



Effective Pedagogy for All Students

FROM THE ONLINE RESOURCE *INCLUSIVE PRACTICE AND THE SCHOOL CURRICULUM*

*Tungia te ururua, kia tupu
whakaritorito te tupu o te harakeke.*

*Burn or dispose of whatever hinders
progress in all that is done,
in order that what is desirable may
indeed grow and bear fruit.*

“ High gains are possible for low achievers, high achievers, students of different socio-economic backgrounds and ethnic heritages, and students with special needs within the same class grouping. This principle is taken as definitional of quality teaching. Quality teaching is not effective for just some learners but is effective for all learners. ”

Quality Teaching for Diverse Learners Best Evidence Synthesis, 2003, page 16

Teacher actions that promote student learning

Effective teachers teach all their students effectively. *The New Zealand Curriculum* (page 34) explains that although no formula guarantees learning for every student in every context, there is strong evidence of the kinds of teaching approaches that consistently improve student learning. The evidence shows that students learn best when teachers establish strong relationships with students and their whānau and when they:

- create a supportive learning environment
- encourage reflective thought and action
- enhance the relevance of new learning
- facilitate shared learning
- make connections to prior learning and experience
- provide sufficient opportunities to learn
- inquire into the teaching-learning relationship.



As a group, reflect on what effective pedagogy looks like in practice in your school, either in the school-wide environment or in the classroom. The questions in the table below are to support the discussion.

Teacher actions (NZC, pages 34–35)	Questions to consider	What does this look like in your school or classroom?
Creating a supportive environment	<p>How do you foster and demonstrate positive relationships within the learning environment that are caring, inclusive, non-discriminatory, and cohesive?</p> <p>How do you value and attend to the cultural and linguistic diversity of all your students?</p>	
Encouraging reflective thought and action	<p>What tasks and opportunities have you designed that encourage all students to reflect on their learning individually and with their peers?</p>	
Enhancing the relevance of new learning	<p>How do you stimulate the curiosity of your students?</p> <p>How do you challenge them to use and apply what they discover in new contexts and new innovative ways?</p>	
Facilitating shared learning	<p>How does your learning community foster and demonstrate learning conversations and partnerships where all contributions are valued?</p> <p>How are all members of the classroom encouraged to give constructive feedback on learning?</p>	
Making connections to prior learning and experience	<p>What are some deliberate strategies you use to build on what students know and have experienced?</p> <p>How do you support students to make connections across learning areas, home experiences, and the wider world?</p>	
Providing sufficient opportunities to learn	<p>How do you plan for multiple opportunities for all students to engage with, practise, and transfer new learning?</p> <p>How do you encourage students to take ownership of and manage their own learning?</p>	
Teaching as inquiry	<p>How do you use what you observe in daily teaching and learning to ensure that all students' learning needs are planned for and met?</p>	

Planning for all

Effective planning supports all students to access rich and broad learning opportunities across the learning areas of the New Zealand Curriculum. Such planning recognises different ways to support student achievement. Effective teaching and learning is based on teacher belief that the core of teaching and learning is the same, regardless of whether a student has a disability or requires additional support.

Effective teachers:

- ensure that every student can access learning, if necessary drawing on specialist support to achieve this
- ensure that learning opportunities connect with students' prior knowledge and experience
- ensure that every student has multiple opportunities to interact with others and with a variety of material
- provide opportunities for students to express themselves in a range of ways
- provide opportunities for students to show what they know and are learning.

Universal Design for Learning

No two students are alike in their thought processes, abilities, interests, and approaches to learning. Universal Design for Learning (UDL) is a useful framework to support schools to plan for all students from the outset. It helps them to ensure that the school curriculum meets the needs of all students, providing everyone with equal opportunities to learn.

“UDL is a framework for looking at how we plan our goals, our teaching methods, the resources and materials we use, and the way we design assessments. UDL is based around three principles that ensure that there are options for all learners to have equal access to learning.”

Te Kete Ipurangi (n.d.)

