Learning for All K–12

reach every student

Ontario

Contents

1   Introduction

Background

In 2008, the Ontario government released *Reach Every Student: Energizing Ontario Education,* in which it articulated its commitment to "raise the bar" for *all* students in Ontario schools and to "close the gap" in student achievement. It identified the following three core priorities in its efforts to meet that commitment:

- High levels of student achievement
- Reduced gaps in student achievement
- Increased public confidence in publicly funded education

The overall government strategy requires a concerted focus on *the effective implementation of evidence-informed assessment and instruction that benefit all students, and particularly those who may require more support.*

> *Our Mission*
>
> *Our commitment is to every student. This means …. [ensuring] that we develop strategies to help every student learn, no matter their personal circumstances.*
>
> *(Reach Every Student: Energizing Ontario Education, 2008)*

Much work has already been accomplished by Ontario school boards and schools in raising levels of achievement and closing the gap among students from Kindergarten to Grade 12. These efforts have been connected with strategic initiatives such as the Literacy and Numeracy Strategy (i.e., Professional Learning, Ontario Focused Intervention Partnership, Tutoring Initiative, Character Development Initiative, Schools on the Move, and Ontario Statistical Neighbours), which provides support to school boards to help improve student achievement in Kindergarten to Grade 6. The Literacy and Numeracy Strategy has provided precise, intentional, and strategic planning to support

student learning and achievement through instructional leadership, assessment and evaluation, and instructional strategies. This work also encompasses the Student Success / Learning to 18 Strategy, which helps build literacy and mathematical literacy among students in Grades 7 to 12 and increases students' engagement in school in a variety of ways. The Student Success / Learning to 18 Strategy has produced systemic benefits of cultural change and an improved professional culture. In the past four years, there has been an overall shift from an implied to an explicit and highly intentional focus on the learner as the focal point in Ontario's secondary schools. There is also an increased focus on a caring school culture, on the tracking and monitoring of individual students, especially with respect to the transition period between elementary and secondary school, and on expanded program choices (i.e., Expanded Cooperative Education, Dual Credit Program, and Specialist High Skills Majors) and flexibility for students.[1]

In 2005, the release of *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students With Special Education Needs, Kindergarten to Grade 6*[2] was instrumental in helping to improve achievement in literacy and numeracy among students with special education needs. The implementation of *Education for All K–6* was supported by two projects – the Council of Ontario Directors of Education (CODE) Special Education Project (2005–2008) and the Ontario Psychological Association (OPA) Student Assessment Project, Kindergarten to Grade 4 (2006–2008). The CODE project focused on the implementation of the recommendations of *Education for All K–6*, with a focus on literacy and numeracy instructional strategies to improve student achievement for all students and in particular for students with special education needs. The OPA project provided school administrators, school staff, and professional services staff with specific strategies to strengthen the connection between assessment and classroom teaching strategies for students with diverse strengths and needs.

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[1] More information can be found in the *Evaluation of the Ontario Ministry of Education's Student Success / Learning to 18 Strategy Final Report* (Canadian Council on Learning, 2008).

[2] Referred to henceforth as *Education for All K–6.* The current document will be referred to as *Learning for All K–12.*

The results achieved through these two projects and through the ongoing work of educators across the province have been encouraging. These results, together with the positive response of the education sector *at both the elementary and secondary levels* to the beliefs and strategies outlined in *Education for All K–6,* have given the Ministry of Education the directional support it needed to provide further guidance for *raising the bar and closing the gap in achievement for **all** students, from Kindergarten to Grade 12*. This document is designed to provide that guidance.

Our Shared Beliefs

Through provincial consultations with educators and stakeholders in spring 2008, the guiding principles of *Education for All, K–6* were confirmed as essential to any effort to improve the achievement of all students from Kindergarten to Grade 12 and to close the achievement gap. They are restated here, as the beliefs that also underlie *Learning for All K–12*:

- ***All students can succeed.***
- ***Each student has his or her own unique patterns of learning.***
- ***Successful instructional practices are founded on evidence-based research, tempered by experience.***
- ***Universal design and differentiated instruction are effective and interconnected means of meeting the learning or productivity needs of any group of students.***
- ***Classroom teachers are the key educators for a student's literacy and numeracy development.***
- ***Classroom teachers need the support of the larger community to create a learning environment that supports all students.***
- ***Fairness is not sameness.***

The Vision and Purpose of *Learning for All K–12*

> *Today, students are doing better in reading, writing and math and are graduating in higher numbers. But we have more to do. Over the next four years, we will keep working with parents and other education partners to improve the publicly funded education system for Ontario's two million students. If we had to pick one word that epitomizes our vision for education, it would be a system that "energizes" everyone.*
>
> *(Reach Every Student: Energizing Ontario Education, 2008)*

Learning for All K–12 is designed to share information with educators throughout the Ontario school system, from Kindergarten to Grade 12, about educational approaches that have proved to be effective in helping *all* students learn. It describes *knowing your students* as an important first step in an integrating process of assessment and instruction to improve student learning at both the elementary and secondary levels --

> *The Breakthrough System*
> The Breakthrough system addresses the need to "establish classroom routines and practices that represent personalized, ongoing 'data-driven, focused instruction'". It identifies *three core components* that must be "synergistically interconnected" if the system is to succeed:
>
> 1. *Personalization* -- Education that puts the learner at the centre, providing assessment and instruction that are tailored to students' particular learning and motivational needs;
> 2. *Precision* -- A system that links "assessment for learning" to evidence-informed instruction *on a daily basis*, in the service of providing instruction that is precise to the level of readiness and the learning needs of the individual student;
> 3. *Professional learning* -- Focused, ongoing learning for every educator "in context", to link new conceptions of instructional practice with assessment of student learning.
>
> According to the authors,
> "*The glue that binds these three components is moral purpose: education for all that raises the bar as it closes the gap.*" (p. 16)
> In other words, if education partners lose sight of the moral purpose of "serving *all* students to a high standard", they run the risk of implementing the three components in ways that may fail to bring about the desired changes in education.
>
> The success of the large-scale reform that the Breakthrough system envisions depends on cooperation and aligned purpose at the level of the school and community, the district or region, and the state.
>
> (Fullan, Hill, & Crévola, 2006, pp.16–26, 87)

one that educators from Kindergarten through Grade 12 can implement to help them plan and deliver instruction that benefits all students, from high achievers to those who need additional support.

This process supports school boards in their implementation of the draft *K–12 School Effectiveness Framework* (Ontario Ministry of Education, 2009.), the K–12 Board Improvement Plans, School Improvement Plans and School Board Special Education Plans. The approaches described in *Learning for All K–12* are based on a key finding of educational research since 2000[3] -- namely, that all students learn best when instruction, resources, and the learning environment are well-suited to their particular interests, strengths, needs, and stage of readiness. Michael Fullan, Peter Hill, and Carmen Crévola have brought many of the ideas born of this research into play in the broader system for improving student achievement that they describe in *Breakthrough* (2006).

Learning for All K–12 focuses on two *Breakthrough* system components -- **personalization** and **precision** -- and on approaches and tools that can help educators "link 'assessment for learning' to evidence-based instruction in their classrooms on a daily basis". It describes approaches to planning instruction that enable educators to focus effectively on individual students' needs -- such as Universal Design for Learning, differentiated instruction, and the tiered approach to prevention and intervention. This document also outlines important planning tools, in the form of the *class profile* and the *student profile,* to help educators plan daily assessment and instruction that is "good for all and necessary for some".

Learning for All K–12 supports:

* building capacity for learning on the level of individuals, schools, and school systems;

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[3] The work of Conzemius and O'Neill (2002), Dufour (2002; 2004); Dufour and Eaker (1998), Fullan (2006; 2007), Reeves (2002), Schmoker (2004), Stiggins (2004), and others explores the ideas noted here.

- strengthening both students' and teachers' sense of efficacy with respect to improving student achievement;
- teachers' understanding that each student progresses along an individual learning and growth continuum from Kindergarten to Grade 12;
- the use of planning tools for assessment and instruction to support student learning;
- an educational culture based on individual and collective ownership of the learning and achievement of all students.

The Role of Professional Learning

> *An organization that operates as a learning community relies on a culture of collegiality, which leads the principal and his or her teachers to work with obvious professionalism, and to work together as colleagues in a spirit of family, while showing mutual willingness to listen and confidence, seeking in this way to learn from one another in order to improve their potential, and the potential of the entire team.*
>
> *(Koffi, Laurin, & Moreau, 2000, as cited in Education for All K–6, p. 55)*

Although *Learning for All K–12* focuses primarily on the ideas of personalization and precision in assessment and instruction, the third component of the *Breakthrough* system -- professional learning -- is critically important to any attempt to improve student achievement and close the achievement gap. To be effective, professional learning needs to be learning "in context" -- that is, learning that helps educators develop the particular knowledge and skills they need to provide focused assessment and instruction for the students in their classrooms.

Commitment to professional learning communities, which is discussed further in Chapter 5, develops the collective capacity of staff to work together to achieve the fundamental purpose of the education system, schools, and classrooms – that is, high levels of learning for all students. Educators can improve the learning experience of every student

when they develop and implement a shared commitment to high academic goals for their students and engage in collaborative problem solving, continuous assessment for learning, and ongoing professional learning that is job-embedded and site-specific.

