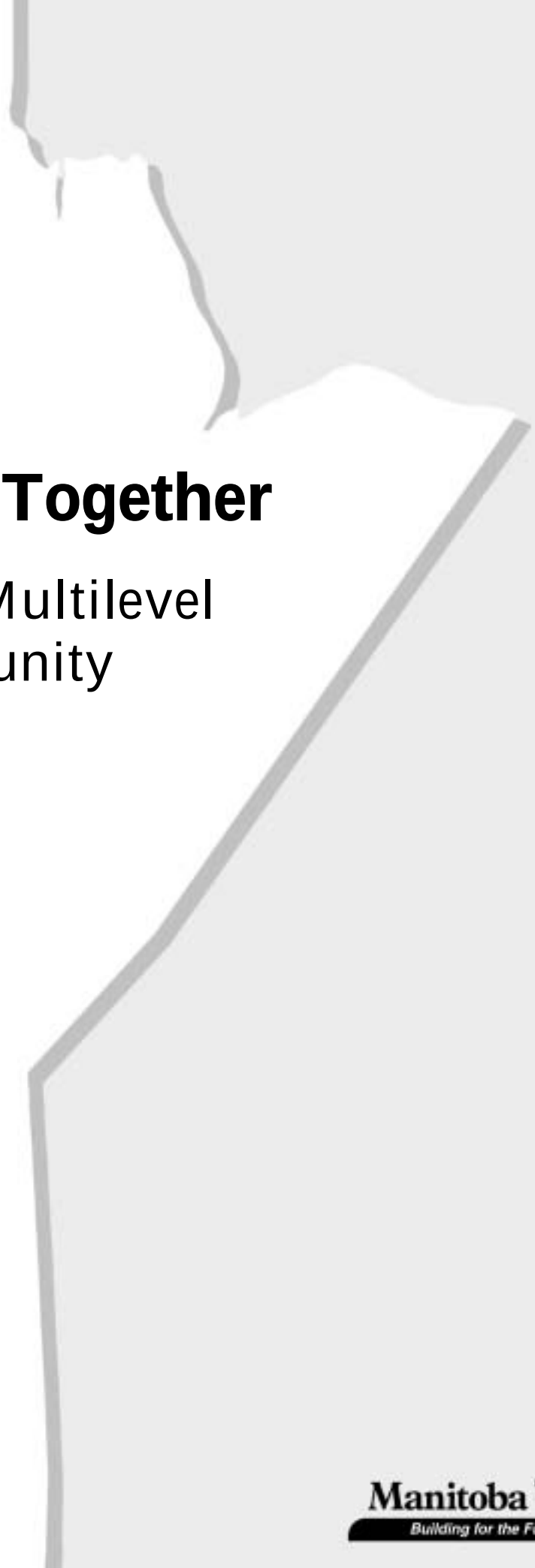
Independent Together

Supporting the Multilevel Learning Community



Manitoba
Building for the Future

INDEPENDENT TOGETHER

Supporting the Multilevel
Learning Community

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This print resource will also be available on the Manitoba Education and Youth website: <http://www.edu.gov.mb.ca/ks4/cur/multilevel/index.html>. Most of the blackline masters (BLMs) included in this resource can be downloaded from the website. Teachers may copy these BLMs for classroom use.

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CONTENTS

INTRODUCTION

Purpose

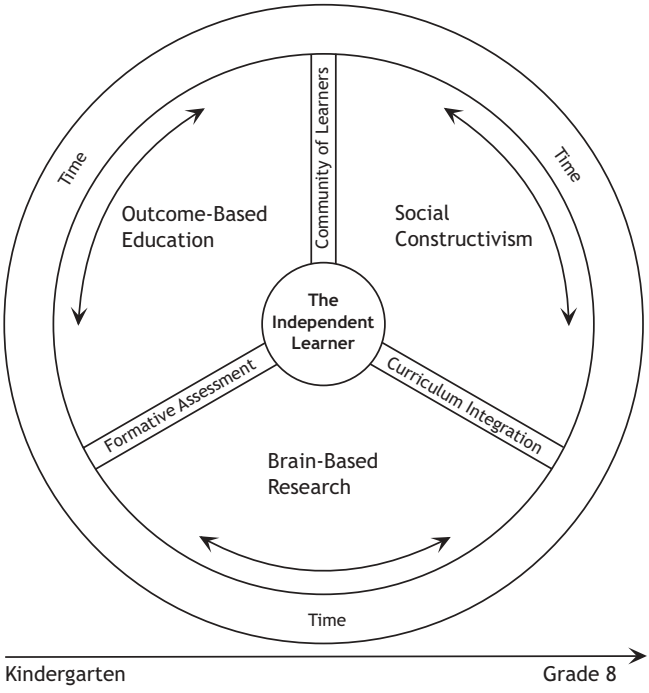
Independent Together: Supporting the Multilevel Learning Community is designed to engage students, educators, and parents in developing independent learners within a student-centred multilevel classroom community and to celebrate the uniqueness of each learner. Development along a *continuum of learning* offers independent learners time to grow as risk takers, leaders, researchers, and thinkers.

Background

As a result of philosophical choice or demographic necessity, many Kindergarten to Grade 8 teachers in Manitoba have two or more grades for two or more years in their classrooms. Developing independent learners is imperative to the success of these multilevel classrooms, which depend upon a supportive and informed learning community consisting of learners, educators, and parents.

The theoretical ideologies of this resource represented in the diagram below reflect Manitoba's outcome-based curricula grounded in social constructivist underpinnings and current brain-based research. The principles of formative assessment and differentiated instruction, which are integral throughout all recent curriculum documents, are crucial to the quality of learning in the multilevel classroom.

Continuum of Learning in the Multilevel Classroom



Based on best practices, curricula are integrated to facilitate inquiry of big ideas, thus targeting learning outcomes from multiple curricula for formative and summative assessment. A flexible planning model that can engage a broad range of students in planning for inquiry provides teachers with a variety of entry points for teacher-led, shared or negotiated, and student-led instruction. Putting all this into practice takes time.

Time is an asset rather than a disadvantage in the multilevel classroom. When educators have a clear understanding of the theoretical underpinnings and pedagogy of the multilevel classroom, and are supported in implementing these best practices, there will be more time for supporting learning. The multilevel classroom provides a context for quality learning and teaching that will benefit all partners in its learning community.

Content

Independent Together: Supporting the Multilevel Learning Community presents practical and adaptable strategies to manage multiple curricula and to provide a rich learning and teaching context for a wide range of learners. This resource contains the following sections:

- The **Introduction** outlines the purpose, background, and content of the document.
- **Chapter 1** defines the term *multilevel classrooms*, provides a review of related literature, and describes the benefits of a multilevel classroom for students, educators, and parents.
- **Chapter 2** describes the learning community and the role of each partner: learners, educators (teachers and administrators), and parents.
- **Chapter 3** examines assessment and evaluation processes in a multilevel classroom.
- **Chapter 4** outlines ways to differentiate instruction for a range of learners.
- **Chapter 5** provides suggestions for integrating multiple curricula for a range of learners.
- **Chapter 6** constructs a flexible planning model based on the four-column format used in Manitoba's Foundation for Implementation documents and the inquiry process.

- **Blackline Masters (BLMs)** support the suggested learning, teaching, and assessment processes, and may be adapted to meet the needs of each learning community. A sample Parent Brochure is included.
- **Appendices** provide classroom examples and identify connections to strategies in other departmental publications, including *Success for All Learners*.
- The **Glossary** defines terms used throughout the document.
- The **Bibliography** cites the resources used in the development of the document. Resources are suggested within each chapter.

This resource does not attempt to duplicate existing resources that explore best practices, but discusses the specific application of these practices to multilevel classrooms.

Chapter 1: Learning and Teaching in the Multilevel Classroom

CHAPTER 1: LEARNING AND TEACHING IN THE MULTILEVEL CLASSROOM

Application of Best Practices to Multilevel Classrooms

This resource examines the research base underpinning multilevel classrooms in which one teacher is responsible for students of a broader age-range than is generally found in the traditional single-grade classroom. It provides pedagogical and practical supports to assist the *learning community* (students, teachers, administrators, and parents) in taking advantage of the unique opportunities multilevel classrooms provide. The instructional and assessment approaches suggested for these classrooms are also best practices in single-grade classrooms.

In this resource, the term *parents* refers to both parents and guardians and is used with the recognition that in some cases only one parent may be involved in a child's education.

Definitions of Terms

In this resource, the term *multilevel classrooms* refers to student-centred classrooms in which students learn across two or more grades and are taught by the same teacher for two or more years. In Manitoba, these classrooms are generally referred to as *multi-age*, *multi-grade*, and *combined classes*. Some schools/divisions/districts also use the term *alternative programming* or *flex programs* when one teacher has a broad age-range of students for two or more years.

Reasons for Establishing Multilevel Classrooms

Decisions to create multilevel classrooms are based on pedagogical and/or demographic considerations:

- Some schools/divisions/districts choose multilevel programming for philosophical reasons. These deliberately formed multilevel classrooms emphasize a continuum of learning, rather than maintaining grade differences. In such classrooms students work with the same teacher for two or more years.
- In communities with low student populations, all Early Years students, all Middle Years students, or all students from Kindergarten to Grade 8 may be taught in the same classroom. These classes, like the deliberately formed multilevel classrooms, may also emphasize a continuum of learning.
- Other schools may have two or more grades assigned to the same teacher to manage shifting enrollment. These classrooms are often viewed as a temporary measure within a school.

Regardless of whether multilevel classrooms are created for pedagogical or demographic reasons, they can be seen as assets that promote quality learning.

The Research Underpinnings

Research shows that there are many benefits to having students learn in groups with older and younger peers. The pedagogical advantages of multi-age learning are supported so well by research that some jurisdictions in North America have mandated multi-age classrooms in Early and Middle Years schools (Kasten; Miller, *Multigrade Classroom*).

The terms *multi-age* and *multi-grade* are used in much of the research. The research underpinnings highlighted here are, for the most part, reflected in all multilevel classrooms except those formed for only one year.

Although research is not available for short-term combined classes, a wealth of information exists regarding multi-age classrooms where students are with the same teacher for two or more years. Major reviews of this research into multi-age learning show several consistent trends. In reviewing 57 Canadian and American studies, Pavan found that in 91 percent of the studies, students in multi-grade classrooms performed as well as or better than students in single-grade classrooms academically (22-25). Their greatest gains tended to be in language and reading. Lolli attributes this higher literacy achievement to the integration of curricula and the construction of meaning where language skills and strategies are tools used to learn content. The benefits of an integrated approach to learning are also well supported by brain-based research and Gardner's multiple intelligences model (Politano and Paquin; Lazear; Jensen, *Teaching*; Gardner).

In affective and social indicators, students in multi-age classrooms strongly outperform students in single-grade classrooms (Miller, "Multiage Grouping"; Pratt; Connell). They score higher in study habits, social interaction, self-motivation, cooperation, and attitudes to school (Gayfer).

The benefits of having older students offer assistance to younger students are supported by research. Studies show that both the student being tutored and the student doing the tutoring improve academically (Anderson and Pavan). Kasten emphasizes that "the act of translating one's understanding into language is intellectually demanding" (5); this is certainly the role of the tutor. Vygotsky's theory of language also purports that the construction of meaning takes place within the social context of the learner and that interaction with supportive, competent language users is integral to developing language skills.

Placing students from several grades in one classroom does not in itself create a successful multi-age classroom, however. Multi-age classrooms are based on a student-centred, subject-integrated approach to learning. If a teacher assigned to a multi-age, combined, or multi-grade classroom uses approaches traditionally used in single-grade classrooms and attempts to teach separate and discrete curricula to each grade-group, the benefits are lost. According to Goodlad and Anderson, when teachers attempt to deliver distinct graded programming in a multilevel classroom, students end up doing more "seat work" than they would in a single-grade classroom.

Miller ("Multiage Grouping") and Costa and Timmons found that multi-age classrooms require more time than single-grade classrooms for teacher planning and professional development and that insufficient planning may have an impact on the success of the programming. Teachers in multilevel classrooms also require a thorough understanding of classroom assessment (Gaustad; Stiggins). It is essential, therefore, that teachers who face the challenge of two or more grades in their classrooms be provided with professional development in strategies and approaches developed by multi-age educators.

Furthermore, administrators are encouraged to maintain a combined classroom for at least two years so that students can benefit from the advantages that multilevel grouping provides, benefits that are not as evident in the first year as in the subsequent year(s). A two-year commitment to a multilevel classroom also enables teachers to initiate a two-year plan for curriculum implementation in content areas, such as science and social studies, rather than teaching two different programs simultaneously.

One limitation of many research studies is that they are "snapshots" of student attitudes and performance at a given time; few studies track students over several years. There is also an innate bias to the research in that teachers assigned to multi-age classrooms tend to be more experienced, and students placed in multilevel classes are sometimes chosen because they have independent work habits. Burns and Mason suggest that where students are assigned to multilevel classrooms, the learners' individual curricular paths should be the criteria for placement.

Clearly, however, many qualitative and quantitative studies indicate that students in multi-age classrooms perform as well as or better than students in single-grade settings in standardized tests and that they have a more positive attitude towards school, higher self-esteem, and better peer relationships. Kasten claims, "Children with a variety of needs, strengths, abilities, and ways of knowing are thriving in these classrooms" (8).

Benefits of Multilevel Classrooms

The benefits of multilevel classrooms explored in this resource apply to classrooms that are maintained for two or more years. There are distinct benefits for the whole learning community—learners, teachers, and parents.

Class/Learner Benefits

Multilevel classrooms are built on the premise that diversity is not a challenge to be overcome, but an asset and a resource that promotes learning. In reality, all classrooms are diverse. By the time students are eight years old, their academic performance in a single-grade classroom may span three or more years. In addition, students bring to the classroom a wide range of learning approaches, developmental stages, aptitudes, interests, experiences, cultural backgrounds, and personalities. Thus, there are no homogeneous classrooms.

The natural varied composition of a multilevel classroom has specific advantages for learners:

- Multilevel programming recognizes that each student is at a different stage of learning and focuses on the developmental stage of the learner; of necessity, the focus moves to individual learning along a continuum. This minimizes competition because students recognize and accept that each student is at a different place in his or her learning. Students learn to set personal learning goals, assess themselves, and reflect on their own learning.
- Multilevel classrooms provide opportunities for students to gain self-knowledge as they interact with older and younger peers. Throughout life, people rarely operate in groups that are systematically separated by age. The range of social relationships students build in a multilevel classroom more closely reflects the diverse social situations individuals encounter in workplaces, communities, and families. In fact, just as the youngest child in a family typically passes developmental milestones earlier than his or her siblings did through watching and listening to older siblings, younger students learn from the wider knowledge base of older classmates and from their modelling of skills and behaviour.

Older students likewise develop their capabilities as they assume leadership roles and articulate their understanding as they share their learning with younger students. In the multilevel classroom, though, a student's position relative to her or his classmates changes each year. Students with strong leadership skills in their own age group enter the classroom as the youngest students and learn valuable skills in following leadership. Students who are less assertive or who require more support or guidance have opportunities to share their learning with younger students and experience themselves as leaders.

- Multilevel classrooms allow for continuous progress. All learners can be challenged. In a multilevel environment, students do not need to spend time on concepts and skills they have already mastered. Students who have not attained specific learning outcomes by the end of a school year have the opportunity to achieve them the following year. In multilevel classrooms, all students are expected to attain the learning outcomes, and time becomes a variable that can help them do so. (See Chapter 3 for more information about assessment.)
- Multilevel classrooms provide students with stability and an ongoing relationship with a teacher. Continuity within the same classroom over several years helps diminish the anxiety associated with moving to a new classroom at the beginning of a new school year, and shortens the time it takes to learn new routines, thereby increasing instructional time.

Teacher Benefits

Many teachers who have experience in multilevel classrooms report that certain challenges are minimized by the fact that students are at different developmental stages. Just as families consider multiple births a greater care-taking challenge than caring for children several years apart, so teachers find there are advantages to having a contingent of older students in a classroom.

Multilevel classrooms benefit teachers in a variety of ways:

- Teachers have more time to develop a deeper understanding of each student's strengths and needs over two or more years, and can plan instruction at the student's level of development. Teachers in single-grade classrooms often feel they have only begun to know their students by the end of the school year. A multilevel classroom allows teachers to profit from their understanding of each student's unique personality, interests, and

learning styles, and offers them the satisfaction of following a student's growth over a period of years.

- Teachers have fewer students to learn to know each year. Orientation at the beginning of a school year is simplified and consumes less time. Senior students know routines and model them for new students.
- In planning programming for two or more years, teachers have opportunities to be more flexible with curricula, planning projects around student interests and current community events.
- Teachers can develop a stable parent volunteer program that relies on the same volunteers over several years. Over time, many parents feel more confident volunteering because they know the teacher better. If siblings are placed in the same multilevel classroom, teachers have the opportunity to work with a smaller group of families.