The principles are:

- provide multiple means of representation – the ‘what’ of learning – because students differ in how they perceive and understand information
- provide multiple means of action and expression – the ‘how’ of learning – so that all students can participate and show what they have learned
- provide multiple means of engagement – the ‘why’ of learning – because different students are engaged by different types of tasks and learning situations.

Adapted from Center for Applied Special Technology, 2011, page 5



In [Example 13](#), a teacher provides her year 5–6 students with multiple options for engaging in a technology task and showing their learning.

Approaching school and classroom planning by considering the Universal Design principles will help develop a classroom programme that gives all students equal opportunities to learn. The emphasis is on designing the most responsive curriculum and environment for all students. At the outset, barriers to students' learning are identified and minimised in partnership with students and those that know them well. This can reduce the demands on you during teaching and learning activities, as students are often able to independently adapt the environment and activities to meet their own needs.



As a group, view the [video clip](#) in which Learning facilitator Chrissie Butler discusses Universal Design for Learning (UDL).



Drawing on the video, what do you think you need to consider at the outset of planning a lesson or series of student tasks? Why?



More information on Universal Design for Learning is available on [TKI](#) and in the [guide on UDL](#) on the Inclusive Education website.

Teaching as inquiry

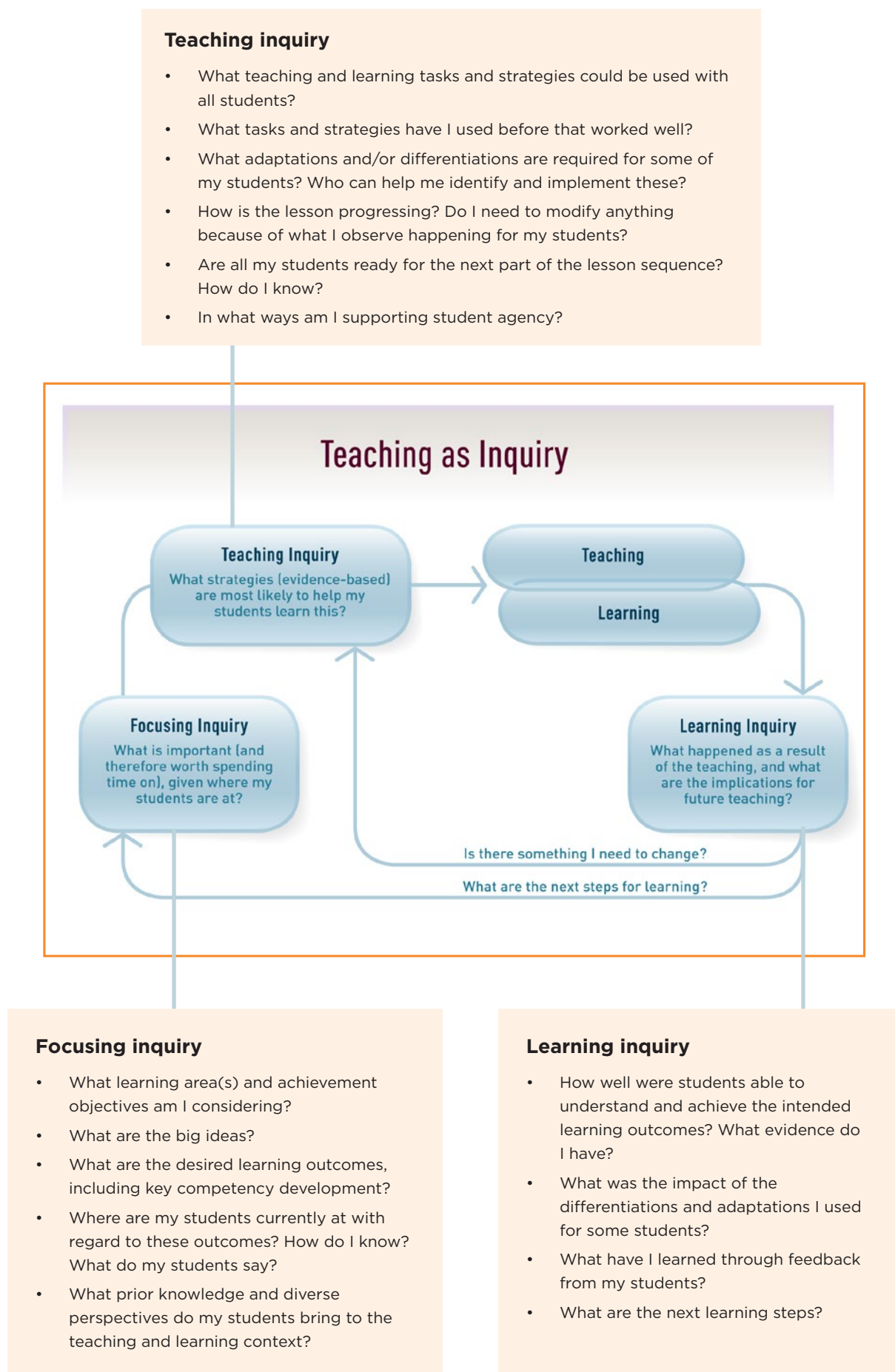
“ Since any teaching strategy works differently in different contexts for different students, effective pedagogy requires that teachers inquire into the impact of their teaching on their students. ”

