and everyone benefits. Differentiated Instruction (DI) allows you to see learning from a variety of perspectives and provides countless, unexpected teachable moments that you may otherwise miss.

This information is intended to inform and to support all who are new to Differentiated Instruction (DI) and those who are refining their DI-skills. It is one of the resources in the professional learning strategy of implementing a more Personalised Approach of Learning in Vocational Education and Training. The information will serve as an introduction to Differentiated Instruction as an effective way to support students with Special Educational Needs (SEN) by providing opportunities that assist them in taking more responsibility for how they learn and what they learn.

Differentiated 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.

Effective Differentiated Instruction requires that teachers take deliberate actions to address the particular needs of students and keep in mind the following essential concepts:

- 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.
- 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 tool to assess student's work against the same criteria.
- Students work in short-term, flexible learning groups and educators are flexible in creating and altering instructional plans in response to learn.



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 teachers 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 process and about their readiness, interests and learning preferences. Teachers may use this information to vary the learning environment, the instruction, and the assessment and the 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.

Examples of research support for Differentiated Instruction

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. 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 recognise 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." ¹
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

¹ Ferguson, Bruce, Tilleczek, K., Boydell, K., Anneke Rummens, J. (2005). Early School Leavers: Understanding the Lived Reality of Student Disengagement from Secondary School.



DI-Principle	Support - Research
	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." ²
A safe, non-threatening and respectful learning environment is vital to student achievement.	"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." ³
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." ⁴
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." ⁵

² Howard, P. (1994). An Owner's Manual for the Brain & Vygotsky, L. (1962). Thought and Language.

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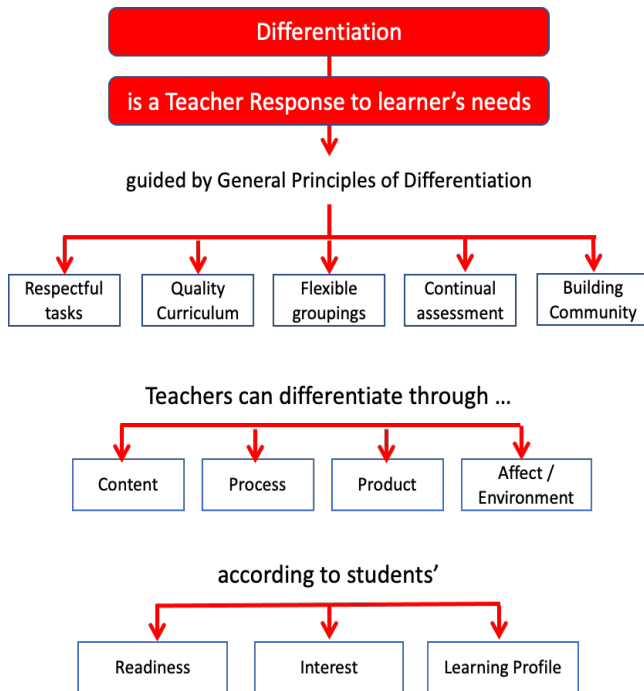
⁴ Csikzentmihalyi, M. (1997). Finding Flow: The Psychology of Engagement with Everyday Life.

⁵ Marzano, Robert (2003). What Works in Schools: Translating Research into Action.

Differentiated Instruction (DI) from the Classroom Teacher's Viewpoint

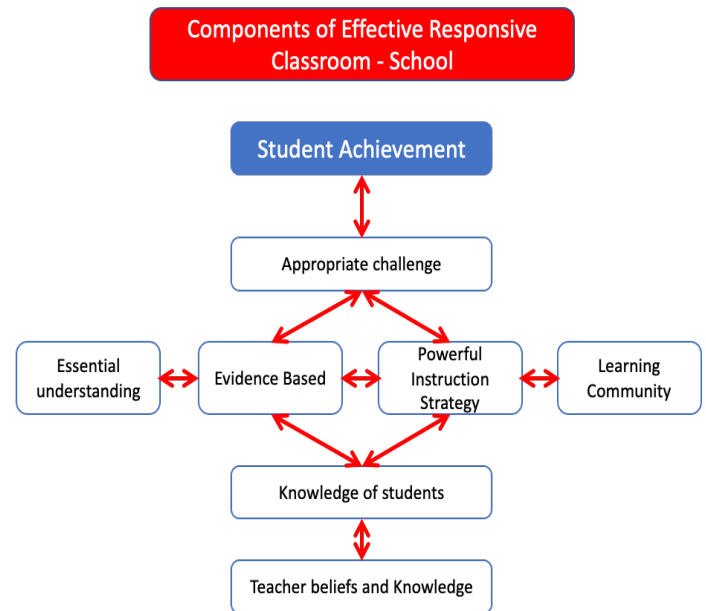
Below, you see an overview of all relevant aspects of Differentiated Instruction (DI) from the perspective of the teacher. The diagram 1 (on the left side of the page) emphasises the concept of differentiation. The diagram 2 (on the right side of the page) emphasises the components which have to be taken into account for an effective response in the classroom – school.

Diagram 1



Source: Carol Ann Tomlinson (2008) . Association for Supervision and Curriculum Development (ASCD)

Diagram 2



Source: Karen Hume (2007). Start Where They Are: Differentiating for Success with the Young Adolescent.