Figure 1. Moral Purpose: Education for all that raises the bar as it closes the gap

*Leadership &
Coordination --
System
Change*

PLC

*Moral
Purpose*

*Personalization
& Precision*

Beliefs founded on the moral purpose of education

- *All students can achieve high standards given significant time and support.*
- *All teachers can teach to high standards given the right conditions and assistance.*
- *High expectations and early intervention are essential.*
- *Teachers need to be able to articulate what they do and why they do it.*

(Figure: adapted from Fullan, Hill, & Crévola, 2006, p. 91. beliefs: Hill & Crévola, 1999, p. 12)

Understanding "Achievement Gaps"

The term *gap in student achievement* commonly refers to the difference between the achievement of students who are achieving at the level of our provincially established standards -- and that of students who are performing below that level. Gaps in achievement can be associated with various interconnected factors, and research measures gaps in terms of such factors. For example, gaps in student achievement can be measured in terms of students' gender, whether they have special education needs, whether they are English language learners, whether they are First Nation, Métis, or Inuit students, and the number of credits they have accumulated by the end of a particular grade. The literature on school effectiveness also indicates the significant impact on achievement of contextual and background factors, particularly socio-economic status and parent education. Achievement gaps can also be defined according to various combinations of these factors such as gender and special education needs, or gender and socio-economic status, or ethnocultural background and credit accumulation by year and grade.

> *The term gap in student achievement in this document refers to the gap that exists between a student's actual achievement and his or her potential for achievement.*
>
> *This document is focused on the importance of helping every student reach his or her potential -- and, as a consequence, on closing the "achievement gap" between different groups of students.*

Although achievement data gathered from a variety of sources tell us that many Ontario students are doing better than ever before, they also indicate that many are still struggling in school, at both the elementary and secondary levels. The data continues to show gaps in achievement between boys and girls, First Nation, Métis, or Inuit students and students from other ethnocultural backgrounds, English language learners and those whose first language is English, and students who have special education needs and those who do not.

Research confirms that gaps in student achievement can be closed and overall improvement in achievement attained if the responsibility for making these changes is shared by all partners in the education system -- students, parents, educators, and community partners (Campbell, Comper, & Winton, 2007; Kober, 2001; Mortimore & Witty, 1997; Willms, 2006). Progress is seen where there has been a sustained and deliberate focus on individual students' strengths and needs, assessment for learning, and precision in instruction through evidence-informed interventions.

> *We need to remind ourselves that it is not just a matter of being aware of the gap goal, but working diligently day after day, monitoring progress, and taking corrective action.*
>
> *(Fullan, 2007, pp. 44–45)*

2   Instructional Approaches[*]

Instruction that both responds to the various needs of a diverse group of students and is precisely tailored to the unique needs of each student can be achieved on the basis of the principles and guidelines of three instructional approaches: Universal Design for Learning (UDL), differentiated instruction, and the tiered approach to prevention and intervention.

Used in combination, UDL and differentiated instruction enable teachers to respond effectively to the needs of all students. UDL provides the teacher with broad principles for planning instruction for a diverse group of students, whereas differentiated instruction allows them to address specific skills and difficulties (Raynal & Rieunier, 1998). The two approaches overlap, sharing certain goals and strategies, such as providing a range of instructional strategies, resources, activities, and assessment tools in order to meet the different strengths, needs, readiness, and learning styles or preferences of the students in a class.

Figure 2

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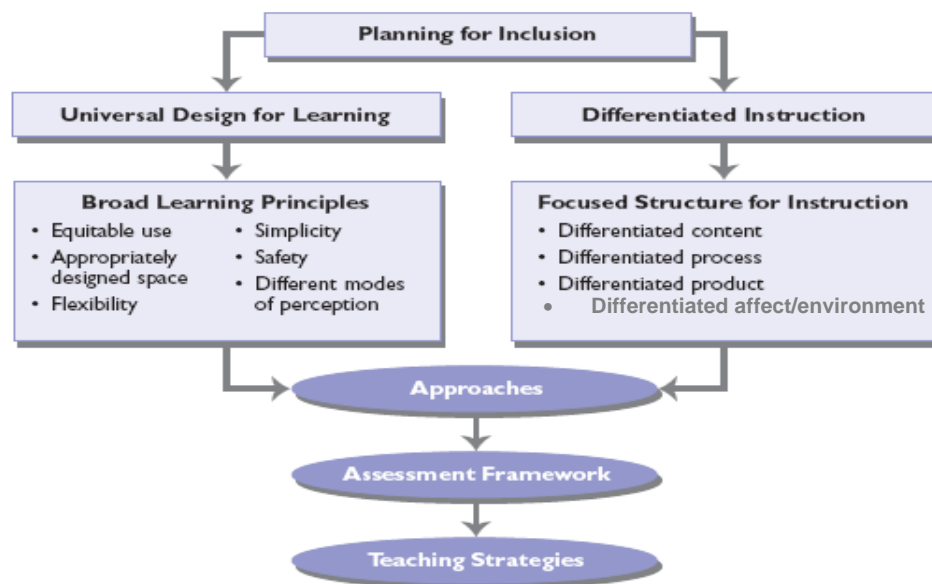
[*] Much of this section is taken or adapted from *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students With Special Education Needs, Kindergarten to Grade 6* (Toronto: Ontario Ministry of Education,2005), pp. 9–18, 60 and *TIPS (Targeted Implementation and Planning Supports): Developing Mathematical Literacy* (Toronto: Ontario Ministry of Education, 2004).

The tiered approach to ongoing prevention and intervention embodies principles of UDL and differentiated instruction, offers a systematic method for the early identification of students who are experiencing particular difficulties and, through ongoing monitoring of their progress, provides the precise level of support those students need.

All these approaches help improve student achievement because they rely on greater personalization and precision in instruction. Their success depends on teachers' clear understanding of who their students are, what kinds of learners they are, their readiness to learn in a given subject at a given time, and the kinds of activities that are likely to engage their interest, and stimulate their thinking.

Each of the three approaches is summarized below. Checklists and indicators for implementing each of the approaches are provided in Appendix C.

Universal Design for Learning (UDL)

> *"Universal Design is not just a technique for special education; rather it is a technique to enhance the learning of all students."*
> *(Turnbull, Turnbull, Shank, Smith, & Leal, 2002, p. 92)*
>
> *"In a diverse classroom, no single method can reach all learners. Multiple pathways to achieving goals are needed."*
> *(Hitchcock, Meyer, Rose, & Jackson, 2002, p. 18)*

UDL was inspired by work in architecture on the planning of buildings with a view to accessibility for people with physical disabilities (Turnbull et al., 2002). Architects observed that the added improvements facilitated access for all users, not just people with physical disabilities. An access ramp, for instance, provides a person using a wheelchair with easier access to a building, but it also makes it easier for a parent with a child's stroller, a cyclist, or someone using a walker.

The notion that assistance targeted at a specific group can help everyone, bolstered by evidence from research, found its way into the field of education. Educators began to realize that a teaching strategy or pedagogical materials that respond to the special needs of a specific student or group of students can also be useful for *all* students. For example, the use of visuals to support the learning of an English language learner or a student who is hard of hearing will also enhance learning for *all* students who have a visual learning style. The aim of UDL, then, is to provide access to the curriculum for *all* students, and to assist educators in designing products and environments to make them accessible to everyone, regardless of age, skills, or situation.

The core concepts of UDL can be summarized as follows:

Universality and equity. UDL is intended to ensure that teaching will meet the needs of all students. The "universal" in UDL does not imply that there is one optimal solution for everyone; rather, it reflects awareness of the unique nature of each learner and the need to accommodate differences, creating learning experiences that suit individual learners and maximize their ability to progress (Rose & Meyer, 2002). This does not mean planning instruction for students with average achievement levels, and then making after-the-fact modifications to meet the special needs of certain students.

> *UDL encourages teachers to develop a class profile and then plan, from the beginning, to provide means and pedagogical materials that meet the needs of all students and not only those with special education needs.*

Flexibility and inclusion. The planning of teaching and the time teachers allocate to students' activities and needs must be sufficiently flexible to provide real learning experiences for all the students, regardless of their performance level. Students are accommodated through:
- a variety of teaching strategies and pedagogical materials that make use of all the senses and vary in form, level of difficulty, and manner of presentation;
- a variety of suitable technological media/software;

- different types of assessment strategies, involving a range of media, formats, and response options. (*Note:* During assessments, students have access to the same supports that they have during instruction unless those supports undermine the purpose of the assessment.);
- various ways of using space.

An appropriately designed space. Teachers can make sure that:
- all students have a clear line of sight;
- resources such as dictionaries and texts are within comfortable reach of all students;
- there is adequate space for the use of assistive devices or the presence of teacher's assistants.

Simplicity. Teachers avoid unnecessary complexity and minimize distracting information by:
- communicating consistent and achievable expectations;
- sharing the learning goals of a lesson in student-friendly language;
- arranging information sequentially to clarify its relative importance;
- breaking instructions down into small steps;
- providing descriptive feedback during the learning.