Parent Benefits

Any programming that enriches the learning of their son or daughter is clearly an advantage for parents. Parents appreciate the stable learning community of the multilevel classroom and its commitment to the learner and to the development of interpersonal skills, emotional maturity, and independence.

Multilevel classrooms benefit parents in the following ways:

- Parents have the opportunity to develop a relationship of trust with the teacher. There is time to work on and solve problems. Through an extended relationship, parents and the teacher develop as partners in supporting the independent learner.
- Because multilevel classes reflect natural family groupings, siblings are usually placed in the same classroom. This simplifies the demands on parents for attending classroom events, volunteering, and communicating with the school.
- Parents appreciate that their child experiences less stress related to beginning a new school year and adapting to the expectations and routines of a new teacher.

For a discussion of frequently asked questions about multilevel classrooms, see BLM 12: Parent Brochure.

Rewards of Meeting Challenges

The challenges of learning and teaching in a multilevel classroom will result in great rewards as all partners begin to understand the benefits that multilevel classrooms offer. With time, experience, and consistent support, multilevel learners will develop the knowledge, skills and strategies, and attitudes they need to become independent learners.

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Chapter 2: The Learning Community

CHAPTER 2: THE LEARNING COMMUNITY

Partners in the Learning Community

Multilevel classrooms form a diverse and natural community, consisting of independent learners, the teacher, administrators, and supportive parents. This learning community is created through the gifts of time and diversity (in age, culture, learning styles, and abilities). Time enables the partners within the community to gain an appreciation of one another and allows for collaboration and reflection. Diversity creates a natural blend of community members.

The learning community is grounded in the following fundamental beliefs:

- **All students are equally important in the classroom.** A student's value is not based on his or her age or stage of development. The learning community respects a "different but equal" approach by ensuring that all students have an equal voice in discussion and decision making.
- **Each student has unique qualities that enrich the classroom.** The learning community celebrates and affirms each individual's strengths and accommodates differences and diversity.
- **All students play a role in each other's learning.** The learning community fosters interdependence and shared responsibility rather than reinforcing the notion that all responsibility rests with the teacher.

The Independent Learner

All partners in the multilevel learning community have important characteristics and interrelated roles and responsibilities. The ultimate goal of the learning community is to support its most integral member: the independent learner.

Multilevel classrooms are based on the premise that students are innately active learners who learn in developmentally appropriate ways within a supportive learning community. Independent learners are not characterized by their ability to work quietly on their own, but rather by their capacity to take ownership of their learning. They develop as independent learners through collaboration with others and by practising self-assessment and reflection.

Collaboration

An independent learner is not someone who works in isolation, but someone who can effectively collaborate with other learning community partners. In the multilevel classroom, as in all classrooms where students are actively engaged in learning, collaboration is a key to learning. In working with others, students use exploratory language, articulating their ideas and responses, comparing them to the ideas of others, and trying out tentative ideas. The multilevel classroom provides for a wide range of collaborative work opportunities. Students may work with same-age peers or in mentoring relationships with older or younger peers. In mixed-age groupings, each student is responsible for contributing and participating according to his or her developmental level.

The *Talking Circle*, based on First Nations teachings, contributes to a sense of trust in the classroom. (See *Success for All Learners* 7.5.)

Cooperative groups form a basic social unit in which students learn to

- develop trust and interdependence
- work collaboratively on long-term ongoing projects
- assume various classroom responsibilities (e.g., greeting guests, taking attendance, caring for plants and pets, managing the classroom library, monitoring homework)

Cooperative learning groups facilitate and support collaboration and independence in the multilevel learning community. (See Glossary.)

Self-Assessment

Self-assessment is key to independent learning. Rather than relying on others to tell them whether they are learning, students are taught to monitor their own learning. Self-assessment creates and reinforces students' accountability for and ownership of their own learning. Students learn more effectively when they play a role in determining the direction of their learning, when they are active partners rather than passive recipients of what goes on in the classroom. Students who make significant decisions and pursue their own interests are engaged and motivated. When students are engaged, the classroom focus shifts away from behaviour management and towards learning.

Self-assessment is not limited to filling out a questionnaire at the end of a major project, but is woven into the fabric of the classroom through goal setting, formal and informal conferencing, and reflective thinking that turns the responsibility for learning back to the student. Terms such as *reflection* and *quality work* are central to the vocabulary of the multilevel classroom.

Students who practise self-assessment competently understand what quality work looks and sounds like. Students reflect on what is powerful in their own work and that of peers as they practise and develop self-assessment skills. Students need to be guided in generating criteria for quality work using student samples of powerful responses, or exemplars. (See BLM 2.)

Constructing Criteria for Quality Journal Writing

Teachers work with students in developing sound criteria for quality work (Gregory, Cameron, and Davies, *Setting and Using Criteria*, 7-14). The following example illustrates how student-generated criteria for quality journal writing may be developed.

- Share exemplars of quality journal writing from examples in literature, a portfolio, or a reflective journal, and ask students to select and share powerful examples from their own reading and reflection.
- Ask students to identify the powerful qualities of these pieces of work. Asking students to identify the qualities of a successful piece of work calls on them to think critically and fosters ownership. After several weeks of reflective conversation, guided journal writing, and sharing of powerful examples from their journals, students are prepared to generate criteria from their own exemplars. For example, in response to the question, "What does quality journal writing look like?" they may generate the following criteria:

  Quality journal writing

  — tells about something that I learned

  — shows a connection to something I already know

  — states what I need to do next
- Use these criteria to provide learners with feedback, and encourage students to use the criteria in self-assessment, reflection, and goal setting.
- Guide students to refine and revise these criteria over time, continually raising the bar.

Reflection

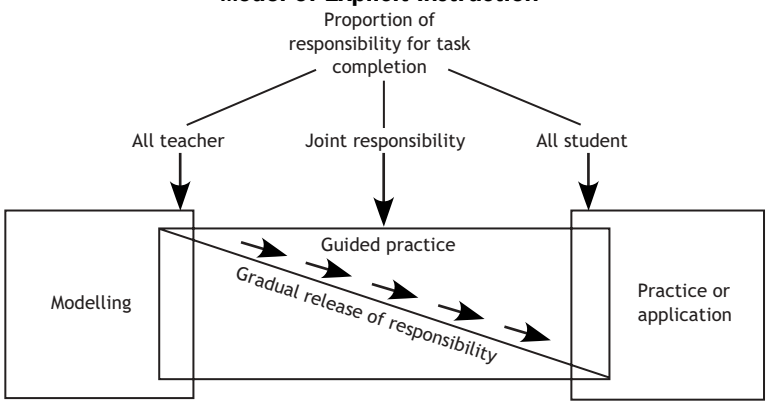
Before students can practise independent and written reflection, they require modelling of oral reflection and explicit instruction in written reflection. However, as students become increasingly comfortable choosing and using reflection strategies—such as Y-Charts (see BLM 1), Exit Slips (Gere), and journal writing—they gradually become more responsible for their learning and are able to reflect independently.

Teaching Reflection According to the Model of Explicit Instruction

Teaching reflection includes modelled, shared, guided, and independent reflection:

- **Modelled:** Reflection begins as an oral skill, and needs to be modelled as part of day-to-day conversation. Read examples from literature and discuss what reflections look and sound like. Frequently use a Think-Aloud strategy (Davey) to share personal reflections. Rather than praising a student's work, engage in a dialogue that reflects on various aspects of the work. Modelled reflection is key to independent reflection.
- **Shared:** Set a class goal for shared reflection, constructing the criteria for assessing progress in accomplishing the goal, and use a Think-Pair-Share strategy (McTighe and Lyman) for oral practice. Record class reflections on a Y-Chart, eliciting from students what they saw, what they heard, and what they think or wonder about, or even what their next goal may be. Observe students to determine who needs further instruction, and who is ready for independent reflection.
- **Guided:** Some students may need explicit instruction, or guided practice, in developing skills and strategies for reflection. Continue oral reflection and teach students how to use strategies (such as Exit Slips, portfolio reflections, learning logs, and journals) that help them think about their learning processes and goals. Ask students to reflect using a Think-Pair-Share strategy. Continue observations to assess students' levels of independence and determine who may need differentiated instruction and support for success. For example, one student may need to use a Y-Chart for scaffolding reflection, and another may need an adaptation such as the assistance of a scribe to record reflective responses.
- **Independent:** Students can use strategies (such as Exit Slips, portfolio reflections, learning logs, and journal responses) to think metacognitively about their learning.

Model of Explicit Instruction



Model of Explicit Instruction: Reprinted from *Contemporary Educational Psychology*, 8, P. David Pearson and Margaret C. Gallagher, "The Instruction of Reading Comprehension," page 337, Copyright © 1983, with permission from Elsevier.

Through reflection, collaboration, and self-assessment, independent learners develop knowledge, skills and strategies, and attitudes that will help them achieve success within the multilevel classroom and beyond.

The Teacher

The demands on multilevel classroom teachers are many. To be effective, multilevel classroom teachers need to

- believe in student autonomy
- provide and encourage role modelling
- facilitate independent learning
- support students in setting goals
- facilitate conferences
- manage time, movement, and space
- build communication between school and home

The roles of multilevel classroom teachers are discussed in greater detail below.

Believing in Student Autonomy

Central to developing independent learners is a teacher who believes that all students want to learn and who trusts students to make responsible choices that promote learning. Teachers who express this belief

- turn responsibility back to students by asking, "How did you find that out?" and "What do you need to do next?" rather than praising "right" answers or directing students to the next step
- provide real choices that accommodate a range of learning styles, recognizing that curricular outcomes can be met in a variety of ways, and inviting students to choose what they will do to demonstrate their learning and identify the steps they will take to accomplish the task
- emphasize intrinsic motivation rather than external rewards

Multilevel classroom teachers see and respect their students as individuals and believe in their role within and their contributions to the learning community.

Modelling Roles

Independent learners need role models as well as models of successful work. Teachers are also learners who

- model curiosity, goal setting, and reflection
- guide students to be competent role models
- share exemplars of quality work and success and teach students how to identify quality samples of their own work

In setting examples of confident and competent learners themselves, multilevel classroom teachers mirror and reflect the essential qualities of the independent learner.

Facilitating Independent Learning

Rather than directly managing every aspect of the classroom, teachers in multilevel classrooms use their leadership role to support students in assuming responsibility and learning independently. Using a gradual release of responsibility approach, as reflected in the Model of Explicit Instruction (Pearson and Gallagher), the teacher guides and monitors student progress towards independence in using learning strategies. Independent learners then not only take responsibility for their own learning and make choices to advance that learning, but also serve as competent role models and guides for new community partners. Independent learners know and draw from a range of processes, strategies, and materials, and work interdependently within a learning community, as well as on their own personal learning goals. Teachers become freed to work closely with individuals or small groups, without spending instructional time in constant supervision.

Supporting Student Goal Setting

Teachers in multilevel classrooms support students, both in a whole-class setting and individually, in setting learning goals in various areas, such as social interaction, skills and strategies, learning processes, and content. Teachers who share their own goals with students and reflect on their progress towards attaining them act as powerful models of self-directed learning.

- **Whole-class goals:** Students work together from the beginning of the school year to determine what they need to do to be a responsible learning community. Supporting this process allows students to make decisions about the kinds of strategies that will promote learning.
- **Individual goals:** The best learning occurs when the goals of the classroom coincide with the student's own goals. Teachers collaborate with students in setting their goals, using tools such as reading/writing continua, goal sheets, and portfolios.
  - **Reading/writing continua** enable students to see where they are as readers and writers, and what they need to learn next.
  - **Goal sheets** enable students to monitor their goals at school and at home (see BLM 3: My Learning Goal Log).

— **Portfolios** enable students to add the evidence of their progress towards achieving learning goals.

Teachers who facilitate student goal setting empower students to become independent learners.

Facilitating Conferences

Teachers confer with students through a variety of means:

- **Over-the-shoulder conferences:** Much of the learning in a multilevel classroom occurs in the conversations that happen among students and between students and the teacher in the course of a day. These informal conferences may occur when the teacher is making the rounds during a workshop. (For a discussion of workshops, see Chapter 4.) These conversations allow teachers to watch and listen, and thereby learn about each student's progress and needs. They also provide students with immediate feedback for learning.
- **Formal conferences:** Teachers often designate 15 to 20 minutes during each workshop for individual conferences with two or three students. The purpose of these conferences is to revisit students' learning goals and provide descriptive feedback, invite students to reflect on their own progress, and assess and monitor student learning.

  In planning conferences, teachers may wish to

  — post a conference schedule or use a pocket chart to advise students when a conference will take place so that they can prepare to share their learning with the teacher or a peer

  — keep a record of observations to monitor student learning over time

  — allow for flexibility, as some students may need conferences more frequently than others

- **Student-led conferences:** These conferences are the cornerstone of summative assessment in the multilevel classroom, allowing students to take ownership for their learning. Student-led conferences give students opportunities to select and showcase work that demonstrates their learning and growth, as well as to negotiate or set new learning goals with their parents. (See BLM 10: Student-Parent-Teacher Conference Record. For more information on summative assessment, see Chapter 3.)

Conferences are a means of learning to know each student better.

Managing Time, Movement, and Space

Teachers model and teach a variety of classroom-management skills and techniques.

- **Routines, processes, and strategies:** Students who use their time productively know the processes and strategies by which they will accomplish their goals. It is the teacher's responsibility to diversify and integrate a variety of routines, processes, and strategies.

Managing a Classroom for Independent Learners

The goal in multilevel classrooms, as in all classrooms, is to support students in learning to manage themselves through a variety of routines, processes, and strategies.

- **Routines:** Let students know where they are expected to be at each point during the day and what they are expected to be doing. Have clear protocols in place so students know classroom expectations and ways to manage their own behaviour. Invite older students to play a leadership role in modelling routines.
  - **Start-up routines:** Students need to know what is expected of them so that they can begin their work independently. Start-up routines may include getting out folders, book club discussions, homework checks, and journal writing.
  - **Classroom responsibilities:** Post and rotate "jobs" such as managing the classroom library, greeting guests, monitoring homework assignments, caring for plants and pets, and restocking art materials and sports equipment.
- **Processes:** Instruct students in the steps required for processes embedded in all classroom work, such as workshops, cooperative learning, reflection, and goal setting.
- **Strategies:** Teach students to choose and use strategies and tools such as reading strategies and graphic organizers in order to solve problems more effectively and independently.

- **Timetables:** Students need to know what lies ahead in the day and in the week. Knowing the schedule gives students a sense of stability, helps them make choices, and honours their role as partners in the learning community. Whenever possible, teachers involve students in planning timetables.

  In planning a timetable, teachers may wish to

  - post the timetable on big sheets (one, two, or three weeks at a time)
  - designate large blocks for workshops and integrated inquiry to explore topics in content areas
  - use the timetable as a basic structure to plan the daily agenda with the class

— allocate 10 to 15 minutes daily for reflection (using strategies such as whole-class reflection with a Y-Chart, Think-Pair-Share strategy, journal writing, updating portfolios, sharing portfolio with a peer, or Exit Slips)

- **Whole-class time and class meetings:** Whole-class learning experiences are important means of building community and sharing the responsibilities of the community. Whole-class time can be used to share information, plan, work on collaborative skills (e.g., how to reach consensus), reflect, and celebrate learning. Whole-class discussions teach students that they have a voice and that their ideas are valued.

  Some multilevel classrooms hold formal class meetings that put the responsibility of managing the learning community into the hands of students. As students' skills develop, cooperative groups may take turns conducting class meetings that address learning community issues and needs.

  In planning class meetings, teachers and/or students may wish to

  — give each member a role: chairperson, recorder, and timekeeper

  — post a blank three-point agenda so that any student in the learning community can add items

  — have students who bring agenda items to a meeting assume responsibility for developing an action plan for follow-up

  — keep meetings short—15 minutes are ideal

- **Ongoing student choice:** Because individual students require varying lengths of time to complete a task, multilevel classroom teachers often provide work options or establish learning centres that reflect the multiple intelligences and that enable students to activate, acquire, and/or apply learning. As these choices generate high-interest experiences, students who work more slowly are also given time to engage in them.

  Learning centres may include

  — collections of Aboriginal artifacts for a social studies unit

  — math-challenge stations that reinforce the concepts learned

  — science observation stations with logs for recording observations

  — classroom libraries of quality literature, including a broad range of authentic texts for student choice

  — computer stations for online inquiry or slide show presentations

— artists' stations for experiencing a variety of media

— physical fitness stations that promote active, healthy living

— stations that integrate various subject areas

Resources for Managing Choice Time

Teachers in multilevel classrooms use various resources for managing and tracking students' choice time, including

- planning boards or pocket charts to suggest where students may plan to go
- agendas for whole-class discussion at the beginning of each day
- checklists of tasks that need to be completed each week with minimum guidance or supervision
- daily planners or learning logs for students to outline how they will use or have used their work time
- wall charts and class lists to track student choices

- **Classroom organization:** The physical environment conveys powerful information to students about the expectations of the classroom. It facilitates the development of a community of learners by offering workspace for whole-class, small-group, and individual learning. The physical environment requires accessible resources for independent learners.