The New Zealand Curriculum, 2007, page 35

Teachers inquire into the teaching–learning relationship “moment by moment (as teaching takes place), day by day, and over the longer term” (page 35). When planning for learning opportunities, you need to carefully consider the needs of all students in your class and the additional support you may require to ensure that their learning needs are met.

Figure 4 shows the teaching as inquiry cycle from *The New Zealand Curriculum* (page 35). The prompts above and below it help to unpack the three inquiries within the cycle.

Figure 4: Teaching as Inquiry





The [examples from the classroom](#) in this resource illustrate how teachers have endeavoured to include all students in participating, learning, and achieving alongside their peers. The examples align to the teaching as inquiry model and demonstrate the strategic actions and reflections made by the teacher, students, and their whānau on their learning.



As a group, discuss the questions alongside the two dimensions below from the [Educultural Wheel](#). Add to the questions from your own teaching experience.

Dimension	Teacher questions
Rangitiratanga Teacher effectiveness	In what ways do I advocate for the unique needs of the students in my classroom? How effective and enabling is my teaching pedagogy? How does my practice and planning unleash the strengths and potential of my students? Do I understand the challenges my students face at school?
Kotahitanga Ethic of bonding	How does the culture of the classroom encourage collaboration? What opportunities are there for students to work together? In what ways am I modelling unity and collaboration in my interactions with others?

Differentiation and adaptation

Teachers are responsible for planning, developing, and reviewing the classroom curriculum. Making curriculum accessible for all students may require ‘thinking outside the square’ in daily practice. This requires you to be prepared to do things differently, to work towards a shift from being a ‘routine expert’ to an ‘adaptive expert’ (Timperley, 2011). You will best achieve this when working as part of a collaborative, supportive learning community.

Effective planning includes thinking flexibly about how to organise teaching and learning. For example, a class may all be working in the same learning area and participating in shared learning activities. At the same time, some students may be working with different content, within different curriculum levels, toward different learning outcomes, or in relation to different assessment criteria. The students and their whānau should contribute to decisions on these different approaches in the light of the outcomes that are of value to them.

The general principle within such flexible approaches is to be as unobtrusive as possible while still ensuring that students' individual learning needs are met. When providing access to the curriculum, you and the teams working with students who need additional support should first consider whether the students can pursue the same learning outcomes as their classmates. Secondly, you should consider whether a learning programme is needed that has broadly similar learning outcomes for the whole class but appropriately meets the learning needs of these students at their levels. Thirdly, some students will need individualised content and individualised supports.



In [Example 8](#), a teacher uses mixed ability groups, differentiated content, adaptations such as visual representations, and support from a teacher's aide to ensure all his year 9 students can engage in shared mathematics tasks.