Safety. Classrooms must be safe, with minimal hazards and no elements that might cause accidents. The assessment of safety might depend on the specific students in the classroom. If a student has a safety plan or protocol, every adult in the school needs to be aware of it and able to act on it.

One of the keys to ensuring success when following UDL principles is to provide assessment and feedback to students and to adjust instruction as necessary to maximize learning.

Differentiated Instruction

> *To differentiate instruction is to recognize students' varying levels of background knowledge, readiness to learn, language ability, learning preferences, and interests, and to react responsively.*
>
> *(Adapted from Hall, Strangeman, & Meyer, 2003, pp. 2–3)*

Differentiated instruction is based on the idea that because students differ significantly in their *interests, learning styles*, and *readiness to learn*, it is necessary to adapt instruction to suit these differing characteristics. Teachers can differentiate one or a number of the following elements in any classroom learning situation (Tomlinson, 2004):

- the *content* of learning (what students are going to learn, and when);
- the *process* of learning (the types of tasks and activities);
- the *products* of learning (the ways in which students demonstrate learning);
- the *affect/environment* of learning (the context and environment in which students learn and demonstrate learning).

The approach, driven by an understanding of the student, may facilitate high levels of both achievement and student engagement (Caron, 2003; Tomlinson, 2004).

Differentiated instruction draws on the theories of Lev Vygotsky, in particular on the theory of the Zone of Proximal Development (ZPD). Within the ZPD, the student may not yet be capable of solving a particular kind of problem on his or her own, but can do so with assistance and is thereby supported to move on to another level of knowledge. The instructional approach that provides such support at the right times in the student's cognitive development -- that is, at the times that the student is "ready to learn" -- is called "scaffolding". In differentiated instruction, teachers scaffold and tailor instruction to individual students' needs and understanding, providing the emotional support and opportunities for practice that students may need.

> *"Readiness" does not refer to the student's general ability level, but to the current knowledge, understanding, and skill level a student has in relation to a particular sequence of learning. "It reflects what a student knows, understands, and can do today in light of what the teacher is planning to teach today" (Tomlinson & Eidson, 2003, emphasis added). Differentiating instruction based on student readiness involves knowing where particular students are on the learning continuum, then planning program features and instructional strategies, resources, and supports to meet them where they are and move them along this continuum. Some students may require remediation or modified expectations; others may need extensions or opportunities for independent study.*
>
> *(TIPS: Developing Mathematical Literacy, 2004, p. 4)*

In differentiating instruction according to students' interests, a teacher attempts to increase the likelihood that any given lesson or project is highly engaging and personally meaningful for each student in the class. Teachers who know students' interests can vary projects, themes, and examples used in instruction to reflect those interests.

Students' learning styles and preferences influence their "learning profile". Understanding how students learn best enables teachers to differentiate instruction effectively. Students may be better at internalizing, processing, and communicating information through *auditory, visual, tactile,* or *kinesthetic* modes or learning styles. In his *Frames of Mind: The Theory of Multiple Intelligences* (1993), Howard Gardner identified eight types of intelligence -- *verbal/linguistic; logical/mathematical; visual/spatial; musical/rhythmic, bodily/kinesthetic; interpersonal; intrapersonal;* and *naturalist* -- which strongly influence the ways in which students learn best.

A key strategy in differentiated instruction is the use of flexible groupings, which allows teachers to assign different tasks to different students, individually or in small groups,

based on interests, learning styles, or readiness. Students may be grouped by interest, but may also have activities set at different levels of complexity (questioning levels/abstract thinking processes) resulting in varying products that employ students' preferred learning modality (auditory, visual, or kinesthetic) (Theroux, 2004).

It is important to note, however, that the approach does not exclude instruction and activities in which all students are working on the same learning task at the same time, whether individually, in groups, or as a class.

Ongoing assessment, and then adjustment of strategies and resources according to assessment results, is critical to sustaining the effectiveness of a differentiated instructional approach.

Differentiated instruction includes:
- *providing alternative instructional and assessment activities;*
- *challenging students at an appropriate level;*
- *using a variety of groupings to meet student needs.*

Differentiated instruction does not include:
- *doing something different for every student in the class;*
- *disorderly or undisciplined student activity;*
- *using groups that never change, or isolating struggling students within the class;*
- *never engaging in whole-class activities with all students participating in the same endeavour.*

(TIPS: Developing Mathematical Literacy, 2004, p. 1)

Figure 3 illustrates the principles and strategies associated with differentiated instruction.

Figure 3. A Concept Map for Differentiating Instruction

Differentiation of Instruction

↓

is a teacher's response to learner's needs

guided by general principles of differentiation, such as

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

Teachers can differentiate through

| Content | Process | Product | Affect / Environment |

according to student's

| Readiness | Interests | Learning Profile |

through a range of instructional and management strategies such as

multiple intelligences	tiered lessons	4MAT
jigsaw	tiered centers	varied questioning strategies
taped material	tiered products	interest centers
anchor activities	learning contracts	interest groups
varying organizers	small-group instruction	varied homework
varied texts	group investigation	compacting
varied supplementary materials	orbitals	varied journal prompts
literature circles	independent study	complex instruction

Adapted from a paper presented by Carol Ann Tomlinson at the Association for Supervision and Curriculum Development (ASCD) Summer Conference, 2008, and included in the conference materials. As cited in *Reach Every Student Through Differentiated Instruction* (Toronto: Ontario Ministry of Education, 2009).

Strategies That Draw on Principles of UDL and Differentiated Instruction

As noted earlier, UDL and differentiated instruction overlap, sharing a number of goals and strategies. Both promote varying the form of assessment and instructional materials (e.g., printed text, visual or auditory representations), using different media, providing opportunities for different kinds of activities and different means of demonstrating learning. In addition, both UDL and differentiated instruction recognize the importance of a safe and supportive environment for improving student learning.

Teachers already use many assessment and instructional approaches that are compatible with the principles of UDL and differentiated instruction. These strategies take into account the background and experiences of all students to meet their diverse interests, aptitudes, and learning needs. They include the following (adapted from *Education for All K–6*, pp. 16–17):

- *Cooperative learning approach:* Cooperative learning emphasizes small-group work. The teacher puts students with different abilities and talents into a small group and assigns that group a specific task, with the requirement that the students work together to achieve this goal (Clarke, Eadie, & Wideman, 1992; Howden & Kopiec, 1999; Howden & Martin, 1997; Perrenoud, 1998a). The teacher needs to structure the task so that no member of the team can complete it on his or her own (Arcand, 2004; Clarke et al., 1992; Howden & Kopiec, 1999; Howden & Martin, 1997).

- *Project-based approach:* This approach requires the teacher to facilitate learning through a variety of projects dealing with a particular topic or theme. Students may be required to analyse data, develop a synthesis, and present their newly acquired knowledge (Francoeur-Bellavance, 2001). The open nature of project-based learning allows students to choose subjects they are interested in, at their own level (Leclerc, 1998; 2000). Teachers use open or parallel questions to provide students in mixed-ability groupings with the opportunity to work simultaneously on a number of options. Teachers need to make sure that they find

at least one task appropriate to each student, and should monitor carefully that students are attempting tasks at the most appropriate instructional level (Perrenoud, 1997; 1999).

- *Problem-based approach:* This approach requires the teacher to present students with a realistic, believable problem that they can solve only through the acquisition of a new skill. Students reflect on the best process or strategy for solving the problem, and are also encouraged to develop or question effective procedures used in other problem situations (Perrenoud, 1998a). Teachers should carefully plan what they want to work on and what cognitive challenges they wish to provide their students. The teacher's challenge when using this approach is to ensure differentiation of instruction. It is tempting in problem-solving tasks for teachers to favour the most able, vivacious, perceptive, and independent students (Perrenoud, 1998a).

- *Explicit instruction:* Students' abilities to learn independently fall on a continuum, so teachers must provide students with a range of structured to unstructured learning opportunities (Pressley, Wharton-McDonald, Mistretta-Hampston, & Echevarria, 1998; Pressley, Yokoi, & Rankin, 1996). Some students require instruction that uses overt thinking processes (e.g., using modelling and think-aloud), or what is sometimes referred to as explicit instruction (Gaskins, 1998; Kamil, Mosenthal, Pearson, & Barr, 2000; National Reading Panel, 2000). Explicit instruction requires teachers to frequently model the use of assessment tools and learning strategies. To help students "discover" that a strategic approach is superior to a non-strategic one, teachers can:
  o verbalize their thought processes, including the steps they take in a strategy or learning process, as well as the parameters associated with the use of these thought processes;
  o share relevant personal learning experiences related to the concept or strategy they are teaching;

     o   provide students with opportunities to practise using the strategy, mentor and monitor students' practices, provide timely feedback, and guide their attempts until they can carry out the strategy independently (Almasi, 2003; Woloshyn, Elliott, & Kaucho, 2001).

The Tiered Approach

The "tiered" approach to prevention and intervention is a systematic approach to providing high-quality, evidence-based assessment and instruction and appropriate interventions that respond to students' individual needs. It is based on frequent monitoring of student progress and the use of assessment data, focusing on learning rate and level, to identify students who are having difficulty and to plan specific assessment and instructional interventions of increasing intensity to address their needs effectively. The tiered approach can be used to address both academic and behavioural needs. The nature, intensity, and duration of interventions may be decided by teachers individually or in collaboration with a school team, always on the basis of evidence derived from monitoring student achievement.