The Physical Classroom Environment

Multilevel classrooms have

- tables that can easily be arranged for a variety of group scenarios
- open floor space if room permits for whole-class learning experiences, class meetings, and workspace for students who prefer to work on the floor (If students sit on the floor, a horseshoe configuration promotes active listening.)
- community supplies (e.g., pencils, erasers, rulers, scissors, highlighters) at each work station
- storage bins for easy access to materials and resources such as art supplies, math manipulatives, science supplies, and physical education equipment
- shelves for storing journals, notebooks, and portfolios
- library carts for text sets used for instructional, practice, and research purposes
- a classroom library with a broad range and variety of texts for reading for enjoyment
- reading bags for silent reading, each bag containing at least an "easy read," a "just-right read," and a "challenge read"
- two or three study carrels to provide for individual workspace
- a message board for posting information such as agendas, routines, group lists, criteria, continua, and classroom or school news and announcements of celebrations
- surface areas for displays and projects

Planning for effective use of time, movement, and space is essential for an organized multilevel classroom.

Building Communication between School and Home

Teachers communicate frequently with parents. Holding a parent-information meeting early in the year helps inform parents of classroom expectations, goal setting, and curricula. These meetings provide opportunities to suggest ways in which parents can support the learning community. (See BLM 12: Parent Brochure.)

Students may play a role in parent-information meetings, deciding what is important for their parents to know about their classroom community, including aspects such as personal learning goals, collaborative group work, project work, quality work, portfolios, classroom reading continua, book talks, and science clubs. Teachers who involve students in weekly exchanges of information also create opportunities for both students and parents to reflect on learning.

Increasing Communication in the Learning Community

Communication is accomplished through various means:

- **Take-home envelopes:** Set up take-home envelopes that students can use to transfer the piece of work they think is most significant each week, along with a note reflecting on their reasons for selecting this work. Parents can send back a response and other communication in the same envelope.
- **Home-school journals:** Establish the weekly practice of having students describe their week in letters to a family member of their choice. Keep students' letters and the responses in a folder labelled Home-School Journal. This collection of letters can form a memorable record of the year for families to keep.
- **Books and games:** Share strategies with parents that they can use to support learning at home. Send books or games home in a plastic sealable bag, for example, and include a parent handout of tips for learning with their daughter or son.
- **School newsletters:** Include classroom news in the school newsletters so that parents can see that the multilevel classroom is integral to the whole school community.
- **Surveys and requests:** Send home parent surveys or volunteer requests at the beginning of the year. Teachers may outline the goals for the year and ask for parents' areas of expertise and their availability.

Teachers in multilevel classrooms learn to take advantage of the "extra time" they have with students and parents to build communication among partners within the learning community over several years.

The Parents

As active and informed partners in the learning community, parents understand, value, and encourage student goal setting, inquiry-based learning, collaborative/cooperative learning, student self-assessment and reflection, and conferences. Parents value the pedagogical theories that support a multilevel classroom.

Families and other members of the school and surrounding community are wonderful resources for a multilevel classroom, and having an open-door classroom with frequent visitors has many benefits for students, families, and teachers. With a parent base that is relatively stable over several years, multilevel classrooms can build an active volunteer program. Besides providing essential support for the class, volunteers gain a firsthand understanding of how the classroom works.

Parents may participate and choose the nature or extent of their involvement as volunteers, based on their time, interest, and comfort level in the multilevel classroom. As volunteers, parents have options such as the following:

- Help with scheduled activities such as book groups.
- Share expertise related to a project or inquiry.
- Supervise or drive students on field trips.
- Collect and donate materials (e.g., buttons, bottle caps, jar lids, keys) that can be used as math manipulatives.
- Prepare materials for learning centres or projects.

Parents may also wish to observe in the multilevel classroom. When arriving, it is important that they meet briefly with a teacher or administrator to share the purpose of various learning experiences and to identify what evidence of learning they might look for as they observe. Visitors often turn into regular volunteers.

As partners in the multilevel learning community, parents offer valuable resources and are integral to supporting student learning. Their commitment to the independent learner and the philosophy of the multilevel classroom fosters trust in the classroom community, as well as the surrounding community.

The Administrator(s)

Administrators play an active role in the learning community. Successful multilevel classrooms are supported by administrators who understand the theory and research behind multilevel learning and are committed to the opportunities that this learning environment may offer learners.

Multilevel classroom administrators can provide encouragement and support in a variety of ways:

- **Classroom visits:** Visit the multilevel classroom regularly.
- **Classroom set-up:** Involve teachers in the decision-making process for setting up a multilevel classroom, whether that classroom is being created for pedagogical or demographic reasons. Ideally, the teachers selected for multilevel classrooms will understand the concepts behind multilevel education and will be eager to establish their own classrooms.
- **Release time:** Provide release time for teachers to visit existing multilevel classrooms and discuss their plans with exemplary teachers. This is particularly helpful for teachers in meeting the unique challenges of multilevel programming.
- **Team teaching:** Take steps to ease the transition to multilevel classrooms. For example, the year before establishing multilevel classes, support teachers in team teaching of cross-grade integrated units, and ensure that a core group of students who were in the teachers' classes the previous year are part of a new multilevel class.
- **Whole-school decision making:** Plan for whole-school dialogue so that all teachers in the school can develop an understanding of the multilevel classroom(s) and participate in making school-wide decisions about developing timetables, rotating topics in the subject areas, and planning for a continuous curriculum across the school.
- **Timetabling:** Collaborate with teachers in preparing the timetable and plan the best way to schedule specialists' time (if available) for multilevel classrooms. Scheduling physical education and music classes simultaneously, for example, provides time for classroom teachers to collaborate. Ensure that teachers have large blocks of time for supporting class workshops.
- **Professional learning:** Provide professional learning for teachers and specialists who will be working in the multilevel classroom. Hold in-service sessions about multilevel classrooms for all staff so that other teachers recognize and support the needs and goals of multilevel programming.

- **Debriefing:** Provide time for teachers to share experiences and debrief.
- **Orientation:** Arrange a parent visit to an existing multilevel classroom as an orientation to multilevel learning in the spring before a new child is to join a multilevel class.
- **Educational information and communication:** Support teachers to help educate and prepare parents, and be prepared to answer parents' questions. Create a handout for parents explaining the advantages of multilevel learning. (BLM 12: Parent Brochure can be used or adapted for this purpose.)

Quality learning and teaching happen when administrators have a clear understanding of the theoretical underpinnings for best practices in multilevel classrooms, ensure the provision of adequate supports for multilevel classroom teachers, and are committed to ongoing communication with parents.

The Dynamic Learning Community

The composition of the learning community is diverse and dynamic. Graduation, shifting enrollments, mobility, and staffing changes affect everyone in the learning community. Although individuals in the learning community may come and go, the interrelated roles and responsibilities of the partners remain.

A successful learning community depends upon valuing the gifts of time and the diversity of its participants. Each partner shares the responsibility of supporting the independent learner. Strengthening communication about and commitment to the multilevel classroom and multilevel philosophy benefits all partners of the learning community, especially its most integral member, the independent learner.

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Chapter 3: Assessment and Learning in the Multilevel Classroom

CHAPTER 3: ASSESSMENT AND LEARNING IN THE MULTILEVEL CLASSROOM

Best Practices in Classroom Assessment

Throughout this resource, *assessment* and *learning* are synonymous. Each chapter reflects the ongoing assessment responsibilities of all partners in the multilevel learning community. This chapter describes the beliefs or premises of classroom assessment as they support learning and inform teaching in the multilevel classroom.

Successful multilevel classrooms demonstrate best practices in assessment that include

- targeting student learning outcomes
- using a variety of assessment methods and tools
- differentiating assessment for developmental and cultural appropriateness
- assessing students performing authentic tasks
- involving students in reflecting on and assessing their own learning
- setting and revising learning goals

Classroom-Based Observation

Assessment is an ongoing process of learning and teaching throughout each day in the classroom; it is not an add-on. Observation is the primary assessment method, and immediate descriptive feedback is essential to improving student learning in the multilevel classroom.

Quality classroom observation is dependent upon

- achievable learners' goals
- targeted learning outcomes
- clear criteria
- a variety of authentic learning and teaching contexts
- insightful, systematic monitoring of what teachers see and hear

Because each classroom forms its own culture, teachers play a powerful role as observers, and their professional judgement is valued and integral to quality classroom observation. Observation provides teachers in multilevel classrooms with an effective and efficient way to explore their students' thinking. Teachers learn about their students' strengths and areas in need of support and development, across multiple curricula and over two or more years. Furthermore, classroom observation is valid and reliable when teachers are guided by targeted learning outcomes and clear criteria, observe a variety of authentic performance tasks, and monitor ongoing learning over time.

In multilevel classrooms, purposeful assessment is necessary for managing instructional time and multiple curricula. Thus, teachers *plan with the end in mind*, targeting a manageable number of learning outcomes that may be observable during instruction, practice, engagement in a process, or a performance task. It is not intended that learning outcomes be assessed in isolation, but in the context of real learning and performances that demonstrate understanding. Multilevel classroom teachers may use the basic organizing structure of the curricula, or the larger ideas such as general learning outcomes, strands, clusters, or competencies, before focusing on specific learning outcomes. In mathematics, for example, teachers may think of the specific learning outcomes as the final performance task, but begin observation by focusing on the strands to guide formative assessment. In this way, teachers are observing students at various levels of development, and taking them from where they are towards the end-of-year learning outcomes. Specific learning outcomes or grades are benchmarks that guide assessment for reporting and evaluation.

Differentiating Assessment

Assessment in multilevel classrooms is naturally differentiated because of the wide range of learners' needs and multiple curricula. Teachers observe a few students each day, focusing only on a manageable number of learning outcomes to determine prior knowledge, understanding of new concepts, or the level of performance. Thus, on a given day, a multilevel classroom teacher may collect observable data (what is seen and heard) on two or three students during a read-aloud, during a mathematics workshop, and during reflection time to determine students' understanding of inquiry in a social studies-based theme or unit. (See BLM 5: Focused Observation Form.)

Differentiating assessment is also dependent upon where a student is on a continuum of learning and within the Model of Explicit Instruction (see Chapter 2). When assessing students' understanding of the inquiry process, for example, the multilevel classroom teacher would need to find out and monitor the nature and degree of *scaffolding* that students require to be successful in independent inquiry, or determine each student's level of independence (beginning, with guidance, or independent). Accordingly, teachers focus their daily observations on a few students to determine what they can do, where they are on a continuum of learning, and what instruction will be necessary to develop knowledge, strategies and skills, and attitudes for success.

In addition to making observations, teachers augment their repertoire of assessment methods with conferences, performances and/or products, written tasks, and short quizzes that usually become embedded in instruction or part of the workshop (see Chapter 4). Whatever assessment methods teachers use, they must ask, "Why am I assessing this?"

Formative and Summative Assessment

Teachers in multilevel classrooms require a clear understanding of formative assessment and summative assessment, which have two distinct purposes in classroom assessment.

Formative Assessment

Teachers need to have a clear understanding of what learning looks like and of the curricular expectations.

Teachers look for evidence of learning when they

- check for understanding as a whole-class experience proceeds so that groups can be formed for further practice, strategic instruction, or independent inquiry
- closely observe students working individually and in small groups
- confer with individual students to assess students' progress and needs
- provide descriptive feedback to guide learning
- facilitate reflection at closure of a learning experience

Formative assessment is foundational to the multilevel classroom. Its purpose is primarily to inform instruction and to provide learners with timely and descriptive feedback. Close, ongoing observation informs teachers' daily decisions about instruction for the whole class, about the formation of flexible and cooperative groups, and about individual learning needs. General learning outcomes or essential questions (that is, the big ideas in curricula) guide formative assessment as teachers plan with the end in mind, and guide the learners through processes towards culminating performances, demonstrations, or products. Keeping in mind that several specific learning outcomes encompass a culminating performance or product, teachers will target only two or three specific learning outcomes at one time, depending upon learners' needs and goals. Focused observation on a few learning outcomes provides teachers with a way of managing the assessment of a wide range of learners across multiple curricula. (See BLM 5: Focused Observation Form.)

Because the classroom is based on continuous progress, and because the whole class does not move along the continuum of learning at the same rate, teachers make judgements many times each day about how they can best support students in progressing to work of greater complexity, abstraction, and independence. Teachers assess what learners can do on a journey towards the targeted end-of-year learning outcomes. Targeted learning outcomes also assist teachers in guiding students as they develop criteria that evolve with new learning; student-generated criteria guide learners on their journey towards achieving specific learning outcomes. In this respect, assessment is an essential part of instruction. (For more information on constructing student-generated criteria, see BLM 2.)

Formative assessment is integral to learning, too. The greatest impact upon students' learning happens through the ongoing descriptive feedback from teachers as they observe what they see and hear, through peer assessment, and through students' own self-assessment and reflections. Students' learning goals are the steps they take along developmental continua as they gain independent learning skills in the multilevel classroom. Formative assessment empowers students and helps them develop confidence in their own unique learning capabilities. Clearly, teachers who use formative assessment in their classrooms make a positive difference to the quality of learning.

Summative Assessment

Summative assessment is usually a task(s) performed at the end of a theme, unit, semester, term, or school year to demonstrate evidence of learning and to communicate learning to all partners in the learning community. The performance of each student is compared to end-of-year learning outcomes for his or her grade and reported to parents. Summative assessment also includes a synthesis of teachers' observations and students' self-assessments or reflections (formative assessments) to create a thorough description of what the learners know and can do.

Because of the wide range of skills and abilities in the multilevel classroom, however, use of an activation strategy during inquiry may serve as a formative assessment for some students and a summative assessment for others. During activation, multilevel classroom teachers will notice that some students may move directly to independent inquiry; they have met the specific learning outcomes, and teachers will guide them towards more challenging expectations for summative assessment(s) that may even be beyond their "grade" level.

Forms of summative assessment that work well in multilevel classrooms include performances, portfolios, developmental continua, student-led conferences, and action plans. (For more information, see Appendix A: Assessment and Evaluation in the Multilevel Classroom.)

Conscientious record keeping of formative assessments provides a wealth of data at reporting periods, and assists in making summative assessments authentic and relevant for students and parents.

Monitoring Classroom Assessment

In planning for assessment, a starting point may be to practise focused observation (see BLM 5) and informal or "over-the-shoulder" conferences. Teachers may then want to introduce portfolios because it is the learner's responsibility to maintain evidence of progress on learning goals.

Teachers in multilevel classrooms use the same range of formative and summative assessment methods and tools as teachers in single-grade classrooms. It is imperative that monitoring student learning and maintaining observational records be kept simple and time efficient, yet provide useful documentation of what students know and can do in order to inform instruction. Although technology can be helpful in tracking student learning, use of a clipboard and a nearly blank observation form is often the most effective and efficient means of record keeping. It is helpful to plan when, for whom, and what assessment methods will be used over each day, month, or year (see BLM 4: Assessment Plan: Year-at-a-Glance).

Keeping assessment manageable is essential in the multilevel classroom. Many blackline masters and suggestions for criteria are available in Manitoba's curriculum documents. Teachers may examine and adapt them to meet the needs of their students. In the multilevel classroom, teachers may begin by choosing only two or three observable criteria at one time to focus their observations.

Record-Keeping Tools and Methods

- **Record-keeping materials:**
  - a clipboard
  - self-adhesive notes
  - a binder
  - dividers (one for each student, plus three or four extras)
- **Recording forms:**
  - Assessment Plan (see BLM 4)
  - Daily Observation Form (laminated) (see BLM 6)
  - Daily Observation Forms (one for each student) (see BLM 6)
  - Focused Observation Form (one for each theme, unit, performance, and so on) (see BLM 5)
- **Clipboard contents:**
  - Daily Observation Form (laminated)
  - Focused Observation Forms (one or two, depending on current classroom theme, unit of study, and so on)
- **Binder contents:**
  - Assessment Plan
  - a section for each student, with one Daily Observation Form for each student
  - a section for Focused Observation Forms as they are completed
  - a section for blank recording forms or templates
  - other sections (as applicable)
- **Binder maintenance:**
  - Transfer self-adhesive notes from the clipboard to each student's record monthly or at the end of a semester or term.
  - Add Focused Observation Forms when completed.
  - Add any other pertinent information that will assist with formative and summative assessments.

With experience, teachers will develop and manage assessment strategies and record keeping at their own level of comfort. Teachers will learn, with practice, to use a variety of methods in a variety of contexts to ensure valid and reliable assessment information/data.