Two key approaches for effective planning and teaching are **differentiating** and **adapting** (Mitchell et al., 2010). Most teachers already use both these approaches to some extent. As you develop your expertise with these approaches, you will:

- recognise that units of work can easily be modified in the classroom programme to cater effectively for students with diverse needs, by using a range of approaches and strategies in planning and teaching
- recognise that some students need multiple opportunities to engage with a range of materials to support their understanding, and that these opportunities may involve using assistive technology or simple adaptations
- reflect on and evaluate multiple ways students can demonstrate their understanding in different learning areas; for students with diverse needs, it may be at the same level or a different level to their peers
- identify ways that all students might assess their capabilities and reflect on their own learning.

Differentiating the classroom programme, adapting the supports

Giangreco, Cloninger, and Iverson (2011) developed a framework to broadly characterise each student's participation in learning along two dimensions:

- the programme – what is taught (the classroom curriculum), annual goals, specific learning outcomes, and so on
- the supports – what is provided to assist the student to access and achieve educational outcomes, including materials, people (such as specialist teachers), specific teaching strategies, changes in the classroom and environment, and so on.

The school and classroom curriculum can be made accessible to all students through:

- **differentiations:** changes to the *classroom programme* – the content of the school and class curriculum and expected responses to it (the 'what')
- **adaptations:** changes to the *supports* – the school environment, the classroom, teaching strategies, and teaching and learning materials (the 'how').