The tiered approach can facilitate early identification of students who may be at risk and ensure appropriate and timely interventions for students who exhibit persistent learning difficulties, significantly reducing the likelihood that they will develop more intractable problems in the future (Vaughn, Linan-Thompson, & Hickman, 2003).

"An extremely effective approach to assessment and intervention is the 'tiered' approach, which sequentially increases the intensity of instructional interventions."
> *(Vaughn & Fuchs, 2003, as cited in Education for All, K–6, p. 60)*

The tiered approach is summarized in the following chart:

Figure 4

Tier 3

For students who require additional support to achieve learning goals, even more precise and intensive instruction and assessment are planned, often with the help of the in-school team and/or other available resources. Monitoring of progress continues.

Tier 2

On the basis of assessment results, interventions are planned for students who are experiencing difficulty in a particular area or in general. Student progress in response to these interventions is closely monitored, and instruction is adjusted as needed.

Tier 1

Instruction and assessment for all students, planned in relation to the curriculum. The teacher observes, monitors student progress, and notes which students may be experiencing difficulty.

As noted in *Education for All K–6* (p. 60), the success of the tiered approach depends on teachers receiving professional learning in assessment practices, progress-monitoring methods, and intervention strategies for students with diverse educational needs.

3   Assessment for Learning

Types of Assessment

Recent research in education has focused on three different types of assessment:

- *assessment **as** learning*;
- *assessment **of** learning;*
- *assessment **for** learning.*

Assessment as learning is a process of developing and supporting students' metacognition. Assessment as learning focuses on the role of the student as the critical connector between assessment and learning. When students are active, engaged, and critical assessors, they make sense of information, relate it to prior knowledge, and use it for new learning. In doing so, they perform the regulatory process in metacognition. This occurs when students monitor their own learning and use the feedback from this monitoring to make adjustments, adaptations, and even major changes in what they understand. It requires that teachers help students to develop the ability to reflect on and to critically analyse their own work and to practice and become comfortable with these processes.

Assessment of learning is summative in nature and is used to confirm what students know and can do, to demonstrate whether they have achieved the curriculum outcomes, and, occasionally, to show how they are placed in relation to others. Teachers concentrate on ensuring that they have used assessment to provide accurate and sound statements of students' proficiency, so that the recipients of the information can use the information to make reasonable and defensible decisions. This document is focused on assessment for learning, which is conducted before and during learning and guides instruction.

Assessment for learning is designed to give teachers information to modify and differentiate teaching and learning activities. It acknowledges that individual students learn in idiosyncratic 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 not only what students know but also how, when, and whether students apply what they know.

Teachers can also use this information to streamline and target instruction and resources, and to provide feedback to students to help them advance their learning (Ontario Ministry of Education, *Differentiated Instruction Educator's Package, Facilitator's Guide – Assessment for Learning. Getting to the Core of Teaching and Learning*, 2008, p. 4).

The Benefits of Assessment for Learning

Studies have shown that the use of assessment *for* learning contributes significantly to improving student achievement, and that improvement is greatest among lower-achieving students (Black & Wiliam, 1998).

> There is considerable research which confirms that assessment *for* learning is one of the most powerful ways of improving learning and raising standards because it is rooted in helping students learn more.

Assessment for learning is the process of gathering evidence from a variety of sources and using a variety of approaches or "assessment tools", and interpreting that evidence, to enable learners and teachers to determine:

- where the learners are in their learning;
- where they need to go; and
- how best to get there.

Teachers can adjust instructional strategies, resources, and environments effectively to help all students learn *only if they have accurate and reliable information about what their students know and are able to do at any given time, and about how they learn best.* Ongoing assessment for learning provides that critical information; it provides the foundation for differentiated instruction.

Components of Assessment for Learning

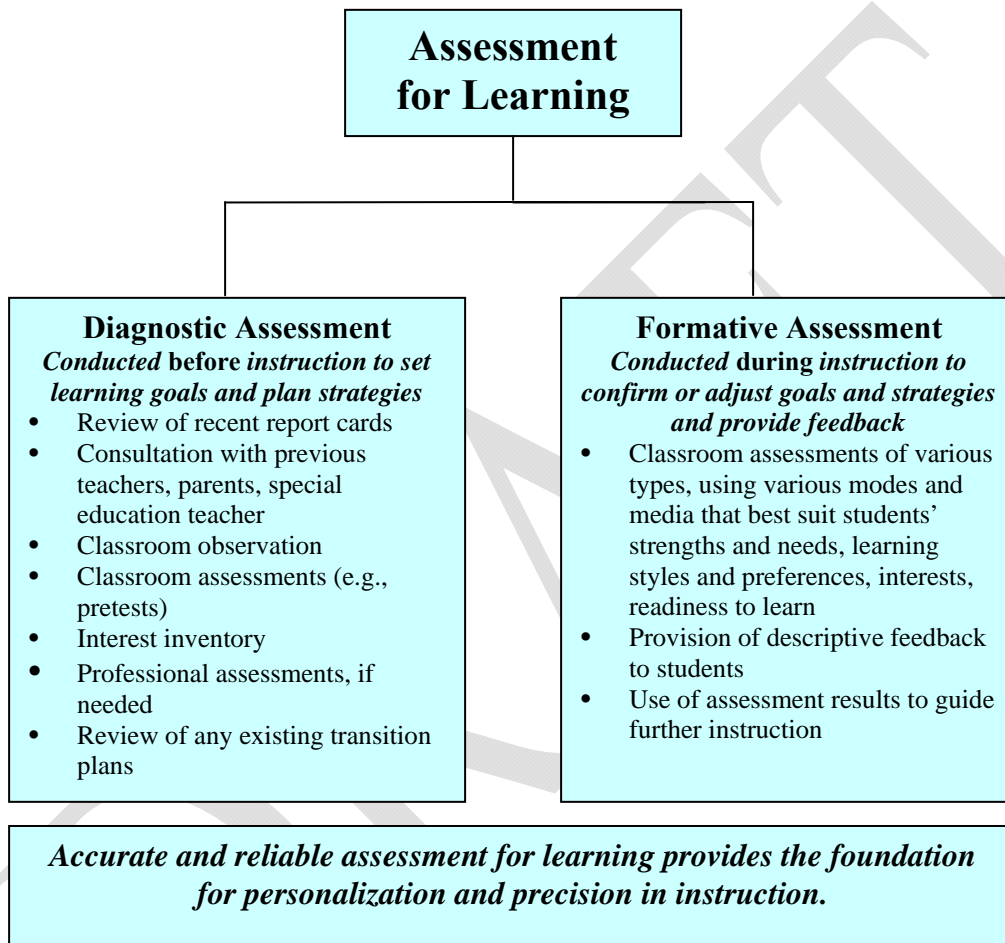Assessment for learning includes diagnostic assessment and formative assessment:

- ***Diagnostic assessment***[4] is conducted before instruction and 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 assessments and tasks that meet students' learning needs, interests, and learning preferences. Teachers and students use this information to set appropriate learning goals.

  Diagnostic assessment helps the teacher to identify what the student brings to the classroom or to a specific subject. This information about students can be gathered from previous teachers, parents, and formal sources, such as the Ontario Student Record.

- ***Formative assessment*** is conducted during learning and is intended to give teachers and students precise and timely information so that 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 in that the information gathered is used for the specific purpose of helping students improve *while they are still gaining knowledge and practising skills.* Teachers who view assessment as integral to learning engage students as collaborative partners in the learning process (Ontario Ministry of

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[4] Diagnostic assessments can include both classroom (educational) assessments and, where appropriate, professional assessments (i.e., speech and language, health, and psychological assessments).

Education, *Differentiated Instruction Educator's Package, Facilitator's Guide – Assessment for Learning. Getting to the Core of Teaching and Learning*, 2008, p. 3.).

Figure 5

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                     ┌─────────────────────┐
                     │    Assessment        │
                     │    for Learning      │
                     └─────────────────────┘
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Diagnostic Assessment	**Formative Assessment**
Conducted **before** *instruction to set learning goals and plan strategies*	*Conducted* **during** *instruction to confirm or adjust goals and strategies and provide feedback*
• Review of recent report cards • Consultation with previous teachers, parents, special education teacher • Classroom observation • Classroom assessments (e.g., pretests) • Interest inventory • Professional assessments, if needed • Review of any existing transition plans	• Classroom assessments of various types, using various modes and media that best suit students' strengths and needs, learning styles and preferences, interests, readiness to learn • Provision of descriptive feedback to students • Use of assessment results to guide further instruction

Accurate and reliable assessment for learning provides the foundation for personalization and precision in instruction.

The reliability of assessment for learning depends on:

• the identification, clarification, and sharing of learning goals in student-friendly language;

• the student's understanding of the success criteria of these goals in specific terms – what successful attainment of the learning goals looks like;

- descriptive feedback that helps students consolidate new learning by providing information about what is being done well, what needs improvement, and how to take steps towards improvement; and
- self-assessment that motivates students to work more carefully and recognize their own learning needs, so that they can become effective advocates for how they learn best.