Assessment As a Shared Responsibility

Students must also learn to monitor their own learning growth. This is part of the shared responsibility of the assessment process in the multilevel classroom. Setting goals, creating action plans, and generating criteria are methods that enable students to assess the quality of their work. When students are responsible for monitoring their own learning, the teacher has less marking and record keeping to do, and students are learning valuable lifelong skills and habits. Students can monitor their own growth along a developmental continuum, maintain a log of reading or process steps, reflect on their learning, and keep a portfolio showing the evidence of their learning. Students who have learned to be competent self-assessors will also be competent peer assessors. Empowering students to be active participants in the learning and teaching process nurtures confidence and the love of learning.

Assessment literacy is "…understanding the principles of sound research-based assessment" (Stiggins 107). In the multilevel learning community, one hears:

- "I can…"
- "This is quality work because…"
- "How can I help you with your learning goal…"
- "The evidence of my learning is…"
- "My reflections are…"
- "Your thinking shows…"

As the learning community involves students, teachers, and parents, assessment is often viewed as a shared responsibility. In order for assessment to be a shared responsibility, however, all partners must clearly understand the criteria by which a quality process, performance, demonstration, or product is to be assessed. (For more information on constructing student-generated criteria, see BLM 2.) When students, educators, and parents are actively engaged in assessment, the learning community has the potential to develop a common understanding of the classroom assessment and evaluation process.

To develop a common understanding of learning, learning improvement, and quality of learning, the learning community must be led by teachers and administrators who have a clear, research-based understanding of classroom assessment. Some means of engaging all partners in the assessment and evaluation process are: developmental continua, student-generated criteria for processes, performances, demonstrations, or products, portfolios, goal setting with parents at student led-conferences, and classroom celebrations of learning. Such a learning and teaching context fosters a common understanding and *assessment literacy* within the learning community.

Reporting Student Progress and Achievement

Parents may feel lost without the usual context of grade divisions, and need clear information in report card periods about whether their daughter or son is on course to attain the specific learning outcomes by the end of the school year. Within the context of a multilevel class, grade levels, which are based on end-of-year learning outcomes, are like benchmarks. Comparing student progress to criteria based on the end-of-year learning outcomes, or benchmarks, informs teachers and parents where students are in relation to grade-specific expectations and provincial standards.

Developmental continua are assessment tools describing observable behaviours (knowledge, skills and strategies, and attitudes) during authentic processes and/or performances. Continua profile student growth and achievement over time. They can be used by students, teachers, and parents to see what learning looks like, to determine next steps or learning goals, and to report student progress and achievement.

Reporting is best accomplished through developmental continua. Use of developmental continua can be time saving for teachers, as they are tools for recording formative assessment data, which may also become a component of the students' report card for summative assessment. Older students can be responsible for monitoring their own progress on continua, which again can save teachers much valuable time. Teachers or students can highlight skills attained and concepts mastered, and can refer to the evidence of learning in students' portfolios or learner profiles to illustrate and explain the continua. Teachers and parents need to be aware that not all students learn in exactly the same sequence or at the same rate, but that the continua track learning over time.

In Manitoba, at the end of a semester or school year, reporting the performance or achievement of students from Grade 6 through Senior 4 is to be expressed in marks as well as in narrative or anecdotal comments. Research is clear that marks should be avoided until summative assessment occurs at the end of a semester or school year so that students have had full opportunities to learn content and develop skills and strategies. Using student-generated criteria to assess quality work provides students and parents with a clearer picture of what the student knows and can do, and enables them to set appropriate goals for future learning, as well as constantly raising expectations. The criteria offer students and their parents descriptive feedback for report cards. These same criteria should be used to develop quantitative rubrics for marks when percentages are required on report cards from Grade 6 to Senior 4.

A *standards test* is an evaluation based on end-of-year learning outcomes and grade-level standards. When standards tests are written in multilevel classrooms, teachers may prepare a teacher-made test so that all students are engaged in the same sort of activity. For example, if the Grade 6 students write an English Language Arts Standards Test, the other students may also experience a "test" or attend to another task that accommodates a test-writing environment for the "Grade 6" students.

Assessment for Learning

Assessment for learning is based on quality classroom observation. In the multilevel classroom, learning is best described along developmental continua so that all partners in the learning community have a clear understanding of what the learner knows and can do. Developmental continua also show each partner in the multilevel community what the next steps in the learning process will be, which facilitates goal setting and planning for new learning.

When teachers use developmental continua to engage students and parents in assessment for learning, teachers have more time and more information for supporting student success. Quality classroom observation is a skill that teachers acquire with practice, and it is the most effective way to improve student learning and achievement.

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Chapter 4: Differentiation in the Multilevel Classroom

CHAPTER 4: DIFFERENTIATION IN THE MULTILEVEL CLASSROOM

Planning for Differentiated Instruction

Teachers in a multilevel classroom teach "individually all at once" (Dorta, in Bingham *et al.* 123). All instruction is planned to accommodate a range of learning, teaching, and assessment methods in which students can engage according to their own developmental needs along the continuum of learning. Differentiated instruction allows teachers to meet students' cognitive and developmental needs, as well as to accommodate their interests and learning styles. Planning for differentiated instruction, using instructional methods that are student centred and developmentally and culturally appropriate, is planning for success.

Diverse Learning Needs and Multiple Curricula

As in a single-grade classroom, planning for differentiation is essential in the multilevel classroom. Meeting the learning needs of a wide range of students and managing multiple curricula are challenging tasks, however. To manage these two tasks, multilevel teachers may find it helpful to focus on learning outcomes from a mid-range grade as a *starting point* to guide their formative assessment and plans for differentiation. In a Grades 4 to 8 multilevel classroom, for example, the Grade 5 learning outcomes may be an appropriate starting point. Formative assessment will provide the teacher with information as to where each learner is in relation to the Grade 5 learning outcomes—below, at, or above the determined starting point. Multilevel classroom teachers will begin to see a *continuum of learning* evolve from the formative assessments and then plan accordingly to meet each learner's needs along that continuum. (See Glossary.)

To meet the needs of a wide range of learners, a multilevel classroom requires

- an observant teacher
- assessment of prior knowledge
- developmental continua
- an inclusive learning environment
- student choice
- authentic materials and resources

A provincial Foundation for Implementation document for a mid-range grade in a multilevel classroom is a valuable tool for choosing appropriate learning and teaching strategies. The strategies, for the most part, are the same across the grades; however, the expectations, amount of scaffolding, and materials and resources often differ. A document from a mid-range grade is a manageable starting point in planning differentiation for students who are at a variety of points along the continuum of learning within the multilevel classroom.

It is understood, however, that planning for learners with exceptional learning needs will require careful attention to meet the specific learning outcomes identified in their *Individual Education Plan* (IEP). Students with exceptional learning needs may require instructional time in a different learning context from that of their classmates. This should occur when the specific learning outcomes identified in the IEP cannot be best met during strategic instruction and some project work within the classroom. The multilevel classroom is an ideal learning environment for inclusion, as all partners in the multilevel learning community can have their individual learning needs met when assessment and instruction are guided by a continuum of learning.

The most important steps in planning for differentiation are determining what the learner can do and setting achievable learning goals to inform instruction and guide new learning. Some students will require more instruction and guidance than others to meet their learning goals. Regardless of whether students move quickly to independence or require more support, they all can experience success through differentiation.

Success for All Learners (Manitoba Education and Training) provides a comprehensive discussion of strategies for differentiation appropriate for the multilevel classroom. For more information about inclusion, see the Department's Special Education website at <http://www.edu.gov.mb.ca/ks4/specedu/index.html>.

Considerations for Differentiating Instruction

Teachers and students in the multilevel classroom will benefit from differentiating learning tasks and expectations, differentiating materials and resources, and organizing and managing the classroom for differentiation.

Differentiating Learning Tasks and Expectations

Due to the wide range of learners in the multilevel classroom, learning tasks are generally open-ended and have a continuum of expectations. Multilevel classroom teachers

- observe what each learner can do in order to plan for learning and teaching
- provide a variety of learning tasks representing the multiple intelligences and allowing for student choice
- plan open-ended tasks that can offer different developmentally and culturally appropriate challenges for a range of students
- allow for flexibility with timelines
- teach goal-setting skills for establishing achievable expectations

- instruct with the Model of Explicit Instruction in mind (see Chapter 2)
- use student-generated criteria to assess learning
- plan for oral assessments, or the assistance of a scribe, when students are unable to manage written responses

Manitoba's Foundation for Implementation documents offer many suggestions for instruction and assessment in each subject area. In a multilevel classroom, the teacher's task is to reference a mid-range grade document in order to place each student on the continuum of learning within the classroom.

In science, for example, the learning outcomes themselves suggest differentiation with respect to student independence and assessment expectations:

- **Student independence:** Students in different grades may be asked to attain the same learning outcome with varying degrees of independence. Grade 5 students, for example, are asked to formulate a prediction/hypothesis identifying a cause and effect relationship with guidance from the teacher, whereas Grade 6 students are expected to complete this task on their own.
- **Assessment expectations:** Students in different grades can perform the same learning task with varying instructions and assessment criteria. Grade 1 students, for example, need to meet one criterion related to function when they construct an object or device, whereas Grade 2 students need to meet two criteria—function and aesthetics.

In multilevel classrooms, teachers will observe students working together with different developmentally appropriate expectations.

Differentiating Materials and Resources

Multilevel classroom teachers pay close attention to the materials and resources necessary to support and maintain a collaborative classroom, including a wide variety of authentic materials and texts to foster inquiry and independent learning.

- **Supplies for learning centres, workstations, and workshops:** Individual students may each have a clipboard or coil-bound notebook to use at learning centres and during workshops. Colour-coded clipboards and folders are useful for managing cooperative learning groups. At many workstations, community supplies (e.g., pencils, pens, erasers, highlighters) are kept in accessible containers.

- **Resources for mathematics and science investigations:** Collections of authentic materials (e.g., buttons, keys, bread-bag tags, seashells, beans, rocks, nests, grains, containers, small boxes) and artifacts play an important role in observing and communicating concepts. Combining authentic materials and commercial manipulatives can enable a broad range of learners to work side-by-side to formulate a mathematical hypothesis or discover a scientific theory.
- **Art materials:** Readily available art materials are also necessary for a variety of learning styles, as well as supporting workshops for independent learners.
- **Text sets:** In the multilevel classroom, text sets are essential because they support a wide range of reading abilities and serve as instructional resources for reading, writing, and inquiry. Select a wide range of visual, print, and multimedia texts on a topic or theme from a content area that accommodates read-alouds, as well as shared, guided, and independent reading. Text sets need to include developmentally and culturally appropriate expository and literary texts. (Building text sets based on content topics or genre studies may be a whole-school project over several years.)

  If students need support in reading a challenging text, they may join their cooperative group to listen while the "reader" reads the text aloud. For the purpose of inquiry, students commonly choose challenging texts to read and view, and they often gain valuable information from these texts to share with the class or to answer their questions. Learning to read in the content areas is an essential reading skill; thus, text sets also need to include appropriate texts for strategic instruction in content reading.

Provide *text sets* of several different stories, books, genres, magazines, images, and multimedia resources on the same topic or theme. This

- allows a broad range of students to participate at their own levels
- enriches class discussion by bringing varied perspectives to the topic
- stimulates interest in further reading and inquiry, as students are often motivated to read and view texts their friends have read and discussed

Resources and supplies need to be ready and accessible for several students who are engaged in a variety of learning tasks at one time.

Organizing and Managing for Differentiation

The ways in which teachers organize and manage the multilevel classroom can accommodate differentiation for a wide range of learners. Establishing learning centres and a variety of groupings supports a range of learners and ensures classroom management:

- **Learning centres:** Learning centres are essential to the multilevel classroom, as they are to the single-grade classroom. They need to have a variety of hands-on materials and open-ended tasks or investigations to accommodate the wide developmental and cultural range of the students. It is important that learning

centres align with targeted curricular outcomes and reflect the multiple intelligences.

- **Groupings:** A variety of groupings facilitate differentiation in a multilevel classroom, including *flexible* and *cooperative groups*:
  - **Flexible groups:** The purpose of flexible groups is to meet a particular need or interest of a small group of learners for strategic or explicit instruction, guided practice, or independent inquiry. These groups will change frequently throughout a day or a learning/teaching sequence. Flexible groups may be formed by and across developmental levels and by student choice.

    Suggestions for Forming Flexible Groups

    - Keep a class list on the computer with students' names organized in order of their place on the developmental continuum in an instructional area. Print a copy of the list for each week and use it in planning strategic instruction in flexible groups. These lists can easily be revised when a student makes a developmental leap.
    - For some tasks, mentorship pairings may be desirable. Groups will operate more independently with the leadership of advanced students.
    - Students may select their own partners on the basis of various considerations (e.g., friendship, choice of resources, choice of problem-solving methods).

  - **Cooperative groups:** The main purpose of cooperative groups in the multilevel classroom is to develop a collaborative "micro" learning community within the larger classroom community (Johnson and Johnson). It takes time for these heterogeneous groups to develop interdependence. Cooperative groups may stay together for an entire term.

    Cooperative groups offer valuable opportunities for independent learning, thereby also allowing the teacher more time to work with flexible groups. Because of the wider developmental range in the multilevel classroom, thoughtful role assignment in cooperative groups is essential so that younger students are not overshadowed by older ones. Assign roles that are based on students' skills (e.g., reader, recorder, reporter, helper) and rotate them. Alternatively, suggest a "share-the-pen" strategy, with each member taking a turn at recording an idea while the others are coaches, assisting with spelling, and encouraging thinking.

    Cooperative groups may be formed across developmental levels. Select students who have a range of social and academic abilities that will foster interdependence.

The Workshop Format

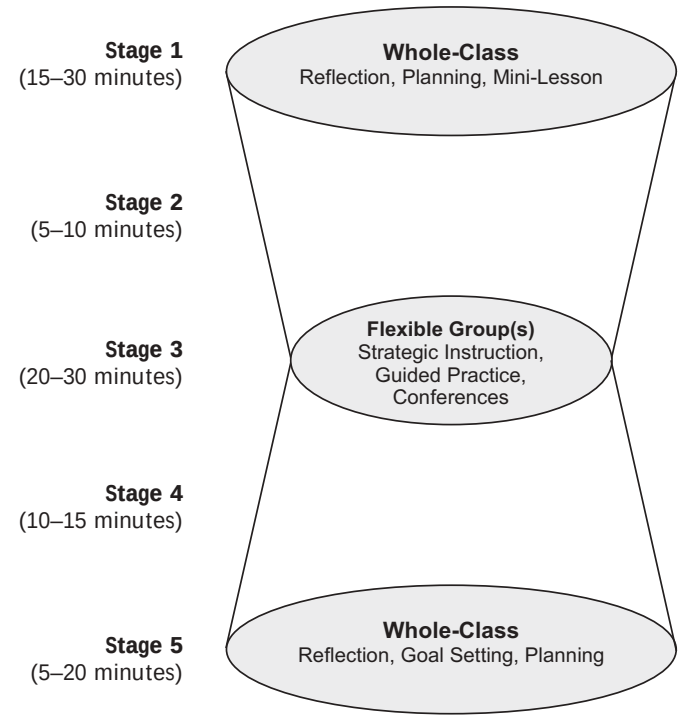
Learning in a multilevel classroom is often accomplished through a workshop format that uses a variety of groupings and allows the multilevel teacher to teach "individually all at once" (Dorta, in Bingham *et al.* 123). Dorta suggests that teachers use an "hourglass" model for workshops, following these stages:

- Stage 1: Whole-class setting for reflection, planning, and initial instruction
- Stage 2: Cooperative and flexible groups to prepare for learning
- Stage 3: Flexible group(s) for strategic instruction, guided practice, and/or conferences
- Stage 4: Cooperative and flexible groups to practise and apply learning
- Stage 5: Whole-class setting for sharing, reflection, goal setting, and further planning

A large block of uninterrupted time (60 to 90 minutes) is necessary for successful workshops in multilevel classrooms. (Times will vary from classroom to classroom and from day to day within a classroom.)

These workshop stages are discussed on the following pages.

Learning and Assessment in the Workshop Context



Adapted from "The Hourglass" by Peggy Dorta, in *Exploring the Multiage Classroom* by Anne A. Bingham with Peggy Dorta, Molly McClaskey, and Justine O'Keefe, copyright © 1995, with permission of Stenhouse Publishers, Portland, ME, USA.

Workshop Stages

The workshop embeds learning in five stages.

- **Stage 1: Whole-Class:** Workshops usually open with whole-class reflection, planning (goal setting), and/or a mini-lesson on a concept, theme, text, or strategy to which all students can respond. The goals at this stage of the workshop may be to
  - explore students' prior knowledge
  - give direct instruction in a concept that activates learning for all students and supports exploration of concepts
  - present mini-lessons on strategies (e.g., for content reading, spelling, mathematics, scientific processes, group processes)
  - plan (e.g., for inquiry)

  After this whole-class discussion or mini-lesson, students move or are guided into a variety of group or individual learning contexts.