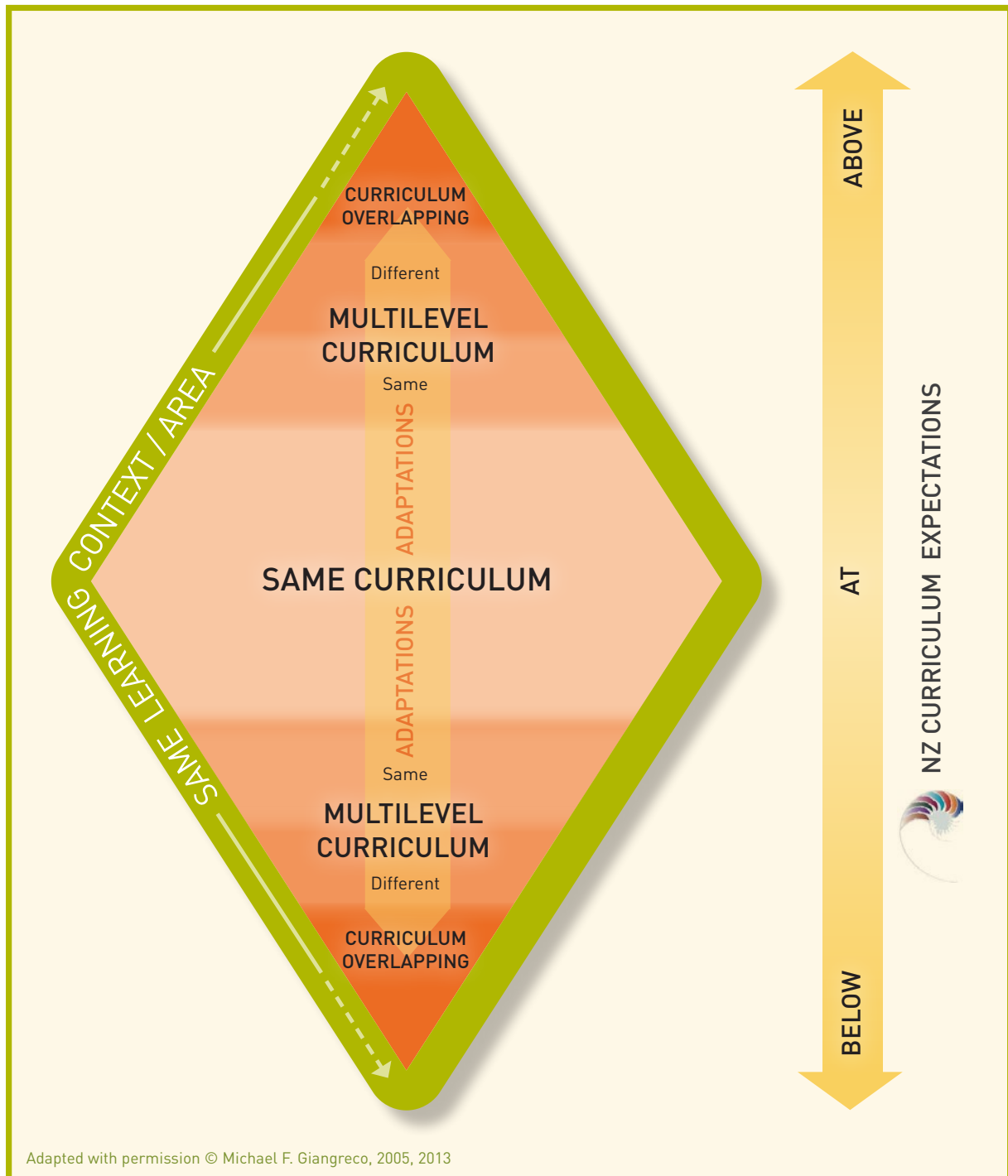
Differentiating the programme

Where some parts of the curriculum content need to be individualised for some students, you can differentiate your classroom programme using two approaches that Giangreco (2007) discusses: **multilevel curriculum** and **curriculum overlapping**.⁶ Both approaches support students who require additional support to fully participate in classroom learning.

Figure 5 illustrates these different types of differentiation within the classroom curriculum.

⁶ In New Zealand, teachers are familiar with the concept and approach of differentiated instruction, usually to meet learning objectives within the same curriculum level for all students in the class. Multilevel curriculum and curriculum overlapping, on the other hand, aim to meet learning objectives within several curriculum levels for students in the class.

Figure 5: Differentiation within the classroom curriculum



The different approaches shown in Figure 5 are discussed below. **In all the approaches, students work within the same learning context** (i.e., in the same physical location and related learning experiences). They also work in the **same learning area** (or areas, for an integrated unit or activity), although this is not always the case for curriculum overlapping.

In **'same curriculum'**, students experience the same content and activities, the same level of complexity (curriculum level), and the same number of learning outcomes to be achieved. For example:

A class is mostly working at level 3 in science and are learning about the concept of a fair test. Groups of students are required to set up four pots that have the same amount of soil and the same seed, and that receive the same amount of water each day. One pot is given some fertiliser to see if this makes a difference. The learning outcomes are understanding the importance of controlling variables to determine what makes a difference, and understanding how an adequate sample size makes a test more robust and minimises other factors.

In **'multilevel-same curriculum'**, students experience the **same** content and activities as the rest of the class, but the level of complexity and number of learning outcomes are adjusted in keeping with the students' learning strengths and needs. For example:

In the science unit, Joel and Tama set up the same experiment using the four pots and are expected to understand that one plant grows more quickly because it receives some fertiliser. They are not expected to work on the other learning outcome related to sample size.

In **'multilevel-different curriculum'**, students experience **different** but related content and activities, and the level of complexity and number of learning outcomes are adjusted in keeping with the students' learning strengths and needs. For example:

In the science unit, Sharon is learning how to pot up a plant, and she uses an activity that involves matching pictures of plants with seeds to identify what the seed she is planting will turn into.

In **curriculum overlapping**, students may participate in similar activities to the rest of the class, but the level of complexity and number of learning outcomes are significantly adjusted in keeping with the students' learning strengths and needs. The learning outcomes cover more than one area of the curriculum – generally the area the rest of the class is working in, as well as, for example, social sciences, health and physical education, English, or the key competencies. For example:

In the science unit, Katie helps her group set up the experiment. However, the targeted learning outcomes for her relate to communication (from the learning area of English) and the key competency of participating and contributing. With adult support, she uses a visual schedule to follow the instructions and sequence of activities and works on maintaining attention and turn-taking.

Airini excels in scientific investigations and is an advanced reader, absorbing several library books a week. She enjoys working in the school's vegetable garden, which she helped design in the gifted programme and now maintains as a member of the student council. While other students are working on the fair test experiment, Airini is reading cultural folklore about plants. She loves the Chinese story *The Empty Pot*, and, based on it, she and her teacher agree she should design an experiment around her question, 'What happens when seeds are heated to different temperatures before planting?' Airini develops hypotheses and procedures for data collection. She will share her research results with the student council at their planning meeting for the spring garden.