Assessment for learning involves collaboration among teachers, parents, and students, and enables students to experience the successes that come with timely intervention and with instructional approaches and resources that are suited to the ways they learn best. Both factors help build students' confidence and provide them with the incentive and encouragement they need to become interested in and focused on their own learning.

A checklist to guide the use of *assessment for learning* in the classroom

☐ Break and/or combine curriculum expectations.

☐ Clearly identified incremental learning goals in student-friendly language.

☐ Share the learning goals with students at the start of the teaching and learning process, and clarify these learning goals to ensure a common understanding between teachers and students.

☐ Apply assessment strategies that are closely tied to the learning goals of each lesson and that accurately reflect student progress and achievement.

☐ Always discuss results of assessments with students, providing timely descriptive feedback that helps them understand their strengths and the areas in which they need to improve. Discuss specific steps they can take to make the improvements.

☐ Adjust instruction -- and, if appropriate, learning goals -- on the basis of assessment results.

☐ Encourage students to monitor their own progress, to take responsibility for their learning, to celebrate and take pride in their achievements, to communicate with their teachers and parents about their learning, and, in general, to develop their sense of efficacy with respect to improving their achievement.

(Adapted from Stiggins, Arter, Chappuis, & Chappuis, 2005)

4   Planning Assessment and Instruction

*Developing class profiles and student profiles can help teachers plan daily instruction that enables every student to learn and achieve success -- instruction that is **"necessary for some and good for all".***

Knowing Your Students

Effective assessment and instruction planning starts with knowing your students. To know their students and to plan focused assessment and instruction, teachers need to:

- gather information about the students in their classes;
- process and synthesize that information in order to understand each student's strengths, learning styles, preferences, needs, interests, and readiness to learn;
- select or develop and implement appropriate and productive combinations of assessment and instructional strategies, activities, groupings, and resources to address the diverse needs of students in their classes.

Two highly effective tools designed to facilitate effective planning are the *class profile* and the *individual student profile*. These tools are discussed in detail in the following sections, and sample templates are provided in Appendices A and B.

Developing a Class Profile

The class profile provides the teacher with a snapshot of the strengths and needs, interests, and readiness of the students in the class. It is a resource for planning that conveys a great deal of critical information at a glance, serving as an inventory of accumulated data. This profile is best designed as a "living document", in that it is both a reference tool for planning assessment and instruction at the beginning of the year, semester or term, and a tracking sheet for monitoring progress, recording changes,

adjusting instructional strategies, planning subsequent instruction or interventions, and sharing information with other teachers.

The class profile is developed at the beginning of the school year, semester, or term as the teacher undertakes the process of "*assessment for learning"* for the students in his or her classes. It is a tool for recording and summarizing information gathered through *diagnostic assessment* prior to instruction and through *formative assessment* during instruction. A class profile can be updated as the school year, semester, or term progresses. It enables teachers to identify and group students by:

- their learning styles and preferences (often referred to as a "learning profile");
- their current place in the learning, or "readiness to learn", with respect to the expectations of the particular subject and grade or course, as well as their learning strengths and areas in need of improvement;
- their interests and talents;
- their socio-affective characteristics;
- the supports needed to help meet student needs.

Note that the sample class profiles attached provide two columns for recording the information noted above for each student, under "Learning Profile" and "Strengths / Areas of Need".

Why Develop a Class Profile?

The class profile helps teachers to:
- *sort, categorize, and summarize classroom data;*
- *detect patterns of similarities and differences among the students that will help guide the planning of assessment and instruction;*
- *serve as a daily reference for planning assessment and instruction;*
- *use data to design differentiated instruction;*
- *form flexible groupings;*
- *monitor student progress by noting results of ongoing assessments;*
- *make adjustments in response to assessment results to better focus instruction;*
- *share information among educators and parents.*

The sample elementary and secondary class profiles attached illustrate the process of developing a class profile.

Some school boards may already have developed similar profiles for use in their schools, or may have different types of charts, diagrams, and electronic forms from which class profiles can be generated. The particular configuration of the profiles is not critical. What is important is for educators to use planning tools to help them become familiar with each student's learning and growth continuum and to plan assessment and instruction that helps a student reach his or her potential. When all the teachers in a school use this type of a planning tool, they become engaged in a systematic and collaborative process, which should include students, to share information and plan effective assessment and instructional strategies.

Steps in the Development of a Class Profile

1. Gathering information about students. The classroom teacher develops his or her class profile by gathering information about each student from the following sources:
- the Ontario Student Record (OSR)

- transition plan (if the student has one)
- consultations with current and previous teachers
- consultations with parents and/or parent--student questionnaires
- consultations with students through surveys and conferences
- interest inventories
- classroom observation
- initial assessments (e.g., pretests)
- class profiles from earlier grades
- Education Quality and Accountability Office (EQAO) data
- Individual Education Plan (IEP)

In the course of gathering information from these sources, the teacher may find evidence to support the need for a more intensive focus on particular students. For those students, the teacher may decide to develop an *individual student profile* (see attachment), perhaps in collaboration with other teachers, the special education teacher, and/or members of an in-school team.

2. Organizing and recording the student information on a class profile template. The teacher summarizes each student's strengths and areas of need in terms of learning readiness related to the subject and grade or course, interests, and social-behavioural characteristics.

3. Selecting instructional strategies and resources based on information in the class profile. The teacher consults with professional colleagues and reviews relevant resources to determine appropriate instruction relating to each student's strengths and needs. In the process of compiling ideas in the class profile, the teacher is able to identify the strengths, needs, similar challenges, and interests of the students in the class. The teacher begins to identify those students who will benefit from similar types of strategies and group them depending on their learning styles, preferences, and particular stages of learning. The teacher may also group students according to similar modes and media, resources, and/or supports for assessment and instruction. The teacher can also detect

opportunities for potentially beneficial pairings and groupings of students with similar or complementary learning styles, personalities, and interests.

4. Program planning and the implementation of Universal Design for Learning, differentiated instruction, and, where needed, interventions of increasing intensity (the tiered approach). The teacher considers the curriculum, the instructional strategies selected, and the patterns in the class, and plans in light of these factors. The principles of Universal Design for Learning ensure that planning is flexible, supportive, adjustable, and focused on increasing access to the curriculum by all students.

5. Monitoring progress and adjusting strategies; reviewing the overall program. Over time, during the course of instruction and ongoing assessment, the teacher gathers new information about students, based on their response to instructional strategies and approaches and to the overall learning environment. The teacher notes progress or the lack of it, and considers any adjustments in planning. In the case of students who have persistent difficulties, the teacher may note the need for more intensive instructional support or for special intervention by an in-school team or external specialist.

6. Consultation with the in-school team(s) and out-of-school supports (including community agencies). Keeping in mind that strategies require adequate investment of time and persistence before a decision can be made about their effectiveness, the teacher may decide to seek further assistance regarding some students from the in-school team(s) and out-of-school supports. The teacher works in collaboration with the in-school team(s) to review the effectiveness of teaching strategies selected and/or to incorporate the recommendations made by out-of-school professionals.

Sample Class Profiles

A sample elementary school class profile (Senior Kindergarten) and a sample secondary school class profile (Grade 9 Applied Mathematics) are provided as attachments. In each case, a completed template is shown on the left-hand page, with an illustration of the

same profile showing the steps in the process of its development on the right-hand page. (A blank template is provided in Appendix A.)

In each of the sample class profiles, there are notes pertaining to students who may require additional support to help them reach their full potential in learning. In the elementary class profile, one of those students is Mark. In the secondary profile, one is Angela. Here are their stories:

Elementary Class Profile -- Mark's Story

Mark is a 5-year-old Senior Kindergarten student who enjoys counting, sorting, and sequencing. Mark responds well to routines and consistency in the classroom. He is meticulous about putting other students' toys away on the toy shelf in a very particular way. Mark was diagnosed at the age of 2 with Autism Spectrum Disorder (ASD). In class, Mark struggles to focus and becomes overwhelmed very easily. When he feels overwhelmed, Mark will take his blanket and hide in the cloakroom. He can become very anxious and sometimes has loud outbursts. He struggles to communicate with his peers and will withdraw if he cannot get his feelings across.

Secondary Class Profile -- Angela's Story

Angela is a 14-year-old girl in Grade 9. She is an avid reader and loves to play the piano. She spends much of her free time on the family's small hobby farm, caring for the animals. She aspires to be a veterinarian and operate her own animal hospital. Angela is currently enrolled in academic courses, with the exception of Grade 9 Applied math. She has limited social interactions with her peers and often chooses to work alone.

Developing a Student Profile

The individual student profile is a tool for compiling information that provides a more complete and more precise picture than does the class profile of a student's strengths

and needs, as well as of the assessment and instruction that best suit an individual student's learning style, preferences, needs, interests, and readiness and the supports available to the student.

When Is an Individual Student Profile Needed?

Developing an individual student profile is a practice that is "good for all and necessary for some". When a teacher recognizes that a student requires additional time and support in order to be successful in learning or to reach his or her potential for achievement, the teacher will create a student profile. In such cases, more detailed and precise information is required and can be gathered from a variety of information sources. The information collected through this process enables the teacher to provide more personalized and precise classroom assessment and instruction.