- **Stage 2: Cooperative and Flexible Groups:** At this stage in the workshop, there is a great deal of movement. Depending on the students' level of independence and their goal or task for the workshop, some students may move into cooperative learning groups, some may choose a partner, and some may work individually. Other students may be assigned to flexible groupings of two to five students for guided practice or further strategic instruction.

  For example:

  - In a reading/writing workshop, students may engage in silent and oral reading, literature circles, reader response, revision, editing, or a conference with the teacher.
  - During an inquiry workshop, students who need more practice with a concept may continue with materials at learning centres, and those who need to move ahead may be directed to work with open-ended frames such as concept maps or KWL (Know, Want to know, Learned) charts (Ogle). Other independent engaging experiences may include a problem-solving task, a design project, ongoing inquiry, or a textbook activity for practice.

  Continuous formative assessment is vital to determine flexible groupings at this stage. Teachers need to know which students have grasped specific concepts in order to decide on the combinations and learning/teaching experiences that would best advance their learning.

The groups for Stage 2 of the workshop may be chosen by the teacher as part of instructional planning, or may be spontaneously formed by the teacher or students to take advantage of a strategic teaching opportunity. On occasion, students may work individually.

While students are preparing to work in cooperative groups and individual inquiry, the teacher will choose to work with a flexible group for further instruction or guided practice. As this group prepares for learning, the teacher will also check that the remainder of the students know what is expected of them and are engaged in on-task learning. Teachers will develop a routine for this part of the workshop, which may include the following steps:

- Meet with one flexible group at a designated workstation for further instruction.
- Move around the room, ensuring that all students understand their task and are engaged in it.
- Proceed with a mini-lesson or strategic lesson with the group awaiting instruction at the designated workstation.

- **Stage 3: Flexible Group(s):** Most students will be engaged at this stage of the workshop. The teacher may provide further instruction for the flexible group identified in Stage 2, and then assign a practice task that the group will be able to manage independently. The teacher may then work with another flexible group or confer with two or three individual students for focused formative assessment.

- **Stage 4: Cooperative and Flexible Groups:** This stage of the workshop is a valuable time to watch and listen to students at work. By moving around the room again, touching base with each group and observing and assessing the progress of each student, the teacher is able to offer over-the-shoulder conferences, record observations, and gain more valuable information about students' learning.

- **Stage 5: Whole-Class:** Students return to the whole-class grouping to bring the workshop to closure and celebration. Closure is generally kept brief, although it may vary from 5 to 20 minutes. Students may report on or synthesize their learning, reflect, or plan their next step(s). Teachers may facilitate student reflection through questions such as the following:
  - What did you learn today?
  - What strategy worked well for you?

— Would you like to share it with us?

— What was easy? What was hard?

— What do we/you need to do next?

At celebration time the teacher usually reflects on positive observations, offers constructive feedback for future learning, or may guide students in constructing or using assessment criteria.

Students may write personal reflections in their learning logs to assess their progress at the workshop and to revise their learning goals if necessary. This reflective response serves as a start-up cue for the next day's workshop.

Differentiating for Student Success

Successful multilevel classrooms are a result of differentiated instruction that meets the needs of diverse learners within a learning community. Teachers' understanding of developmental learning, knowledge of curricula, and skills in practising formative assessment are instrumental in planning for differentiation. It is recommended that at the outset teachers choose to focus on one aspect of differentiation at a time. Developing skills and confidence in ongoing daily assessment is helpful in differentiating for students' success, and a good starting point for teachers new to the multilevel classroom. Multilevel classroom teachers realize that it takes time to acquire and apply these best practices.

Resources

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Chapter 5: Curriculum Integration in the Multilevel Classroom

CHAPTER 5: CURRICULUM INTEGRATION IN THE MULTILEVEL CLASSROOM

Integration across Subject Areas and Grades

Successful multilevel programming integrates curricula across subject areas and grades. Research shows that students learn best when learning is connected (Jensen, *Teaching*; Vygotsky). This does not mean, however, that all curricula are integrated all the time. *Curricular Connections* (Manitoba Education and Training) outlines expectations and provides examples of various models of integration.

Students exploring the world in authentic ways will naturally call on learning associated with different subject areas. Curriculum integration allows students to develop a whole picture of the topics they explore, without artificial divisions into subject areas. Integrated themes, units, or projects based on topics in social studies, science, and health education, for example, provide purposeful contexts for learning and practising language arts and mathematics skills. They allow teachers to use time more efficiently, taking advantage of overlaps between subject areas and avoiding fragmenting the day into separate periods. To attempt to deliver distinct and separate curricula based on subject areas and grades would be a daunting task for any teacher, and would overlook the benefits multilevel learning offers.

Teachers in multilevel classrooms can approach curricula in various ways, such as the following:

- Set curriculum-based goals early in the school year in collaboration with students.
- Integrate big ideas from various curricula to make learning meaningful and to use time effectively and efficiently.
- Aim for in-depth learning and development of higher-order thinking skills, such as analysis, comparison, and synthesis, rather than addressing a great deal of content superficially.
- Analyze Early and Middle Years curricula and devise developmental continua.
- Shape curricular instruction based on ongoing observation and assessment.
- Use interdisciplinary themes to provide structure and a base for common discourse. Learning is differentiated when students embark on different application and extension tasks, based on their learning needs and interests.

- Use specific focused instruction and find ways for students to practise and apply new skills in the context of thematic projects or performances.
- Rotate content-based curricula, particularly in science and social studies, or use parts of each to complement student inquiry. In a Grades 5 and 6 multilevel classroom, for example, the class may explore topics from the Grade 5 Science curriculum one year, and from the Grade 6 Science curriculum the next.
- Recognize that teaching students how to learn is integral to every curriculum, and instruct students in the skills of independent learning.
- Target learning outcomes from various curricula for assessing processes, performances, demonstrations, and/or products.

Suggestions for integrating various subject areas in the multilevel classroom follow, along with resource suggestions.

Integrating English Language Arts

The structure of Manitoba's Curriculum Framework of Outcomes documents supports multilevel instruction in English language arts. In planning big ideas in English language arts, teachers use the five general learning outcomes (GLOs), which are the same for all grades. Students learn to listen, speak, read, write, view, and represent to

1. explore thoughts, ideas, feelings, and experiences
2. comprehend and respond personally and critically to oral, literary, and media texts
3. manage ideas and information
4. enhance the clarity and artistry of communication
5. celebrate and build community

Specific learning outcomes, when read across the grades, set up a continuum of literacy learning for teacher reference. (See Appendix D in the Early and Middle Years English language arts Curriculum Framework of Outcomes documents.) For summative assessment and evaluation, teachers target the specific learning outcomes, addressing the same outcomes (knowledge, skills and strategies, and attitudes) across all grades, with gradually increasing expectations for each grade. For example, developmental continua in reading and writing cluster specific learning outcomes along the continuum of literacy learning in order to facilitate the management of multiple learning outcomes and to support authentic assessment.

The Foundation for Implementation documents also support learning and teaching in the multilevel classroom. A wide variety of strategies for instruction and assessment are similar across many grades; however, the expectations for assessment become more sophisticated along the continuum of literacy learning. The instructional and assessment strategies also show that the English language arts learning outcomes are generally not targeted or assessed in isolation, but are clustered for instructional purposes and for creating performances, demonstrations, and/or products. Most strategies in these documents are appropriate for multilevel classrooms. In using and adapting these strategies, teachers endeavour to keep them as open-ended as possible to meet a variety of learning styles and needs.

In the study of English language arts, students learn literacy skills at different times and in different ways. Classroom learning reflects "everyday" experiences where students learn to choose and use appropriate materials for authentic purposes.

All learning involves using language, so the English language arts curriculum can be integrated naturally into all classroom learning experiences. In the process of conducting inquiries in science or social studies, for example, students learn the language skills of questioning, locating sources, and managing information, as well as developing their content reading skills and vocabulary. In conjunction with reading and producing expository texts, students may read and create aesthetic texts that allow them to explore the affective aspects of inquiry topics and to express their own response to what they are learning.

Multilevel classrooms offer many authentic opportunities for mutually beneficial partnerships in making meaning. Competent students may consolidate their skills by acting as editors for students who require support. Older students, for example, may benefit from being paired with younger students as book buddies, modelling reading skills. Younger students may form an appreciative audience for the texts produced by older classmates. Collaboration and community building (GLO 5) happen naturally in the multilevel classroom.

As in all classrooms, teachers in multilevel classrooms attempt to balance whole-group, small-group, and individual learning experiences, using a workshop format. Multilevel classrooms provide many opportunities for learners to interact in a social context that helps them develop proficient literacy skills for lifelong learning. Language arts learning is a natural by-product of all communication in the classroom.

Suggested Resources

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Integrating Mathematics

In an active classroom, mathematics instruction is approached in the same spirit as language arts or science instruction—as a means of satisfying curiosity about the world. “Mathematics is a science of pattern and order” (MSEB *et al.* 31). Just as the goal of science is to make sense of things, so the goal of mathematics is to find and analyze mathematical patterns and make meaning of them.

From Kindergarten to Senior 4, students in Manitoba use seven critical processes to build their understanding of mathematics and to support lifelong learning:

- Communication—showing learning orally, through diagrams, and in writing.
- Connections—making connections among everyday situations, other subject areas, and mathematics concepts.

- Estimation/mental mathematics—developing understanding of numbers and quantities.
- Problem solving—investigating problems, including those with multiple solutions.
- Reasoning—justifying thinking.
- Technology—using technology to enhance problem solving and encourage discovery of number patterns.
- Visualization—drawing on mental images to clarify concepts.

Manitoba's mathematics curriculum encourages the development of numeracy through four strands:

- Patterns and Relations
- Shape and Space
- Statistics and Probability
- Number

Manitoba's Curriculum Framework of Outcomes documents support multilevel instruction by showing how mathematics concepts develop across the grades. Teachers will find them useful in the preliminary planning for instruction before consulting the Foundation for Implementation documents for detailed ideas about using manipulatives, strategies, and performances for instruction and assessment to help learners achieve the learning outcomes.

Current research emphasizes the importance of teaching mathematics in a connected manner to increase student understanding (Askew *et al.*). Rather than teaching strand by strand or topic by topic, teachers provide learning opportunities that make connections among concepts such as measurement, geometry, numbers, and patterns. It is essential that mathematics skills be built in the context of meaningful experiences. Measurement and graphing, for example, are important tools for students engaged in interdisciplinary inquiries.

Those not familiar with multilevel classrooms may assume that teachers will rely on mathematics textbooks and workbooks to manage teaching students with a range of developmental needs. In fact, many opportunities occur in the multilevel classroom for students to work at authentic tasks with their classmates in order to construct meaning by using manipulatives and writing about their experiences. Students may be grouped according to their learning needs rather than their age as they interact with peers to talk about and explain mathematical ideas.

Even in multilevel classrooms, teachers create a separate time slot for mathematics that does not fit into thematic inquiries. In fact, a mathematics workshop is an ideal learning context for the problem solving and investigations expected in the mathematics curriculum. By planning rich, open-ended learning tasks with connections to the school and community, teachers encourage students at different levels of understanding to work together as they construct new meanings.

In the multilevel classroom, teachers may use a whole-class setting to introduce the workshop and to foster the development of concepts and big ideas. To activate learning, for example, the workshop could begin with a mental mathematics task in which all students are asked to show how they could mentally calculate the sum of two numbers and to share their strategy with a peer. Students at an earlier stage of development may explain their strategy using manipulatives, while others may use the relationships between numbers. Next, the teacher may introduce a concept or problem-solving strategy using a variety of manipulatives for exploring and connecting understanding. Through ongoing observation teachers guide students into rich, open-ended tasks. Learning centres that support concrete, pictorial, and symbolic stages of learning are effective ways for students to consolidate and extend learning, and to meet each learner's developmental needs. While students are engaged in open-ended tasks, the teacher is forming flexible groups for mini-lessons. Teachers may also guide students in creating authentic performance tasks to apply new learning and they may base assessment expectations on the learners' developmental level(s) as well as the appropriate learning outcomes. Mathematics workshops may close with sharing, self-assessment, and reflection. (For more information about the workshop format, see Chapter 4.)

Teachers find that learning mathematics is relevant for students when they make connections to other subject areas and everyday living. Opportunities to integrate mathematics with content areas and the classroom community are natural connections in multilevel classrooms.

Suggested Resources

For more information about teaching and integrating mathematics in the multilevel learning community, see the following resources:

Askew, Janice, *et al. Effective Teachers of Numeracy: Final Report (Feb. 1997).* London, UK: School of Education, King's College, 1997.

Banks, Janet Claudil. *Essential Learnings of Mathematics.* Edmonds, WA: CATS Publications, 1996.

Barratta-Lorton, Mary. *Mathematics Their Way.* Don Mills, ON: Addison-Wesley, 1995.

Barratta-Lorton, Robert. *Math: A Way of Thinking.* Don Mills, ON: Addison-Wesley, 1997.

Burns, Marilyn. *About Teaching Mathematics: A K-8 Resource.* 2nd ed. Sausalito, CA: Math Solutions, 2002.

---. *Mathematics: Teaching for Understanding, Grades K-6: Parts 1-3.* Three Videocassettes and a Teacher Discussion Guide. White Plains, NY: Cuisenaire Company of America, 1992.

Kroner, Lou. *In the Balance: Algebra and Logic Puzzles, Grades 4-6.* Mountainview, CA: Creative Publications, 1997.

Labinowicz, Ed. *The Piaget Primer: Thinking, Learning, Teaching.* Don Mills, ON: Addison-Wesley, 1980.

Manitoba Education and Training. *Grades 5 to 8 Mathematics: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1997.

---. *Grades 5 to 8 Mathematics: Manitoba Curriculum Framework of Outcomes and Grade 6 Standards.* Winnipeg, MB: Manitoba Education and Training, 1996.

---. *K-4 Mathematics: Manitoba Curriculum Framework of Outcomes and Grade 3 Standards.* Winnipeg, MB: Manitoba Education and Training, 1995.

---. *Kindergarten to Grade 4 Mathematics: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1996.

---. *Kindergarten to Grade 4 Mathematics: Classroom-Based Assessment.* Winnipeg, MB: Manitoba Education and Training, 2000.

Manitoba Education and Youth. Curriculum website: <http://www.edu.gov.mb.ca/ks4/cur/>.

Manitoba Education, Training and Youth. *Grades 5 to 8 Mathematics: Classroom-Based Assessment.* Winnipeg, MB: Manitoba Education, Training and Youth, 2001.

Mathematical Sciences Education Board (MSEB), *et al. Everybody Counts: A Report to the Nation on the Future of Mathematics Education*. Washington, DC: National Academy Press, 1989.

Van de Walle, John A. *Elementary and Middle Years Mathematics: Teaching Developmentally.* Don Mills, ON: Addison Wesley Longman Inc., 2001.

Integrating Science

In the Kindergarten to Senior 4 science classroom, students are actively engaged in "doing" science and developing related skills and attitudes, as well as extending their understanding of science concepts. In addition, they make links between science and daily life and appreciate both the power and limitations of science.

Manitoba's science curriculum fosters the development of scientifically literate students through five foundation areas:

A. Nature of Science and Technology

B. Science, Technology, Society, and the Environment

C. Scientific and Technological Skills and Attitudes

D. Essential Science Knowledge

E. Unifying Concepts

Specific learning outcomes incorporating these foundation areas are identified for each grade. Grade-level learning outcomes are organized into four thematic clusters, reflecting the following disciplines:

- Life Science
- Physical Science
- Earth Science
- Space Science

The thematic cluster charts provided with the Curriculum Framework of Outcomes documents allow teachers to see an overview of the topics for each grade to facilitate planning.

Each grade also contains an Overall Skills and Attitudes cluster referred to as Cluster 0. This cluster can be used as a skills and attitudes continuum across the grades, similar to the continuum of literacy learning in the English language arts curriculum. With its emphasis on the two major processes of science (Scientific Inquiry and the Design Process), Cluster 0 allows for learning that is based on hands-on investigation. Because the thematic content is not specified in Cluster 0, possibilities for curriculum integration are numerous—for example, guiding a class through the Cluster 0 Design Process learning outcomes to engage in interdisciplinary inquiry.

The thematic content specifications at each grade do present a challenge for multilevel classroom teachers, however. Teachers closely examine the particular content-specific learning outcomes for the grades within each multilevel classroom to determine the best way to approach thematic content. Some possible approaches are suggested below:

- **Topic rotations:** Multilevel classrooms may explore topics specific for one grade in a particular year and explore another grade's topics the next year. Decisions about what topics to rotate and how to rotate them are made at the school level to ensure that there are no gaps in student learning. A rotation spanning more than three years would require the alignment of learning outcomes to meet students' needs.
- **Thematic clusters:** Multilevel classrooms may explore topics from various grades that relate to each other to form an overall theme. In this way, the learning outcomes from several grades can be addressed at the same time. A Kindergarten to Grade 3 teacher may, for example, create a Living Things theme incorporating the four Life Science clusters (Kindergarten—Trees; Grade 1—Characteristics and Needs of Living Things; Grade 2—Growth and Changes in Animals; and Grade 3—Growth and Changes in Plants).
- **Integrated projects:** Multilevel classrooms may use the science curriculum as a source of themes for interdisciplinary projects. For example, the thematic clusters from science can provide the context for students learning graphing skills in mathematics and communication skills in English language arts.