As Figure 5 demonstrates, multilevel curriculum and curriculum overlapping are appropriate for students working both above or below most of their peers. Students with gifts and talents (such as Airini), including those who are twice exceptional (such as Kathryn below), also benefit from them:

“ Although multilevel curriculum and curriculum overlapping are primarily ways to include students with disabilities, they also enable more meaningful participation for students functioning above grade level. Applying multilevel curriculum allows teachers to stretch their curriculum away from a ‘middle zone’ in which all students share the same curricular content, level, and amount of work. ”

Giangreco, 2007, page 5



In [Example 6](#), all the students in a year 4–5 mathematics lesson are learning about fractions. Most students are solving word problems at curriculum level 3. The teacher supports some students to solve different word problems at level 2, and one student explores fractions using objects and pictures.



In [Example 4](#), an English teacher differentiates a year 13 oral presentation unit for students working at NCEA levels 1 and 2, and, in collaboration with the learning support coordinator, uses curriculum overlapping to include a student who is working towards a curriculum level 1 goal in the arts.

Kathryn is a year 6 student who has been identified as ‘twice exceptional’. She is articulate, has an extensive vocabulary, and can confidently discuss and debate complex issues in a clear and logical way. However she has significant difficulty capturing her thoughts and opinions in written form. Consequently, although she has been assessed as having above average intelligence, her literacy and numeracy skills are well below national expectations for her year level. Kathryn receives support from an RTLB, who has been investigating using digital technologies to enable her to better demonstrate her learning. Her teacher has been providing her with more time to complete written tasks in class, and he has been exploring her passions and interests in order to motivate her to further develop her literacy and numeracy skills.

Adapting the supports

If differentiating the programme is about the ‘what’ of teaching, deciding on adaptations is about the ‘how’. Once you have identified specific content you intend to teach within their classroom curriculum, you need to decide *how* you will ensure that all students will be able to access this content. This may involve making changes to the learning environment, adopting specific teaching strategies, modifying teaching and learning materials, or adjusting a task or activity.

Some examples of how you can adapt supports are:

- using cooperative learning groups
- using visual representations – such as graphic organisers, visual timetables, and Venn diagrams – to organise information and reduce the amount of text required
- providing written or visual versions of spoken material (e.g., sign language, transcripts for videos)
- providing adapted computer keyboards or other alternatives to the standard keyboard and mouse (e.g., switch access with corresponding software)

7 And of course, for an individual student ‘same curriculum’ may be appropriate for one learning area (e.g., mathematics) and multilevel curriculum or curriculum overlapping for another (e.g., English).

- using tactile equivalents of written or visual material (e.g., Braille, three-dimensional objects)
- using interactive web tools and social media (e.g., interactive animations, chats)
- arranging the class layout so that specific students are close enough to clearly see the whiteboard or hear instructions
- reducing noise for students who find it distracting (e.g., by providing ear muffs or sound-proofed quiet areas in the classroom).



In [Example 2](#), the teaching team in a year 4-5 class uses a range of classroom and task adaptations that allow students with additional learning needs to generate and express ideas in a poetry lesson.



In [Example 9](#), a year 5-6 teacher adjusts the tasks and learning materials in a science activity to ensure all students remain engaged and learn.

When are adaptations and differentiations needed?

The goal for teachers is to provide meaningful participation for all students within the classroom curriculum. To achieve this, you need to make decisions around curriculum content and level, environment, teaching and learning materials, and responses expected for and by students.

A general guide when deciding on adaptations and differentiations is to **change as little as possible** while still ensuring that students' individual learning needs are met. Some students may need only adaptations to access the curriculum – for example:

Daniel has a hearing loss. Mr Jones is trialling a Soundfield system, which could help Daniel. This will only be effective for him when he wears his hearing aids. Mr Jones has asked the specialist teacher (RTD) to support Daniel to understand the benefits of wearing his hearing aids. This system may also help other students in the class who find it difficult to concentrate or who have auditory processing difficulty.

Alannah has severe dyspraxia so struggles to reach the same writing output as others in the class. However, she can achieve the same outcome as everyone else when she uses her iPad. A teacher's aide with good knowledge of assistive technology makes sure that her iPad can access the class technology systems.