After completing this information-gathering process, the teacher devises assessment and instruction for the student that takes into account the particular needs of the student and capitalizes on his or her strengths. One of the key pieces of information to be derived from the individual learning profile is the student's current instructional level in the area(s) of difficulty. On the basis of this information, the teacher can provide instruction that directly targets the critical skills that the student needs. Essentially, the learning profile performs a "gap analysis" to determine where the student's abilities are relative to the age-appropriate stage of development.

The teacher works in collaboration with the in-school team(s) to review the effectiveness of teaching strategies selected over an adequate period of time and/or to incorporate further recommendations from the in-school team(s).

Information gathering, planning for prevention and intervention through assessment and instruction is an integrated teaching–learning process. It begins and ends with the classroom teacher and is supported by the in-school team(s).

Classroom teachers should communicate with the principal, other educators, and in-school team(s) to coordinate efforts and share information regarding students for whom they believe an individual student profile should be developed.

The information gathered for an individual student profile would become an important resource for the in-school team(s) and any other educators or professionals when an Individual Education Plan (IEP) is being considered for a student.[5]

The box below lists various concerns or issues that may also suggest to a teacher that it may be beneficial to develop an individual student profile.

Teachers can increase the precision and effectiveness of instruction and assessment by developing individual student profiles for their students, particularly for those who:

- *are not reaching their full learning potential;*
- *are facing social-emotional, behavioural, or organizational challenges;*
- *are experiencing difficulty with a particular transition or transitions in general;*
- *have personal circumstances that are interfering with their learning;*
- *have become disengaged from school activities;*
- *may have special education needs.*

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[5] More detailed information on the development of an IEP can be found in *The Individual Education Plan (IEP): A Resource Guide* (Toronto: Ontario Ministry of Education, 2004).

Why Develop a Student Profile?

In developing an individual student profile, the teacher has the opportunity to:

- *consider opportunities for using and building on the student's strengths;*
- *consider ways of drawing on strengths the student has demonstrated in other subjects, the student's prior knowledge in various subjects, and his or her learning style or preference and interests outside school to motivate the student and support his or her learning in the particular subject;*
- *develop specifically targeted assessment and instruction for the student;*
- *consider how the student would benefit from particular student groupings for different kinds of activities;*
- *foresee the need for, and plan for the use of, particular supports and accommodations, appropriate media and technologies, and particular forms and modes of instructional and assessment activities, tools, and resources.*

Steps in the Development of a Student Profile

The steps for developing a student profile parallel those listed on pages 39-43 for developing a class profile. The student profile calls for more intensive research and scrutiny of information sources, and more varied and specifically targeted assessments to better understand the nature of the student's strengths and needs.

Gathering Information

For the individual student profile, it is important to gather and record information similar to that required for the class profile, but also to delve deeper into areas such as:

- current levels of achievement and progress in developing learning skills and work habits (from the most recent provincial report card and EQAO data);
- readiness to learn, particularly in relation to specific subject areas and/or curriculum expectations (e.g., from classroom observations, surveys, pretests);

- learning styles and learning preferences (see Appendix B);
- motivational needs and interests (from interest inventories, questionnaires, classroom discussions);
- learning needs, and any additional support or accommodations that enable the student to learn and to demonstrate learning;
- social and emotional strengths and needs (e.g., self-management, getting along with others, social responsibility), including ability to adjust to transitions;
- available resources and supports that help meet the student's needs;
- other relevant information, such as the kind of activities the student pursues outside the school.

Sources of information and assessments

Sources of information are also similar to those used to prepare the class profile:

- ***Ontario Student Record (OSR).*** Delving deeper into the Ontario Student Record (OSR) can provide a wealth of information about a student and his or her academic history, strengths, and areas of need. Teachers developing a student profile can find out about the student's current and recent levels of achievement in various subjects or courses from the report cards held in the OSR. Report cards also provide important information about learning skills and work habits that affect learning.

  The OSR is a valuable source of information that is too often overlooked. School boards and schools need to make the necessary arrangements and communicate clear procedures for allowing educators timely access to students' OSRs before the start of the school year or semester.

The Ontario Student Record (OSR)

The OSR is the official record of a student's educational progress through schools in Ontario.[*] The OSR consists of the following components:

- o   an OSR folder
- o   provincial report cards
- o   an Ontario Student Transcript (OST)
- o   a documentation file, where applicable (contains educational and professional assessments, IEP, transition plan, etc.)
- o   an Office Index Card
- o   additional Information identified as conducive to the improvement of the instruction of the student

For more information on the OSR, see *The Ontario Student Record (OSR) Guideline, 2000.*

- *Consultations with parents, students, current and previous teachers, school team(s), the special education teacher, community partners.* Consultations with parents, students, and educators and community partners who have been involved with the student's education will provide critical insights that cannot be obtained from other sources.

- *Classroom observation and other classroom assessments.*
  Ongoing classroom observation, along with the use of various assessment tools that are closely linked to the learning goals and objectives of each lesson and designed in a way that enables the student to best demonstrate his or her learning, is critical for determining the student's current achievement level and readiness to learn.

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[*] Schools operated by the ministry, including Provincial Schools and Demonstration Schools. The following schools may choose to establish and maintain an OSR for their students: private schools; schools operated by Indian and Northern Affairs, Canada, in First Nation communities (also referred to as federal schools); First Nation schools operated by Native education authorities.

Classroom observation and assessments also provide information about a student's general learning behaviour and help the teacher track and analyse changes in the student's learning behaviour. Such information enables the teacher to personalize and provide more precise instructional strategies.

Providing Accommodations to Help Meet Student Needs

The information gathered for the student profile will provide the teacher with more in-depth information about individual students' learning styles, preferences, interests, and readiness to learn. Based on this information, the teacher should consider the types of accommodations[6] that would help individual students in the class learn and demonstrate their learning, and that would also enhance classroom dynamics. Providing appropriate accommodations is a significant step in applying the principles of UDL -- that is, ensuring that planning is flexible, supportive, adjustable, and focused on increasing access to the curriculum by all students. Accommodations can include adjustment of timelines on assignments and projects, seating arrangements and grouping strategies, access to information and communications technologies (ICT), and access to various types of organizational tools (e.g., advance organizers, visual schedules).

Devising Instructional Strategies, Monitoring Progress, and Determining Next Steps

The teacher analyses all of the information gathered, performing a "gap analysis" to determine where the student's achievement is relative to the expectations of the curriculum for the particular grade or course. On the basis of that analysis, the teacher designs instruction that directly targets the critical skills that the student needs, in the context of a program planned on the basis of the principles of UDL and differentiated instruction, and provides any necessary additional support. The teacher monitors the student's response to the instructional strategies implemented, and determines whether there is a need for increasingly intensive or specialized interventions, using the tiered approach.

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[6] Although the term *accommodations* was previously used almost exclusively in connection with students who have special education needs, it is now being used more broadly, in reference to ways of meeting the learning needs of all students.

There may be times when the teacher needs to consult with members of the in-school team(s) who may recommend other strategies, refer the student for further educational and/or professional assessments, or when appropriate, address special education needs through the development of an IEP.

Sample Student Profiles

A sample individual student profile for an elementary school student -- Mark (Senior Kindergarten), whose story was provided on page 36 and who is a member of the class represented in the sample elementary class profile -- appears in the attachment. A sample profile for Angela, the secondary school student whose story is given on page 36 and who is a member of the class represented in the sample secondary class profile, is provided as an attachment. In each case, a completed template is shown on the left-hand page, with an illustration of the same profile showing the steps in the process of its development on the right-hand page. (A blank template is provided in Appendix A.)

Planning for Student Transitions

Students experience a number of transitions as they progress along their individual learning and growth continuum from Kindergarten to Grade 12. Transitions can include:

- entry to school;
- transition between activities and settings or classrooms;
- transition between grades;
- moving from school to school or from an outside agency to a school;
- moving from a First Nation school;
- transition from elementary to secondary school;
- transition from secondary school to postsecondary pathways (apprenticeship, college, community living, university, and/or the workplace).

Transition planning is an important process for *all* students. Considering a student's transition is an important part of developing class and individual student profiles. Thoughtful planning for transitions provides the foundation for successful transition

experiences that help a student learn to cope with change and adapt to a variety of settings.

Significant transitions that are more complex, and that include significant changes to many aspects of student's routines, may require collaboration among the school team(s), parents, and the community.

For students with special education needs where the pupil is 14 years of age or older, the Individual Education Plan must also include a plan for transition to appropriate postsecondary school activities, such as work, further education, and community living (Transition Planning: A Resource Guide, Ontario Ministry of Education, 2002).

For students with Autism Spectrum Disorder (ASD), principals are required to ensure that a plan for transition is in place. Transitions may include: entry to school; transition between activities and settings or classrooms; transitions between grades; moving from school to school or from an outside agency to a school; transition from elementary to secondary school; transition from secondary school to postsecondary destinations and/or the workplace (Policy/Program Memorandum No. 140: "Incorporating Methods of Applied Behaviour Analysis (ABA) into Programs for Students With Autism Spectrum Disorders (ASD)", Ontario Ministry of Education, 2007).

Planning for All

The student profile and the class profile together provide teachers with an invaluable reference to consult as they plan lessons and activities geared precisely to the needs of the students in their classes.