Topics from the science curriculum are natural choices for integrated thematic units and/or inquiry in the multilevel classroom.

Suggested Resources

For more information about teaching and integrating science in the multilevel learning community, see the following resources:

Chard, S., and M. Flockhart. "Learning in the Park." *Educational Leadership* 60.3 (Nov. 2002): 53-56.

Manitoba Education and Training. *Grades 5 to 8 Science: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 2000.

---. *Grades 5 to 8 Science: Manitoba Curriculum Framework of Outcomes.* Winnipeg, MB: Manitoba Education and Training, 2000.

---. *Kindergarten to Grade 4 Science: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1999.

---. *Kindergarten to Grade 4 Science: Manitoba Curriculum Framework of Outcomes.* Winnipeg, MB: Manitoba Education and Training, 1999.

Manitoba Education and Youth. Curriculum website: <http://www.edu.gov.mb.ca/ks4/cur/>.

Integrating Social Studies

The social studies Curriculum Framework of Outcomes documents identify knowledge, values, and skills learning outcomes. They address various aspects of citizenship as a core concept of social studies learning across all grades. Knowledge and values learning outcomes are organized under six general learning outcomes:

- Identity, Culture, and Community
- The Land: Places and People
- Historical Connections
- Global Interdependence
- Power and Authority
- Economics and Resources

Skills learning outcomes are organized in four categories:

- Skills for Active Democratic Citizenship
- Skills for Managing Ideas and Information
- Critical and Creative Thinking Skills
- Communication Skills

With their emphasis on community, collaboration, and inquiry-based projects, multilevel classrooms form a natural context for social studies learning. The day-to-day management of the classroom and student involvement in selecting inquiry topics provide opportunities for students to experience the democratic process and to practise consensus building and collective decision making. Students who work with partners older and younger than they are have opportunities to learn tolerance and empathy for others, consider diverse perspectives and points of view, and develop an experiential understanding of interdependence. Through participation in a stable learning community for several years, students learn the core concept of the social studies curriculum: citizenship.

Like science, social studies offers topics ideal for integrated thematic units and/or inquiry in the multilevel classroom. While content themes differ from one grade to the next, they are related by the core concept of citizenship, the six general learning outcomes, and the four skill areas. Many multilevel classroom teachers choose to cycle the content themes so that students will have explored all themes by the time they leave the multilevel classroom.

Suggested Resources

For more information about teaching and integrating social studies in the multilevel learning community, see the following resources:

Manitoba Education and Youth. *Kindergarten to Grade 4 Social Studies: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Youth, in development.

---. *Kindergarten to Grade 8 Social Studies: Manitoba Curriculum Framework of Outcomes.* Winnipeg, MB: Manitoba Education and Youth, 2003.

---. Curriculum website: <http://www.edu.gov.mb.ca/ks4/cur/>.

Robb, L. *Teaching Reading in Social Studies, Science, and Math: Practical Ways to Weave Comprehension Strategies into Your Content Area Teaching.* New York, NY: Scholastic, 2003.

Integrating Physical Education/ Health Education

The organization of the physical education/health education Curriculum Framework of Outcomes documents supports multilevel learning, as the same topic or theme is often addressed in each grade, with the assessment focus changing across the years.

As with other subject areas, the general learning outcomes identified for physical education/health education are interrelated, cumulative, and interdependent. The five general learning outcomes (GLOs) relate to

1. Movement
2. Fitness Management
3. Safety
4. Personal and Social Management
5. Healthy Lifestyle Practices

Specific learning outcomes are identified for each strand, sub-strand, and theme or topic across the grades. The Scope and Sequence Charts in the curriculum documents provide a useful overview of curricular topics.

In multilevel classrooms, students at all grades may explore the same physical education and health education topics, but teachers will identify different assessment criteria and performance expectations based on the specific learning outcomes for each grade. Learning experiences that promote inclusion (e.g., cooperative/collaborative activities, station activities, individual, dual, or small-group activities) are appropriate for the diverse interests and skill levels of students in multilevel classrooms. It is essential that the equipment in the classroom be of the appropriate type and size to accommodate the skill levels of all students.

Students may play on sports teams with peers through the school or community centre, and may be accustomed to associating physical activity with competition. Physical education classes in a multilevel classroom provide opportunities for students to learn to respect and share with others whose physical skills may not be as well developed as their own.

Physical education and health education activities and topics can also be integrated naturally with other subject areas to promote active learning and student engagement. Multilevel classroom teachers may establish a weekly or monthly health topic or theme and integrate

the content in the other subject areas where applicable. Some curricular connections and integration ideas are suggested below:

- **English language arts:** In the physical education/health education curriculum, GLO 4 (Personal and Social Management) focuses on skills for goal setting, decision making/problem solving, interpersonal relationships, conflict resolution, and stress management. As students learn about themselves, gain a greater understanding of their own and others' emotions, develop positive communication skills, resolve conflicts peacefully, and work cooperatively and collaboratively with others, they are attaining many of the learning outcomes of the English language arts curriculum, particularly those from GLO 1 (Explore thoughts, feelings, ideas, and experiences) and GLO 5 (Celebrate and build community). Many English language arts strategies, such as active listening, summarizing, clarifying, and paraphrasing, are reinforced when discussing health-related topics and/or making healthy decisions.
- **Mathematics:** Mathematics learning experiences can include measuring, recording, and graphing of physical challenges such as how far the students can jump or throw a ball, how many minutes students were active each day, or how many laps or minutes students run in a "fitness bank" run.
- **Science and social studies:** Many physically active games, such scavenger hunts, tag activities, and relays, can include science concepts (e.g., animal games, solar system theme, force and motion) or social studies knowledge (e.g., communities, multicultural games and dances). Health education connections can be made with science and social studies on topics such as nutrition and substances use and abuse prevention. Accessing and/or making healthy food choices, for example, relates to a Grade 5 Science cluster titled Maintaining a Healthy Body, as well as to several GLOs in social studies: The Land: Places and People and Economics and Resources. (For an integrated example on nutrition, see page 19 in the Overview of *Kindergarten to Grade 4 Physical Education/Health Education: A Foundation for Implementation*.)

The physical education/health education curriculum is a resource to assist with implementing active learning in the classroom. Once again, the topics and concepts lend themselves well to integrated themes and units of study in the multilevel classroom.

Suggested Resources

For more information about teaching and integrating physical education/health education in the multilevel learning community, see the following resources:

Cone, S.L., and T.P. Cone. "Language Arts and Physical Education: A Natural Connection." *Teaching Elementary Physical Education* (July 2001): 14-17.

Cone, T., P. Werner, S. Cone, and A. Woods. *Interdisciplinary Teaching through Physical Education.* Champaign, IL: Human Kinetics, 1998.

Manitoba Education and Training. *Kindergarten to Senior 4 Physical Education/Health Education: Manitoba Curriculum Framework of Outcomes for Active Healthy Lifestyles*. Winnipeg, MB: Manitoba Education and Training, 2000.

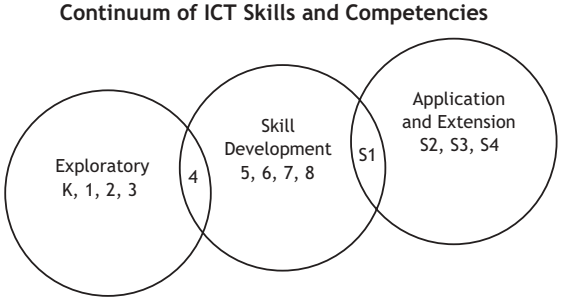
Manitoba Education and Youth. *Grades 5 to 8 Physical Education/Health Education: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Youth, 2002.

---. Curriculum website: <http://www.edu.gov.mb.ca/ks4/cur/>.

Manitoba Education, Training and Youth. *Kindergarten to Grade 4 Physical Education/Health Education: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education, Training and Youth, 2001.

Integrating Information and Communication Technologies

Technology As a Foundation Skill Area (Manitoba Education and Training) contains a continuum of student skills and competencies in information and communication technologies (ICT) from Kindergarten to Senior 4. As the following diagram illustrates, students progress along a continuum of ICT skills and competencies, beginning with the exploratory stage (Kindergarten to Grade 4), followed by the skill development stage (Grade 4 to Senior 1), and finally moving to the application and extension stage (Senior 1 to Senior 4):



As with any developmental continuum, these stages provide multilevel classroom teachers with a tool to monitor student growth and to plan for the next steps in learning.

Students in multilevel classrooms may develop an electronic collection or portfolio to document their learning in all subject areas. In this way, technology can be used both as a tool and as an environment for students to acquire and apply their learning. Students may be encouraged to add to and modify their collection as they progress through the developmental continuum of ICT skills and competencies and learning continua in other subject areas.

Suggested Resources

For more information about teaching and integrating information and communication technologies in the multilevel classroom, see the following resources:

Manitoba Education and Training. *Technology As a Foundation Skill Area: A Journey toward Information Technology Literacy*. Winnipeg, MB: Manitoba Education and Training, 1998.

Manitoba Education and Youth. Curriculum website: <http://www.edu.gov.mb.ca/ks4/cur/>.

Planning for Integration through Inquiry

Manitoba's Foundation for Implementation documents serve as valuable "tool boxes" for classroom instruction. Teachers will notice that many of the suggested learning, teaching, and assessment strategies are the same across all disciplines. The large numbers of student learning outcomes are, however, overwhelming for many teachers, and certainly this is the case for multilevel classroom teachers.

Chapter 6 of this resource describes a Guided Planning Model based on the integration of curricula to make meaning through inquiry. It also emphasizes the need to target a manageable number of learning outcomes that will provide students with opportunities to demonstrate their learning through performances, demonstrations, and/or products for summative assessment. The purpose of the Guided Planning Model is to assist teachers in managing multiple curricula and meeting the needs of a wide range of learners through integration, inquiry, and the gradual release of responsibility or the Model of Explicit Instruction for independent learning.

Resources

Jacobs, H. *Mapping the Big Picture: Integrating Curriculum and Assessment K-12.* Alexandria, VA: Association for Supervision and Curriculum Development, 1997.

Jensen, Eric. *Teaching with the Brain in Mind.* Alexandria, VA: Association for Supervision and Curriculum Development, 1998.

Manitoba Education and Training. *Curricular Connections: Elements of Integration in the Classroom*. Winnipeg, MB: Manitoba Education and Training, 1997.

Manitoba Education and Youth. Curriculum website: <http://www.edu.gov.mb.ca/ks4/cur/>.

Chapter 6: Integrated Learning through Inquiry: A Guided Planning Model

CHAPTER 6: INTEGRATED LEARNING THROUGH INQUIRY: A GUIDED PLANNING MODEL

The Inquiry-Based Learning Community

Inquiry is the cornerstone of instruction in multilevel classrooms. In an inquiry-based classroom, learning grows out of students' natural inclination to question the world. Inquiries may be brief, resolved by referring to a book in the library or an Internet search, or they may lead students to an in-depth study that engages them for an entire year or more. Building classrooms around inquiry engages students, integrates process and content from all disciplines, and fosters self-directed learning.

The *inquiry process* provides

- a means of integrating curricula and leads to holistic, multidisciplinary learning
- a range of learning tasks appropriate for students at different developmental levels
- opportunities to embed instruction in authentic contexts
- an active role for students to share in the responsibility of planning
- support for developing independent learning skills
- a context for cooperation, collaboration, and community building

The basic inquiry process is similar for students of all ages. Students

- pose questions and explore ways to answer them
- locate and manage information from various sources
- process and synthesize their findings
- share their findings on an ongoing basis, supporting each other in their research
- reflect on and celebrate their inquiry findings with a community audience

Regardless of age, less-experienced students may need more support from the teacher in moving through the inquiry stages. More-experienced students, while working with the same thematic focus, usually pose questions of greater depth, explore a wider range of sources, create more complex products, and work with greater autonomy. This sort of differentiation can be managed by using the workshop format for instruction (see Chapter 4).

While the content of inquiry may come from the science, social studies, and health education curricula, student learning also involves mathematics, English language arts, and information and communication technologies. Harste suggests that curriculum be organized through inquiry.

Planning for Inquiry: A Shared Responsibility

Inquiry is fuelled by student curiosity and shaped by student planning. Teachers who come to the classroom with detailed plans for student inquiry are not only increasing their workload, but are also taking over a responsibility that has rich educational benefits when shared with students. In working through the planning process together with students, teachers instruct learners in developing

- a sense of ownership and responsibility for their own learning
- skills and strategies in making decisions and reaching consensus
- knowledge of information sources
- confidence in contacting individuals in the school or community
- criteria for assessing processes, performances, demonstrations, and products

While inquiry is often student-led, it is also teacher-facilitated. Teachers ensure that curricular outcomes are met, that the learning needs of individual students are identified and addressed, that adequate resources are available, and that students' learning processes and products meet criteria for quality work. Thus, the teacher plans what curricula to integrate, what learning outcomes to assess, and what possibilities the inquiry may include to facilitate instruction and learning.

The following table illustrates the shared responsibility between the teacher and students throughout the guided inquiry process in the multilevel classroom.

<table>
<tr><th colspan="3">Guided Inquiry</th></tr>
<tr><th>The Teacher As Reflective Practitioner and Keen Observer</th><th>Inquiry Process</th><th>The Student As Reflective and Active Learner</th></tr>
<tr><td rowspan="3">Formative Assessment
• Target learning outcomes.
• Focus observation.
• Develop criteria.
• Confer with students.
• Plan and revise instruction.
• Reflect.
• Celebrate learning.</td><td>Activating
• Choose a theme or topic.
• Identify and record prior knowledge.
• Ask initial questions.
• Explore and select primary and secondary sources.
• Plan for inquiry.</td><td rowspan="3">Formative Assessment
• Set learning goals.
• Focus observation.
• Develop criteria.
• Participate in conferences.
• Plan and revise instruction.
• Reflect.
• Celebrate learning.</td></tr>
<tr><td>Acquiring
• Gather, process, and record information.
• Focus the inquiry.</td></tr>
<tr><td>Applying
• Plan to express learning.
• Create performance(s)/ demonstration(s)/product(s).
• Celebrate and reflect.</td></tr>
</table>

Identifying *criteria for quality work* is an integral part of independent inquiry.

- Criteria building may be the subject of a mini-lesson.
- As students identify criteria, they may be posted on a wall chart.
- Criteria may be revisited, revised, and added to throughout the inquiry.

Establishing Criteria

At the onset of inquiry, the teacher's focus is to keep the end in mind, knowing that even in student-led inquiry, a final process, performance, demonstration, or product will be an integral component of summative assessment. As the inquiry proceeds, the teacher's and students' ongoing assessments determine opportunities for systematic instruction. Also, from the onset of the inquiry, the teacher and students begin to identify the characteristics of quality work (processes and products). As these characteristics become more sophisticated, the evolving criteria are applied to the processes used along the way and ultimately to the final process, performance, demonstration, or product. Thus, the teacher and students may discuss, for example, what a quality KWL chart, inquiry plan, or design project looks like. (For more information on building criteria, see BLM 2.)

Embedding Instruction in the Context of Inquiry

To address the learning outcomes of several curricula as well as the needs of a wide range of students, instruction needs to be intentional and focused on developing skills and strategies for independent inquiry. Instruction may take the form of mini-lessons for the whole class or for small instructional groups, shaped to address the needs of students as they conduct their inquiry. Embedding instruction in the context of ongoing inquiry helps students see the purpose of their learning and gives them the opportunity to apply it immediately in an authentic context.

The Guided Planning Model

The Guided Planning Model that follows outlines typical inquiry stages. Teachers will keep in mind, however, that inquiry is a dynamic process and that an authentic inquiry will forge its own course as students' understanding and interests develop and as new resources emerge or challenges are encountered. Teachers also recognize that formative assessment is ongoing throughout inquiry and determines what strategies they will teach and what criteria will be developed for summative assessment(s). Inquiry may be viewed as a cycle, with students re-entering the process at any stage as their initial questions are redefined and their plans revised.

The Guided Planning Model outlines the inquiry process within a frame that is closely aligned to the four-column format used in Manitoba's Foundation for Implementation documents. In this planning model, the four columns respectively represent the following instructional components:

- Column 1: Curricular Connections (subject area integration)
- Column 2: Curricular Outcomes
- Column 3: Instruction: Learning, Teaching, and Assessment Strategies (which includes the Inquiry Process or cycle)
- Column 4: Learning Resources/Sources

See BLM 9: The Four-Column Planner for a template. An example follows.