Richard's teacher gives instructions once for all the class, then repeats them using shorter sentences and less complex language for Richard, who has difficulty processing language.



Other students may need only differentiations to access the curriculum – for example:

The class is conducting an inquiry into their local environment. Students can each select new spelling words from a vocabulary list the class has brainstormed for the inquiry. Dennis knows that he can comfortably learn five new words in a week, and that he will need to consolidate them by putting each of them into a sentence.

A few students will need both adaptation and differentiation but rarely on a full-time basis – for example:

Julie’s teacher is aware that Julie trips over things easily, so she has arranged the classroom furniture to provide a clear and easy passage. She knows that Julie struggles to find her bag to get her play lunch because she is smaller than other members of the class, so her bag is on a low hook and a friend helps her to find it. Julie is learning to recognise and write her name – although others in the class are writing a sentence. She needs to use a pencil grip to manage the pencil. The teacher supports Julie during writing to guide where to start each letter.

Grace has autism spectrum disorder (ASD) and is working within level 1 of the curriculum in her year 5–6 class. She has an individual education plan (IEP) which shows the goals her team have agreed on and the aspects of learning that require adaptations or differentiation. Her teacher and classmates use non-verbal visual supports for both social and academic prompts. Her current focus is a social learning goal to take turns.

It is important to acknowledge that individual students may require access to some or all options throughout a school day or even in one lesson or task. The options should be viewed as being fluid rather than static. Remember the principle of **using the least intrusive option available** that meets the student’s needs. For this reason, Giangreco (2007, page 5) cautions against too readily adopting curriculum overlapping:

“*In the interest of access to the general education curriculum teachers and teams working with students with disabilities should first consider whether the student can pursue the same learning outcomes as classmates or whether multilevel curriculum and instruction will provide enough accommodation before using curriculum overlapping.*”



As a group, discuss how differentiation and adaptation are currently evident in your planning and teaching.

- Can you think of a specific example that illustrates each approach?
- How could you use Figure 5 in your planning processes to include all students?

Shifting teachers’ practice

Shifting teacher beliefs and actions is an important focus for inclusive practice because teacher beliefs and attitudes can support or limit a student’s access to learning. As teachers build towards inclusive practice their beliefs and attitudes become more inclusive and they move away from practices that limit learning opportunities for everyone.



The following table lists some of the ways in which teachers shift their practice as they plan to meet the needs of all their students. (The last three rows are specific to secondary teachers.) Working within a group of teachers, discuss how your beliefs and attitudes are reflected in the table.

Moving from ...	Towards ...
Beliefs and attitudes that limit opportunities to learn	Beliefs and attitudes that support opportunities to learn
Low expectations of student learning, progress, and achievement	High expectations of student learning, progress, and achievement
A one-size-fits-all curriculum	Curriculum access that may differ for different students, but curriculum for all
Teachers not knowing how to teach some students	All teachers being capable of teaching all students, with support when required
A belief that “It’s not a classroom teacher’s job to teach ‘these’ students.”	A belief that the learning of all students is the responsibility of all teachers
An attitude that any student with special education needs will require a teacher’s aide	Support in the classroom that is coordinated and appropriate
The teacher’s aide working with the student	The teacher’s aide supporting the teacher to include all students
A belief that “These students do not belong in a mainstream class, they belong in the unit.”	A belief that all students belong in the classroom, learning within the NZ Curriculum
Teachers feeling isolated	Coordinated support for teachers and students
Someone else planning for students with special education needs	Collaborative planning with the LSC/SENCO, student, and whānau
Teachers teaching their subject	Teachers teaching all students
An examinations-only focus	All students having the opportunity to undertake appropriate assessment
Restricted options and pathways post school	Meaningful pathways supporting citizenship, full participation, and lifelong learning



For further information and examples of differentiation and adaptation, explore the guide *Making the Curriculum Accessible to All* on the Inclusive Education site.

For information on differentiated programmes for gifted and talented students, see Component 4 (pages 54-79) in *Gifted and Talented Students: Meeting Their Needs in New Zealand Schools*.