Effective instruction begins with an understanding of the strengths and needs of the learners both collectively as a classroom unit and as individual students. By developing a class profile and individual student profiles when necessary, the teacher establishes informative and insightful references to guide the selection of effective teaching and learning strategies and interventions to maximize all students' achievement, as appropriate in the context of each student's individual learning and growth continuum. The principles of universal design and differentiated instruction ensure that planning is flexible, supportive, and adjustable and that it increases access to the curriculum for all students.

Figure 6
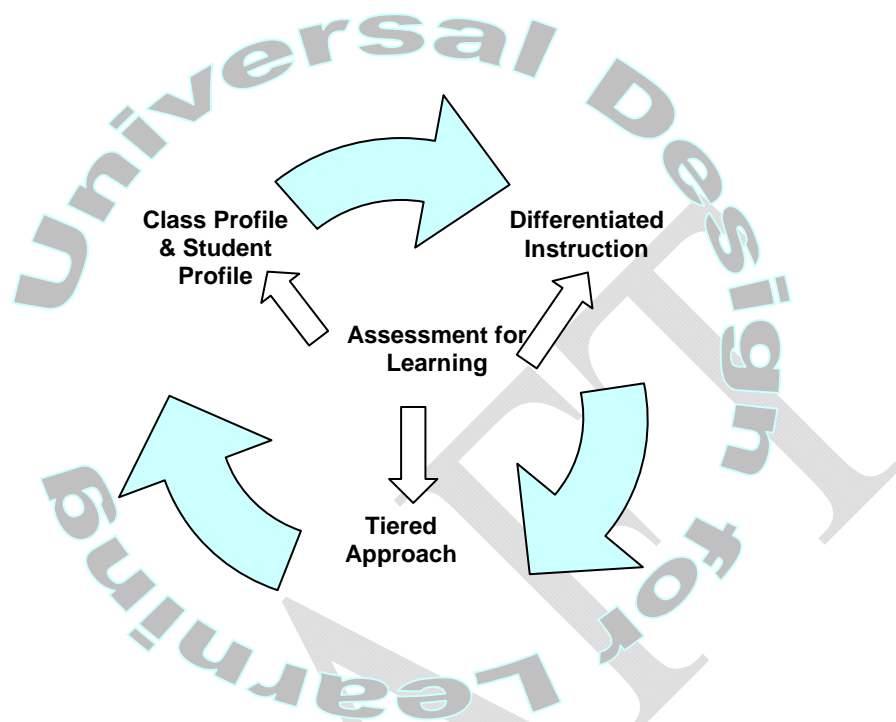
While Universal Design for Learning provides the teacher with broad principles for planning, differentiated instruction allows teachers to address specific skills and difficulties (Raynal & Rieunier, 1998).

5   Putting the Pieces Together

Learning for All in Professional Learning Communities

The approaches outlined in *Learning for All K–12* are designed to bring about personalization of learning, starting with the premise that teachers need to know their students, and that assessment for learning in tandem with professional learning is critical for achieving precision in instruction. These approaches provide a road map for educators to *reach every student*.

> *Professional learning communities (PLCs) are guided by three big ideas:*
>
> - **a commitment to ensure learning for all students**
> - **a culture of collaboration**
> - **a focus on results**
>
> *(Dufour, R. (2004). What is a Professional Learning Community? Educational Leadership, 61(8), pp. 6–11)*

A Commitment to Ensure Learning for All Students

When systems and schools function as professional learning communities, all educators work collaboratively in a culture of learning to ensure learning for all students and their own professional learning. They work together to close achievement gaps by designing coordinated strategies to ensure that all students receive appropriate and timely assessment and instruction. A successful professional learning community works systematically, addressing the learning needs of all within the entire school community.

In professional learning communities there is a culture of high expectations that supports the *belief that all students can learn*, and the school responds in a timely fashion to

students who require intervention and support. An effective intervention is time limited, and the student subsequently progresses without ongoing extra support.

In professional learning communities, there also is a process and practice in place to guide decision making in implementing timely support and interventions through a team approach. The team responds to individual student learning needs, and monitors, tracks, and analyses student data to improve student achievement. There are also shared and clearly understood learning goals for all students, and students see themselves represented in the curriculum, program, and culture of their school. Students feel a sense of belonging in their classrooms and in their schools and participate in decisions that have an impact on their educational experience.

A Culture of Collaboration

Educators in a professional learning community understand that they learn and work together to achieve their collective purpose of *learning for all.* The powerful collaboration that characterizes professional learning communities is a systematic process in which educators work together with parents and community partners to analyse and continuously improve their classroom and school practices.

In a professional learning community, educators work in teams, engaging in an ongoing cycle of exploration into ways of focusing assessment and instruction in their classrooms that promotes deep learning among team members. This process, in turn, leads to higher levels of student achievement. However, the promise of a professional learning community can be realized only if this process is systematic and school-wide. The school must ensure that every educator belongs to a team that focuses on student learning and that every team has the time to meet regularly throughout the school year. The success of the process ultimately rests on a collective will to pursue collaborative learning, as well as on the ability of the individual to find personal security and confidence in the process of continuous improvement.

Teams focus their efforts on crucial questions related to learning, and produce work that reflects that focus, such as identifying learning goals for curriculum planning needs, sharing different kinds of assessment tools, analysing data on student achievement, and developing and sharing instructional strategies and other approaches for improving results. Teams should also develop norms to clarify roles, responsibilities, and relationships among team members. Teams work towards student achievement goals that are linked to school and system goals.

A Focus on Results

Professional learning communities judge their effectiveness on the basis of results. Every educator participates in an ongoing process of identifying current levels of achievement, establishing goals to improve those levels, and working together to achieve those goals. Sustaining an effective professional learning community requires that school staff focus on learning as much as teaching, on working collaboratively to improve learning, and on holding themselves accountable for the kinds of results that fuel continued improvements.

When educators work collaboratively to implement an integrating process of assessment and instruction, student achievement can improve. The success of the professional learning community approach depends on the commitment and persistence of the educators within the school.

Conclusion

Building effective professional learning communities together requires that partners at all levels of the education system create the conditions that provide all students with the best possible opportunities to learn and to maximize their potential. This is a matter of equity and social justice, and it is our collective responsibility.

Leadership is second only to teaching in its impact on student outcomes. School and system instructional leaders play a critical role in supporting an integrated approach to

student-centred learning through their commitment to equity and student outcome.[7] Supervisory officers, principals, and vice principals put in place supportive system and school practices and procedures such as professional learning communities. They facilitate forward planning, align resources, and provide the support to build an integrated process of assessment and instruction in their schools.

In addition, lead educators in elementary and secondary schools also play a significant role in this process by working directly with teachers through job-embedded training and coaching and through existing initiatives (e.g., Leading Student Achievement (LSA), Teaching-Learning Critical Pathways, Professional Learning Communities (PLCs), Hubs and Networks, and Growing Accessible Interactive Networked Supports (GAINS)).

All educators and parents hope that our schools will bring out the very best in their students and encourage them to reach their full potential. Much progress has been made, but we have more work to do. The effort to raise the bar and reduce the gap is a shared responsibility. It requires engagement and partnership between parents, the school, and its community to provide learning opportunities for all students.

Raising the bar and closing the gap can occur when school boards, schools, and educators focus their planning, instruction, interventions, and responses on the following four key tenets:

- Knowing your students
- Knowing where they are in their learning
- Knowing where they need to go in their learning
- Knowing how to get them to where they need to go in their learning

When the planning initiatives of the ministry, school boards, schools, and educators are aligned in a concerted and strategic manner, we can build a seamless continuum of student-centred learning and optimize student learning and achievement.

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[7] Adapted from *Leadership Framework for Principals and Vice Principals and for Supervisory Officers* (Toronto: Ontario Ministry of Education, 2008).

The Ministry of Education has put a number of tools in place to promote school board planning aimed at improving learning outcomes for our students, as follows:

- *Draft K–12 School Effectiveness Framework* (Ontario Ministry of Education, 2009)[8]
- Board Improvement Plans and School Improvement Plans
- School Board Special Education Plans

Learning for All K–12 provides approaches and tools that can be implemented in classrooms, schools, and school boards. These approaches and tools serve as an important starting point in a consistent process of gathering student information, providing personalization and precision in instruction, and tracking student progress over time. Using these approaches and tools through the work of professional learning communities will help school communities improve practices to help students achieve deeper learning. As a result, this process more effectively supports and sustains improvement in student achievement over time. (A list of guiding questions that may assist educators with the implementation of approaches outlined in this document is provided in Appendix D.)

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[8] This document replaces *Draft School Effectiveness Framework: A Collegial Process for Continued Growth in the Effectiveness of Ontario Elementary Schools* (Ontario Ministry of Education, 2007) and *Student Success / Learning to 18 Strategy: Indicators of Student Success* (Ontario Ministry of Education, 2004). This document sets new directions for Board Improvement Plans and School Improvement Plans.