The Four-Column Planner (Example)

Integrated Theme/Topic Teacher choice, negotiated, or student choice **Duration** 4 to 8 weeks

Goals	• What do I want my students to *know and be able to do* to show and celebrate their learning? • What do I need to do to facilitate the success of my students' inquiry?
Performance(s)/ Demonstration(s)/Product(s)	• How will my students show what they *know and can do?*
Classroom Processes	• How will I design the learning-teaching context? (Choose one or two of: inquiry, workshop approach, multiple intelligences....)

Curricular Connections What subject areas do I want to integrate?	**Curricular Outcomes** What do I want students to know and/or be able to do?	**Instruction: Learning, Teaching, and Assessment Strategies*** How will I find out what students already know? / What will I see and hear? How will I facilitate student inquiry? / What learning will I see and hear? How will I/they know what they have learned? / What quality of learning will I/we see and hear?	**Learning Resources/ Sources** People, technology, print, multimedia.
☐ English Language Arts ☐ Mathematics ☐ Science ☐ Social Studies ☐ Physical Education/ Health Education ☐ Information and Communication Technologies ☐ The Arts	What general learning outcomes or strands will connect across the curricula? What specific learning outcomes will I assess? (Target a manageable number of learning outcomes for formative assessment. In addition to the targeted outcomes, other enabling outcomes may evolve throughout the inquiry. Students generate criteria for formative and summative assessment.) **Summative Assessment** (Using new learning in a process and/or to create a product.) • Criteria • Task: performance/ demonstration/product • Reflection	**Inquiry Process** **Activating** (Teacher-Led / Shared/ Negotiated / Student-Led) • Choosing a theme or topic. • Identifying and recording prior knowledge. • Asking initial questions. • Exploring and selecting primary and secondary sources. • Planning for inquiry. **Acquiring** • Gathering, processing, and recording information. • Focusing the inquiry. **Applying** • Planning to express learning. • Creating performance(s)/demonstration(s)/ product(s). • Celebrating and reflecting. **Optional** • Culminating Event	**Primary Sources** ☐ Field Trip ☐ Expert ☐ Artifacts **Secondary Sources (Text Set)** ☐ Multimedia ☐ Print ☐ Web

* See Appendix B: Planning Model (The Third Column) for possible learning contexts that may take place during inquiry.

The Guided Planning Model reflects the Model of Explicit Instruction (see Chapter 2). Students are actively engaged in planning the inquiry, with the teacher as model, guide, or facilitator, depending upon students' understanding of the inquiry process, their learning needs, and their level of independence. This model also allows teachers a variety of entry points, depending on their level of comfort with facilitating student ownership. (See Appendix B: Planning Model [The Third Column].)

The Inquiry Process

In the third column of The Four-Column Planner, the *inquiry process* is divided into three major stages: *activating*, *acquiring*, and *applying*. A discussion of the inquiry stages follows.

Instruction: Learning, Teaching, and Assessment Strategies • How will I find out what students already know? / What will I see and hear? • How will I facilitate student inquiry? / What learning will I see and hear? • How will I/they know what they have learned? / What quality of learning will I/we see and hear?			
Inquiry Process			
Activating	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Choosing a theme or topic.			
• Identifying and recording prior knowledge.			
• Asking initial questions.			
• Exploring and selecting primary and secondary sources.			
• Planning for inquiry.			
Acquiring			
• Gathering, processing, and recording information.			
• Focusing the inquiry.			
Applying			
• Planning to express learning.			
• Creating performance(s)/ demonstration(s)/product(s).			
• Celebrating and reflecting.			
Optional			
• Culminating event.			

Activating Stage

Preparing for learning involves accessing, clarifying, and extending prior knowledge. The following strategies can be used in the activating stage of the inquiry process:

Instruction: Learning, Teaching, and Assessment Strategies • How will I find out what students already know? / What will I see and hear?			
Inquiry Process			
Activating	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Choosing a theme or topic.			
• Identifying and recording prior knowledge.			
• Asking initial questions.			
• Exploring and selecting primary and secondary sources.			
• Planning for inquiry.			

- **Choosing a theme or topic:** The themes for inquiry grow out of curriculum content and/or student interests, and may be proposed by the teacher, negotiated with students, or suggested by students. When a theme or topic is student-led, the teacher puts it into a curricular context that reflects learning outcomes and learner needs or goals. Teachers and students may find it helpful to select a theme several months in advance of the inquiry in order to collect and organize texts and materials. In rural or isolated communities, materials, resources, and library books may need to be ordered from the school division/district office or a lending library (such as the Manitoba Education and Youth Library), or purchased from an urban centre. An overview of topics posted in the school and sent home with students enables the whole learning community to assist in providing resources for the inquiry.

Criteria to Consider

Criteria to consider for quality themes or topics:

- Allow students to explore significant concepts and achieve targeted learning outcomes in integrated curricula.
- Provide a range of learning opportunities for all the stages of cognitive and skill development in the multilevel classroom.
- Engage students in extending their present understanding of the world.
- Accommodate sufficient resources available to explore this topic: human, material, and informational.

- **Identifying and recording prior knowledge:** Students use strategies to activate their prior knowledge about the topic so that new learning will be linked to their existing knowledge. Activating prior knowledge also provides opportunities to assess the needs of each learner. For example, a KWL (Know, Want to know, Learned) chart or a Sort and Predict strategy (Brownlie and Close) might be initiated at the start of an inquiry to provide both learners and the teacher with information for instruction and for planning the inquiry.
- **Asking initial questions:** Many questions will emerge during this period of activation. These initial questions can be recorded, and later revisited and revised when students are at the point of formalizing the questions that will guide their research.

Guiding Students to Ask Questions

Guide students to ask questions that

- pertain to different subject areas: health, social studies, mathematics, science, music, language arts
- could be posed to different "experts" (human sources, such as nutritionists, farmers, store owners, chefs)
- are based on the five Ws/H: Who? What? Where? When? Why? How?

- **Exploring and selecting primary and secondary sources:** A period of preliminary exploration of the selected topic or theme is essential to a successful inquiry. This exploration
  - — builds new knowledge for students who are unfamiliar with the topic and establishes a shared knowledge base for class discussion
  - — stimulates curiosity and prompts the questions that will guide the inquiry
  - — creates excitement, motivation, and student ownership
  - — provides baseline information for assessment

  Using primary sources in the multilevel classroom is an ideal opportunity to meet a broad range of learners' needs. Vivid and engaging experiences such as a trip to a pond or a construction site, a visit from a guest "expert," or the reading of a journal or diary give students concrete sensory information on which to build their learning. (Always consider safety when planning for and when on field trips.) Secondary sources such as books, videos, and the Internet provide additional information sources for the inquiry.

Primary sources include

- experiences of the teacher and students
- observations from field studies
- explanations from field trip guides
- classroom guests
- original diaries and journals
- interviews with family members, community "experts," and Elders

Secondary sources include

- books: expository texts, literary texts
- videos and films
- museums and galleries
- newspapers
- brochures
- websites
- music, art, drama

- **Planning for inquiry:** In activating their prior knowledge early in the inquiry process, students will have listed initial questions, possibly in a KWL chart. Through their exploration of the inquiry topic, students need to add to, delete from, or revise the initial questions. Some students may have moved beyond those initial questions to guiding questions that will focus the inquiry.

Questions for Inquiry

In planning for inquiry, students will ask:

- What questions will we/I explore?
- What information sources do we/I need?
- Who will assume various responsibilities?
- How much time will we/I allow for the inquiry?
- How will we/I record our/my information?
- How will we/I share our/my information?
- Who will be the audience?
- What will the criteria be in assessing our/my work?

As the inquiry questions evolve and change, teachers and students begin to develop a sense of where their inquiry may lead them. They then draft a plan that will guide them through their inquiry. (For an example of planning for an independent inquiry project, see BLM 7: Our / My Learning Plan.)

Students constantly revise their plans as their learning deepens and as groups or individuals form more specific goals for the inquiry. Planning is shaped by student needs, skills, learning styles, and the multiple intelligences. Not all students will follow the same plan.

The teacher will observe and act as a facilitator throughout the planning process. As students formulate their plans, the teacher may guide their discussion and assess students' levels of independence to determine groupings for guided or independent inquiry. Students may work individually or with partners of their own choosing for inquiry. Alternatively, teachers may determine flexible or cooperative groups. (See Chapter 4 for more information about groupings.)

As the inquiry proceeds, students may continue to add to their KWL charts using a different colour of marker each day. They may add new knowledge and revise, add, or delete questions. Students may also record daily reflections under the "L" in their KWL charts as Exit Slips and to monitor learning.

Assessment during inquiry generally focuses on two of three processes:
- inquiry skills
- performances/ demonstrations/ products
- group participation

During the activation stage of inquiry, teachers gain a sense of what assessment criteria need to be developed for the inquiry. Students usually generate two sets of criteria throughout an inquiry process. One set of criteria focuses on a specific aspect of inquiry such as using a variety of sources, recording information, or creating a quality action plan. The other set of criteria is intended for a performance, demonstration, or product. Occasionally, social skills may be assessed as well.

Developing criteria for one of the features of inquiry often starts during activation and continues throughout the acquiring stage during a daily reflection time. (For more information on establishing criteria, see BLM 2.)

Acquiring Stage

In the inquiry process, integrating and processing learning involves the following acquiring strategies:

Instruction: Learning, Teaching, and Assessment Strategies • How will I facilitate student inquiry? / What learning will I see and hear?			
Inquiry Process			
Acquiring	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Gathering, processing, and recording information.			
• Focusing the inquiry.			

- **Gathering, processing, and recording information:** Students will gather information from a range of primary and secondary sources to elaborate upon their prior knowledge and answer some of their questions.

  When processing information, teachers use whole-class discussions for sharing and reflecting. These discussions offer important opportunities to teach students to think critically about their prior knowledge and the information they have gathered. The teacher's role is to ask questions that will help students

  — identify inconsistencies

  — decide how to resolve the inconsistencies

  — identify gaps in information

  — decide how to fill in the gaps

— expand or revise the information

— revise inquiry plans to take account of new information

The teacher's ongoing observations and the developmental levels of the students will determine which students may need to be taught strategies for recording information. Students can record information in various ways:

— Write in an inquiry log.

— Use a T-chart, recording information in the left column, and reflections in the right column. Reflections will include preliminary interpretations and further questions.

— Make notes.

Finally, students may return to their initial sources and/or explore new ones. They can also revisit their inquiry plans and reflect on what they have learned. This will allow them to focus their inquiry and move from their initial questions to their guiding questions.

- **Focusing the inquiry:** Depending on students' degree of independence, teachers will guide them in developing an action plan to express their learning. This action plan will assist students in creating a final performance, demonstration, or product. Considerations for an action plan may include a timeline, audience, purpose, form, personal interests, learning goals, the multiple intelligences, assessment criteria, and available resources.

  Students will use their guiding questions and choose the best sources available to find their answers. They will also consider how they are going to share their learning, whether it be formally or informally. Simultaneously, the teacher reflects upon targeted learning outcomes and takes advantage of teachable moments for extending learning. The ongoing development of student-generated criteria often brings the daily inquiry workshop to closure.

  The inquiry process is seldom linear. Students often share their action plans with peers or with the teacher, and may revise them. Inquiry, learning, and assessment are ongoing as students uncover their need for more information.

Applying Stage

Consolidating learning includes formulating and extending knowledge. At the application stage of the inquiry process, consolidating learning involves the following strategies:

Instruction: Learning, Teaching, and Assessment Strategies • How will I/they know what they have learned? / What quality of learning will I/we see and hear?			
Inquiry Process			
Applying	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Planning to express learning.			
• Creating performance(s)/ demonstration(s)/product(s).			
• Celebrating and reflecting.			

- **Planning to express learning:** Students will revisit their action plans to think about how and with whom they might share their learning. Once again, audience, purpose, and the multiple intelligences are some important considerations. Students and teachers will discuss individuals' strengths and goals to determine an appropriate form in which to express learning. When inquiry is a new process for a class, the teacher may guide the development of an action plan to serve as a model for subsequent inquiry. Performances, demonstrations, and products are often individualized to meet the diverse needs of the learners, whether they are working on group projects, on individual projects with guidance, or on independent projects.

  Depending on the audience, students may express their learning in written, oral, or visual texts in various forms (e.g., stories, dramatic performances, dioramas). This will help them to

  — synthesize information

  — consolidate their learning

  — express their own perspective and response

  — use various language arts forms

  — shape a text to the needs and preferences of an actual audience

  At this time, students and teachers will construct criteria for a quality performance, demonstration, or product. Students' action plans will guide them as they prepare for summative assessment.

- **Creating performances, demonstrations, or products:** At this stage of inquiry, students need large blocks of time, accessible resources, and clear criteria of quality work. Use of a workshop format is ideal, as it allows students and the teacher to have conferences, make revisions and decisions, and reflect upon the inquiry and new learning. Teachers can use this time to assess processes and guide those needing more assistance. Ongoing self-assessment and peer assessment are evident as independent learners apply their learning.

  Not all inquiry will be shared with an audience. If learning outcomes reflecting processes were initially targeted, then summative assessments and closure may take place at this time. Individuals, peers, and the teacher will use the established criteria for evidence of learning (see BLM 8) and assessment. Rubrics may be developed from the criteria if marks need to be assigned (Grade 6 to Senior 4).

  If targeted learning outcomes reflect formal sharing, as in the English language arts outcomes in GLO 4, then it will be necessary to revise and polish the performance, demonstration, or product for the intended audience.

- **Celebrating and reflecting:** Whether closure takes place with or without a culminating event, assessment and reflection are essential to the inquiry cycle, not only to synthesize what has been learned, but also to determine what the next inquiry might be. In the multilevel classroom, celebration and reflection become the culmination of the formative assessment(s) and may be the summative assessment as well. Learners are able to look back on their journey and grow in confidence as a result of their learning. (For more information on reflection, see BLM 1).

Considerations for Reflection

- Debrief the process students used in inquiry, and ask students how they would do things differently next time.
- List the questions students now have about the topic and discuss how they differ from the questions that prompted the inquiry.
- Identify questions that students would like to pursue in a new inquiry.
- Discuss the importance of this learning to students' understanding of the world.

As partners in the multilevel learning community, teachers also celebrate and reflect on the learning that has taken place during the inquiry. Growth in confidence and learning is observable. Teachers reflect on what they see and hear. Both students and teachers use the student-generated criteria of quality work to guide their assessment and reflection.

Through reflection, students and teachers can set goals for further learning. This reflection may take the form of whole-class discussion or individual students' independent writing.

Optional: Culminating Event

Celebrations of inquiry projects may also take the form of a culminating event. Culminating events may include

- exhibitions of models
- dramatic performances
- book launches
- interactive demonstrations
- assemblies

Teachers act as facilitators as students plan culminating events in which each student has a role. These events may be as simple as a classroom celebration, or they may be more formal events to which members of the multilevel learning community or the wider community are invited. In planning and publicizing events, students have opportunities to practise language arts, mathematics, and health education skills (e.g., writing invitations, creating posters, sending notices to a school newspaper, reading announcements on the school's public address system, estimating numbers, choosing nutritious snacks, and thinking about the safety of guests). A visitors' book may be set up for guests to record comments and feedback.

Multidisciplinary Learning through Inquiry

As students plan, conduct, reflect on, and celebrate their inquiry, they learn and practise academic skills and strategies that address the learning outcomes of various curricula.

- In collaborating at every stage of the inquiry project, students learn group skills and processes.
- In recording and managing their ideas, students learn and use organizing strategies such as concept maps and KWL charts.
- In collecting and recording information, students learn mathematics concepts and skills such as counting, measuring, and graphing.

- In interpreting findings, students learn scientific methods and concepts, as well as critical thinking.
- In compiling information from diverse sources, students expand their knowledge base in social studies, science, and health education.
- Throughout the entire inquiry process, students learn and reinforce language arts skills.
- In creating performances or products to share their findings, students use information and communication technologies, art, music, and drama, as well as writing and speaking.
- Through self-assessment, reflection, and goal setting, students grow in confidence and acquire lifelong learning skills and dispositions.

Several dimensions of the multilevel classroom converge with the Guided Planning Model: the learning community, ongoing classroom assessment, a continuum of learning, and multiple curricula. Building classrooms around inquiry is an effective and efficient means towards self-directed learning and celebration of learning in the multilevel classroom.