Differentiated Instruction (DI) in the classroom

Differentiated Instruction is not individualised 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 Differentiated Instruction involves prior planning and formalised structures (e.g. designing a choice board). Some Differentiated Instruction requires less prior planning or results from decisions made on the spot based on emerging student needs (e.g. choice of group size, note-taking options)

Example 1: DI in English Language

Students studying effective presentation techniques individually choose to focus on a speaker's use of images, 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.

Example 2: DI in Business Development

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.

Example 3: 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.

Engaging students by offering choice

“Choice makes learner’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.”

A manageable choice is the goal

All students want to feel they have some control over their lives and they will make more of an effort when their desire for choice is addressed. It is important that teachers clearly define and model choices so that neither students nor teachers become overwhelmed. Students also 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

1. Explicitly teach students the skills necessary to work effectively in a group or with a partner.
2. Help students know their learning strengths and preferences by using inventories, observation and discussion.
3. 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?”
4. Introduce choices in small ways at first:
 - a. Ask if students prefer to work individually or with a partner.
 - b. Let them decide the order of completion when multiple tasks need to be done.
 - c. 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 students. 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.

Conclusion:

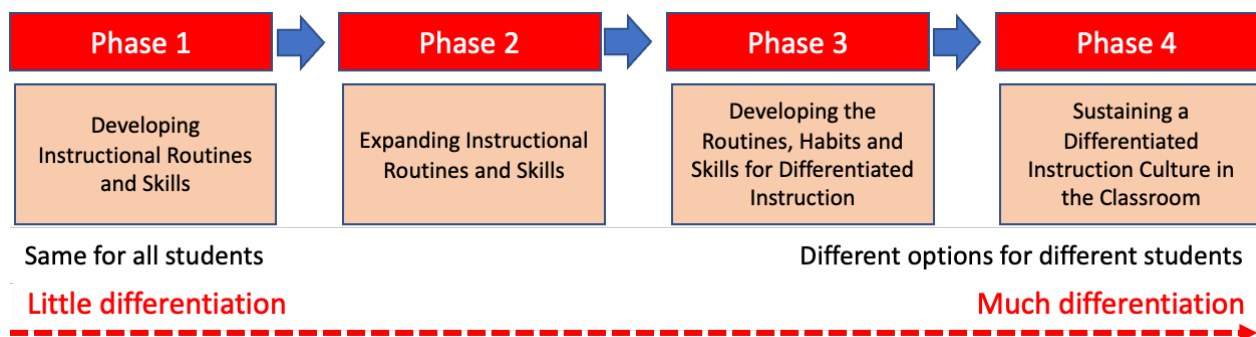
Differentiated Instruction involves:

- 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

Implementing differentiated Instruction in the Classroom

Implementing Differentiated Instruction can be done through 4 phases. The route of the 4 phases is called: the Differentiated Instruction Continuum. It starts with developing fundamental instructional routines and skills of assessment and evaluation. Without having these skills, the next step cannot be made. The second step is to expand the acquired competences based on the learning needs of the students. The third step focuses on designing a variety of options for students by offering a variety of instructions and ways of learning. The last step is to maintain and sustain the acquired competences and practices in order to ensure that the variety of instruction and learning meets each students' needs.

The Differentiated Instruction Continuum is expressed in the figure below.



Phase 1: **Developing instructional Routines and Skills**

Designing instruction, assessment, evaluation and the learning environment for the class as a whole based on curriculum expectations and your own strengths and preferences. All students learn and demonstrate their learning in the same way all or most of the time.

Phase 2: **Expanding instructional Routines and Skills**

Designing instruction, assessment, evaluation and the learning environment based on curriculum expectations and a general sense of the learning needs of your students in the class. Students experience a variety of ways to learn and/or ways to demonstrate their learning.

Phase 3: **Developing the Routines, Habits and Skills for Differentiated instruction**

Designing instruction, assessment, evaluation and the learning environment based on curriculum expectations and a general sense of the learning needs of the class. Try to design a variety of options for your students. Students have a choice of ways to learn and/or ways to demonstrate their learning on an ongoing basis.

Phase 4: **Sustaining a Differentiated instruction Culture in the Classroom**

Designing instruction, assessment, evaluation and the learning environment based on curriculum



expectations and on the specific learning needs of the students in the class. Try to ensure that the learning experiences you provide are a "good fit" for each of your students. 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.

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 students' needs.

Developing Instructional Routines and Skills

Identify your own learning preferences and those of your students by using inventories, surveys, observations in a variety of learning situations and in discussions. Deliberately plan part of a lesson so that it appeals to a learning preference of students 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: engage students in learning that is primarily visual, follow up with opportunities that are kinaesthetic and interpersonal, and then provide experiences that focus on logical/mathematical, intrapersonal and verbal/linguistic intelligences.

Developing the Routines, Habits and Skills for Differentiated Instruction

Begin by providing a single alternative to a standard assignment. Make sure that each alternative is equally respectful and takes roughly the same amount of time and satisfies the same expectations. Provide a few options of 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. Engage the student in the assessment of the learning process.

Sustaining a Differentiated Instruction Culture in the Classroom

Encourage student reflection and involve students in activities that require them to engage in assessment as learning. Talk with students about how they 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.