Appendix A: Class Profile Template

Teacher: _____   Grade/Course: _____   Date started: _____

Student	Learning Profile *	Strengths / Areas of Need *(achievement/readiness, interests, learning needs, social/emotional strengths and needs)*	Instructional strategies and resources; assessment tools; accommodations	Evidence of improvement in learning	Adjustments in instruction / Other interventions, if needed	Available supports and resources	Other relevant information

* The learning profile may include learning style, type of intelligence(s) ("learning preference"), as well as preferences or traits related to socio-economic or cultural background.
Learning styles: **A** -- Auditory; **V** -- Visual; **K** -- Kinesthetic; **T** – Tactile (Dunn & Dunn, 2000)

Learning preferences: **VL** -- Verbal/Linguistic; **LM** -- Logical/Mathematical; **VS** -- Visual/Spatial; **BK** -- Bodily/Kinesthetic; **MR** -- Musical/Rhythmic;
N -- Naturalist; **I** -- Interpersonal; **In** – Intrapersonal (Gardner, 1999).

Draft June 2009

Appendix B: Student Profile Template

Student Profile	

Name: _____   **Age:** _____

Grade/Course: _____   **Credits Accumulated:** _____

School: _____

Date: _____

Sources of Information

(Identify sources of information and assessments to be conducted. Check box and note date when a source has been reviewed or a new assessment completed.)

☐ Review of OSR, including current and previous report cards _____   ☐ Interest and/or learning style inventory _____

☐ Consultation with parents _____   ☐ Work samples, assignments, projects _____

☐ Consultation with previous teachers _____   ☐ Portfolios _____

☐ Consultation with support team _____   ☐ Teacher–student conferences _____

☐ Classroom observation checklist _____   ☐ Peer and self assessments _____

☐ Educational assessments (e.g., pretests related to particular curriculum expectations) _____   ☐ Other (specify)_____

Findings from Information Sources and Assessments -- Strengths and Areas of Need

Current achievement levels, learning skills/work habits, and readiness to learn	Learning styles/preferences and needs, interests, social/emotional strengths and needs	Other relevant information

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Assessment and Instruction

Considerations for Instructional Strategies	Considerations for Assessments	Available Resources and Supports

Appendix C: Questions and Checklists to Guide the Implementation of Universal Design for Learning, Differentiated Instruction, and the Tiered Approach

The following questions and checklists may serve as a guideline for planning instruction for all students.

Universal Design for Learning (UDL)

To check the following: overall design of programs, use of space, and presentation of Information; equity and accessibility for all students; flexibility and inclusiveness; and simplicity and safety.

Questions

➢ How do I provide multiple means of representation (the "what" of learning)?

➢ How do I provide multiple means of expression (the "how" of learning)?

➢ How do I provide multiple means of engagement (the "why" of learning)?

➢ How do I provide access to online learning supports that empower students to expand (the "when" of learning)? [9]

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[9] Adapted from *Universal design for learning guidelines version 1.0.,* CAST 2008. *UDL Guidelines Checklist for Educators* – http://www.cast.org/publications/UDLguidelines/UDL_Guidelines_Educator_Checklist_1.19.09.doc *UDL Guidelines Organizer* – http://www.cast.org/publications/UDLguidelines/UDL_Guidelines_v1.0-Organizer.pdf

Checklist to guide classroom practice using principles of Universal Design for Learning (UDL)

☐ Use the class profile and plan from the outset to provide the means and the types of learning materials/resources that meet the needs of *all* students.

☐ Clearly explain the learning goals of each lesson to students, and check to ensure that they all understand.

☐ Make students aware of what they are expected to learn.

☐ Ensure that challenges are achievable and that instructional and learning strategies are flexible and varied.

☐ Provide ongoing assessment, and adjust instruction in response to assessment results, as appropriate, to help each student learn.

☐ Use a variety of teaching and learning materials that represent all modalities (i.e., that make use of all the senses, that employ different media, and so on).

☐ Use multiple means of presentation, at various levels of difficulty, as appropriate for the students in the class (e.g., present information using visual, auditory, kinesthetic formats, during instruction). Make varied use of space.

☐ Ensure access to various types of information and communication technology tools to facilitate learning.

☐ Ensure adequate space and a minimum of distractions, so that students can concentrate on instructional elements.

☐ Ensure that the classroom is safe.

☐ If a student has a safety plan or protocol, ensure that it is shared with and followed by all members of the school community.

Differentiated Instruction

To check that assessment and instruction are varied to accomplish the following: suit diverse learning styles and preferences; engage students with various interests; support students who are at different stages in their readiness to learn and provide scaffolding, emotional support, and opportunity for practice.

Questions

- ➢ How can I set up the classroom for differentiated instruction?
- ➢ What elements of the learning environment can I differentiate to help all of my students learn?
- ➢ How can I differentiate the ways in which I help students learn new concepts?
- ➢ How do I pose questions that stimulate thinking for all of my students?
- ➢ How can I differentiate the strategies and tools I use to assess students' progress towards their learning goals, to enable each student to demonstrate his or her learning?[10]

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[10] Adapted from *Differentiated Instruction Educator's Guide: Getting to the core of teaching and learning* (Ontario Ministry of Education, 2007).

Checklist for classroom practice using differentiated instruction

Differentiate Content

☐ Vary content (e.g., provide content at different levels of difficulty; enable students to extend knowledge and skills) to suit student readiness, interests, motivational needs, and learning styles.

☐ Unpack the big ideas of the curriculum to create achievable learning goals.

☐ Introduce new learning and pose open questions as appropriate to the student's zone of proximal development (ZPD).

Differentiate Process

☐ Use various assessment strategies to match students' learning style preferences, interests, and readiness.

☐ Use various types of learning activities and various grouping strategies to draw on students' strengths and provide support in areas that need improvement.

☐ Use a variety of instructional and management strategies that engage all modalities.

☐ Provide students with opportunities to choose from an array of activities and projects that involve differentiated processes.

☐ Monitor students' response to the differentiated strategies used, and assess their progress on a regular basis.

☐ Provide the accommodations and/or modifications of curriculum that are specified in the IEPs of students who have special education needs.

Differentiate Product

☐ Gather achievement data through various assessment tools.

☐ Engage students' interest by involving them in various different types of projects and problem-solving activities.

☐ Foster students' sense of ownership of their learning by allowing them to choose the products they will create and the formats or modes of presentation they will use.

The Tiered Approach

To check for the following: application of appropriate interventions that respond to students' individual needs; frequent monitoring of students' progress; adjustment of instruction or goals in response to assessment results; and application of student response data to aid in decisions about next steps (e.g., specialized interventions, professional assessments, and, where appropriate, the development of an IEP).

> *Questions*
> - How do I determine what types of instruction and assessment strategies I should use to meet the needs of all students in the class?
> - What kind of assessment data should I collect?
> - How can this data inform my planning of interventions for students who require more time and/or support in specific areas of learning?
> - How can this data help me determine how best to adjust the type, intensity, and duration of interventions needed by some students?
> - How can I problem solve with the in-school team when assessment indicates that further support is required?

Checklist for classroom practice using the tiered approach

- ☐ Use ongoing monitoring of learning for all students to inform instruction.
- ☐ Monitor student work closely and rely on observation and assessment results to ensure prevention and intervention for students who are experiencing difficulty.
- ☐ Devise appropriate timely interventions to support the student's learning as soon as difficulty is evident, and monitor the student's response closely.
- ☐ Devise interventions of increasing intensity as needed to support the student's learning and continue to monitor student's progress.
- ☐ Use resources of varying levels of difficulty.
- ☐ Where appropriate, problem solve collaboratively, using a team approach, to meet the student's needs.

Appendix D: Questions to Guide System and School Implementation of an Integrating Process of Assessment and Instruction

The following questions can help to promote professional discussions and guide system and school leaders in implementing approaches and tools described in *Learning for All, K–12* at the system and school levels.

Knowing Your Students
At the system and school levels: ▪ What approaches and tools do we currently have in place to ensure that the learner is at the centre – that we "know our students"? ▪ What processes do we have in place to ensure that assessment and instruction are tailored to each student's particular learning style, preferences, interests, and readiness? ▪ What additional approaches and/or tools and processes can we put in place to ensure that the learner is at the centre? ▪ What measures of accountability do we currently have in place and/or need to put in place to ensure that our practices are making a difference in student learning?
Assessment for Learning
At the system and school levels: ▪ How do our current assessment practices inform instruction to support student learning? ▪ How do we effectively use assessment for learning to adjust instruction and revise learning goals? ▪ What resources do we need to provide in order to support the professional learning and practices of assessment for learning?

Personalization and Precision of Instruction

At the system and school levels:

- What assessment and instructional approaches have we effectively used to "raise the bar and close the achievement gap" for all of our students?
- In what ways and to what extent do our current instructional practices incorporate principles of Universal Design for Learning, differentiated instruction, and the tiered approach?
- What further steps can we take, and what additional supports do we need to build a deeper understanding of these approaches and to ensure that they are implemented?

Professional Learning

At the system and school levels:

- How can we deepen our understanding of professional learning communities (PLCs) and increase our capacity for building them, with the aim of improving student achievement?
- How can we change classroom, school, and system practice to build a culture of learning that focuses on success for all students?
- How can we collectively develop "SMART" (Specific, Measurable, Achievable, Results-oriented, and Time-bound) goals through the work of professional learning communities (PLCs)?

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