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Blackline Masters

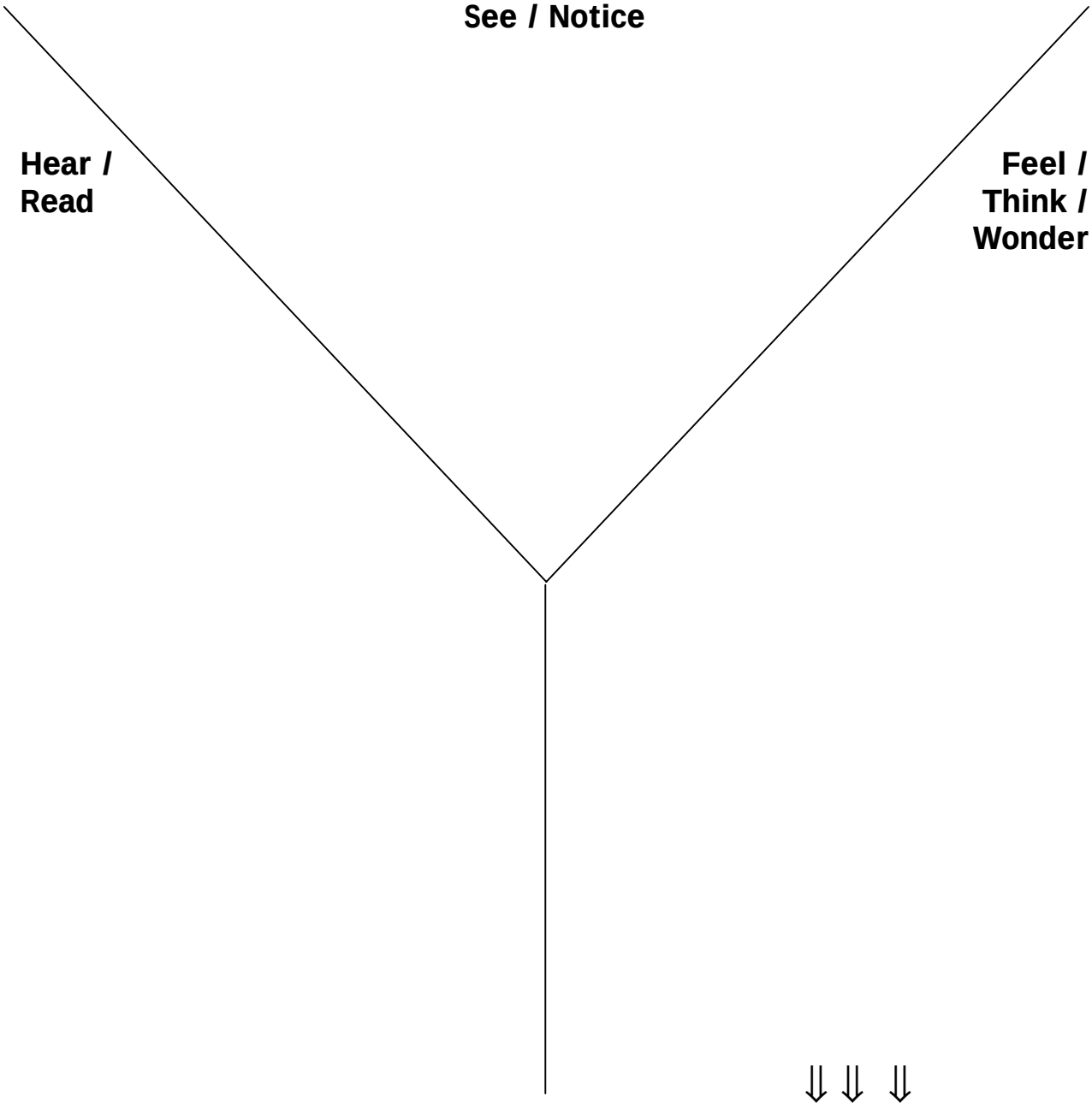
Reflection ⇒ Metacognition

Name _____ **Date** _____

See / Notice

Hear / Read

Feel / Think / Wonder



⇓ ⇓ ⇓

- What do you notice about your thinking?
- What did you remember to do? How did that help you?
- What do you plan to do next?

Constructing Student-Generated Criteria for Quality Work

The process of constructing student-generated criteria for *quality work* is a four- to six-week learning-teaching sequence. Develop only three to five criteria to reflect the targeted learning outcomes or essential learnings. Keep in mind that "less is more."

- ❑ Clarify the purpose of a task and target the appropriate learning outcome(s).
- ❑ Share "exemplary" models of quality work.
- ❑ Guide students to identify and respond to "What's powerful?" from a model or exemplar.
- ❑ Invite students to share "What's powerful?" from their own work. Discuss "What is quality work?"
- ❑ Record responses on a class experience chart.
  A quality _____ looks/sounds like:
- ❑ Continue to chart responses over several days/weeks to "see" the differences and gain a grounded sense of the qualities, characteristics, and development of the criteria.
- ❑ Use charted responses to Sort and Predict the BIG ideas (significant aspects of the task, essential questions, skills or behaviours being assessed). Repeat this process throughout the theme or unit over four to six weeks to enhance and deepen reflective thinking and raise expectations for quality work.
- ❑ Post a checklist or T-chart such as the following:

Criteria for Quality Work	Met (M)	Not Yet Met (NY)
•		
•		
•		
•		

- ❑ Have students use the checklist or T-chart for self-assessment and peer assessment. Use the same criteria for monitoring observations and summative assessments.
- ❑ Revise criteria constantly as learning becomes more sophisticated, *always raising the bar.*

Adapted, by permission, from Kathleen Gregory, Caren Cameron, and Anne Davies, *Setting and Using Criteria: For Use in Middle and Secondary School Classrooms* (Merville, BC: Connections Publishing, 1997), 7-14.

My Learning Goal Log

At the last student-parent-teacher conference we agreed upon the following goal(s) for (student name): _____

Goal(s)
1.
2.
3.

In order for the goal-setting process to be successful, continuous reinforcement is necessary. Please help us make the home-school connection by listing the activities done with/by your child that reinforce the goal(s). Please date and sign the entries.

School Log of Goal Activities	Home Log of Goal Activities

Assessment Plan: Year-at-a-Glance

Month	Methods and Tools						
	Observation			Performance / Product			
	Daily Observation	Focused Observation	Conference	Portfolio	Anticipation Guide	Running Record / Miscue Analysis	Other
September							
October							
November							
December							
January							
February							
March							
April							
May							
June							

Focused Observation Form

Learning Experience / Targeted Learning Outcomes	Criteria	Met (M)	Not Yet Met (NY)
	•		
	•		
	•		
	•		

Observation Date(s)/ Assessments / Student Names					

Focused Observation Form (Example)

Learning Experience / Targeted Learning Outcomes	**Criteria**	**Met (M)**	**Not Yet Met (NY)**
Reading Comprehension—Before-During-After Reading (B-D-A): GLO 2: 2.1.2; 2.1.4; 2.2.2	• Make predictions and inferences.		
	• Reread to make sense.		
	• Make connections to self and other texts.		
	•		

Observation Date(s)/ Assessments / **Student Names**	Sept. 18/03 Independent silent reading	Sept. 19/03 Shared reading: (B-D-A) Text: *Did You Hear Wind Sing Your Name?*	Sept. 24/03 Strategic lesson: B-D-A Text: *Water Dance*	Sept. 26/03 Reading conference: Own choice	Sept. 29/03 Strategic lesson: Repeated readings—To read smoothly from beginning to end. Text: *Welcome to the Green House*
Student A	Reading *Harriet the Spy* (ch. 5-6)	**B-** "The colours make me think it will be about seasons."	**B-** **"**I wonder if there will be changes. Each illustration shows a change in the weather."	Text: *Harriet the Spy* "Can I read the last chapter because I want to read another book by this author?"	
Student B		**A-** "I heard the wind when I was camping."		Text: *I Have a Question, Grandma* "This was an easy read because I visit my Grandma and I know all the words."	Partnered with "D"
Student C	Book Bag: • two *National Geographic: Reading Expeditions* • two comic books Flipping pages; talking to classmate.	No response	**B-** "It looks like a lake and some water." **D-** "It is about water." **A-** "It's water."	*Civilizations Past to Present: Greece* Talks about the illustrations—"I like the war stories."	Partnered with "Teacher" — "I think this will be about a jungle. It is about life in the jungle" Text too difficult, so did read aloud.
Student D	Read *What Is a Scientist?* and *For the Love of Our Earth.*	**D-** "Now I think the author will use patterns like colours and questions."	**B-** **"**I see the word dance. I think it will feel like water moving." **A-** **"**I like the author's pattern *I am…* This reminds me of *Did You Hear Wind Sing Your Name?"*	Text: *Earthquack!* "This is a challenge read." crumbling—"cr-crums," "crums," rereads sentence, "Is it crumbling?"	Partnered with "B"

Student Literature Cited

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Daily Observation Form

Anecdotal Record(s) for _____

Our / My Learning Plan

Name(s) _____ **Date** _____

Topic/Theme _____

Question(s): What we / I want to learn.

- ☐ _____
- ☐ _____
- ☐ _____

Sources: What we / I will use to learn more about _____

☐ Books	☐ Video	☐ Other
☐ People	☐ Field Trip	☐ _____
☐ Internet	☐ Artifacts	☐ _____

Gather and Record Information: How we / I will keep track of information.

☐ Slim Jims	☐ Web	☐ Other
☐ Jot Notes	☐ Sketch	☐ _____
☐ Self-Stick Notes	☐ Photograph	☐ _____

Present New Learning(s): What SMARTS/INTELLIGENCES we / I plan to use to share our / my learning.

☐ Language	☐ Mathematics	☐ Other
☐ Picture	☐ Body	☐ _____
☐ Naturalist	☐ People	☐ _____
☐ Music	☐ Self	☐ _____

Timeline:

We / I will begin the inquiry/research on _____

We / I will conference with

- ☐ _____ on _____
- ☐ _____ on _____
- ☐ _____ on _____

We / I will present our / my learning on _____

Evidence of Learning

Name _____ **Date** _____

Key word(s) or concept(s) from unit, theme, or inquiry.

Explain or define _____

Draw or represent to show what you know about _____

List five facts about _____

Write two new questions from your inquiry.

What struck you about your learning during this theme/inquiry?

Adapted from Concept Overview, *Success for All Learners* 6.112. Used by permission of Lynda Matchullis and Bette Mueller, Nellie McClung Collegiate, Prairie Spirit School Division.

The Four-Column Planner

Integrated Theme/Topic _____ **Duration** _____

Goals	
Performance(s)/ Demonstration(s)/Product(s)	
Classroom Processes	

Curricular Connections	Curricular Outcomes	Instruction: Learning, Teaching, and Assessment Strategies*				Learning Resources/ Sources
☐ English Language Arts ☐ Mathematics ☐ Science ☐ Social Studies ☐ Physical Education/ Health Education ☐ Information and Communication Technologies ☐ The Arts	**Summative Assessment** • Criteria • Task: performance/ demonstration/product • Reflection	**Inquiry Process**				**Primary Sources** ☐ Field Trip ☐ Expert ☐ Artifacts ☐ ☐ **Secondary Sources (Text Set)** ☐ Multimedia ☐ Print ☐ Web ☐ ☐
		Activating	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**	
		• Choosing a theme or topic.				
		• Identifying and recording prior knowledge.				
		• Asking initial questions.				
		• Exploring and selecting primary and secondary sources.				
		• Planning for inquiry.				
		Acquiring				
		• Gathering, processing, and recording information.				
		• Focusing the inquiry.				
		Applying				
		• Planning to express learning.				
		• Creating performance(s)/ demonstration(s)/product(s).				
		• Celebrating and reflecting.				
		Optional				
		• Culminating Event				

* See Appendix B: Planning Model (The Third Column) for possible learning contexts that may take place during inquiry.

Student-Parent-Teacher Conference Record

Student _____ **Term** _____

School _____

Strength upon Which to Build	Areas to Develop

Action Plan		
The student's learning goals for Term ____ are:		
The **student** will:	The **teacher** will:	The **parent(s)** will:

_____

Signature Signature Signature

Record-Keeping Form
(For Grade 6 to Senior 4 Assessments)

Student _____ **Term** _____

Subject/Unit Topic _____

Curricular Connections _____

Learning Outcomes, Strands, Clusters, or Competencies	**Assessments**			
	Formative			**Summative**
				Performance Task(s)
				Comments

Criteria	**Met (M)**	**Not Yet Met (NY)**	**Developing**	**Below**	**At**	**Above**
•						
•						
•						
•						

Final Mark	

Record-Keeping Form (Example)
(For Grade 6 to Senior 4 Assessments)

Student Student A **Term** 3

Subject/Unit Topic English Language Arts: Integrated Theme: Well-Being

Curricular Connections Physical Education/Health Education (S.2.7.A.3b; S.4.7.A.1)
Mathematics (PR I.3.7; SP I.1.7)

Learning Outcomes, Strands, Clusters, or Competencies	Assessments			
	Formative			Summative
	Observations	Learning Log	Anticipation Guide 02/04 19/06	Performance Task(s)
GLO 1: 1.1.1; 1.1.2	04/04 In cooperative group: "How much will it cost me to join the cycling team?"; "What is the history of this sport?"	14/04 "My goal is to make next year's senior cycling team." 26/05 "My endurance is improving—8 km last night!"	✓ ✓ ✓ ✓	15/04 "To show what I have learned during this theme I will design an inquiry plan to improve my health and well-being. I will implement my plan and assess it by June 26." My plan will include: • Personal goals (PE/HE: endurance; ELA: reflection) • Inquiry questions • Research • Organizing information • Sharing information • Assessment: self, peer, teacher, parent
GLO 2	30/04 Reading a *Sports Illustrated* magazine at silent reading.			
GLO 3: 3.3.1; 3.3.4	04/04 Constructed a pros and cons chart re: joining the cycling team.	15/06 "My graph is clearly the evidence that I need to be on next year's team."		
GLO 4	12/05 Created and shared a timeline re: the Tour de France in cooperative group.			**Comments** 26/06 "Student A" has used her enthusiasm for cycling to improve not only her personal well-being but also her skills in self-assessment and reflection. Evidence of this has been added to her portfolio—she replaced last term's reflection sample with an entry made on June 16th.
GLO 5: 5.2.4	07/04 Joined cycling team (treasurer). "I decided to accept treasurer—maybe it will make a difference to my math, too."		✓ ✓ ✓ ✓	
GLO 5: 5.2.4 (continued)		16/06 "Being a team member has been very positive. I have been encouraged by the members to improve my cycling skills. For example…"		**Next Step(s)** Set a reading goal and a goal of own choice for school start-up in September.

Criteria	Met (M)	Not Yet Met (NY)
• Monitors health goal(s) using graphing and calculations. • Formulates extending questions for inquiry. • Creates and uses criteria for assessing personal health goals.		

Developing	Below	At	Above

Final Mark

Record-Keeping Form (Example)
(For Grade 6 to Senior 4 Assessments)

Student Student A **Term** 3

Subject/Unit Topic English Language Arts: Integrated Theme: Well-Being

Curricular Connections Questioning; graphing; calculations; action planning; reflection

Learning Outcomes, Strands, Clusters, or Competencies	**Assessments**			
	Formative			**Summative**
	Observations	Learning Log	Anticipation Guide 02/04 19/06	**Performance Task(s)**
Math: PR I.3.7 SP I.1.7	09/04 Graphing expenses. 18/04 Accurate calculations of costs. "This surplus can be next year's registration fee."	04/04 "How much will it cost me to join the cycling team?" "How many hours will I have to work to buy a new bike?"		15/04 "To show what I have learned during this theme, I will design an inquiry plan to improve my health and well-being. I will implement my plan and assess it by June 26." My plan will include: • Personal goals (PE/HE: endurance; ELA: reflection) • Inquiry questions • Research • Organizing information • Sharing information • Assessment—self, peer, teacher, parent
PE/HE: S.2.7.A.3b S.4.7.A.1	07/04 Joined cycling team (treasurer). "I decided to accept treasurer—maybe it will make a difference to my math, too."	14/04 "My goal is to make next year's senior cycling team. I wonder…?" 26/05 "My endurance is improving—8 km last night!" 15/06 "My graph is clearly the evidence that I need to be on next year's team."	✓ ✓ ✓ ✓	
ELA: GLO 1: 1.1.2 GLO 3: 3.3.1; 3.3.4 GLO 5: 5.2.4	04/04 In cooperative group: "What is the history of this sport? How have bikes evolved over the years?" 06/04 Constructed a pros and cons chart re: joining the cycling team.	16/06 "Being a team member has been very positive. I have been encouraged by the members to improve my cycling skills. For example…"	✓ ✓ ✓ ✓	**Comments** 26/06 "Student A" has used her enthusiasm for cycling not only to improve her personal well-being but also to increase her understanding of math skills in graphing and "showing" calculations. Evidence of this has been added to her portfolio—she replaced last term's math sample with the team's financial statement.
ELA (continued)	12/05 Created and shared a timeline re: the Tour de France in cooperative group.			**Next Step(s):** Think about sustaining your health and math development when setting goals in September.

Criteria	**Met (M)**	**Not Yet Met (NY)**	**Developing**	**Below**	**At**	**Above**
• Monitors health goal(s) using graphing and calculations.						
• Formulates extending questions for inquiry.						
• Creates and uses criteria for assessing personal health goals.						

Final Mark

Parent Brochure

What is a multilevel classroom?

In multilevel classrooms in Manitoba, students across two or more grades are with the same teacher for two or more years. These classrooms become stable learning communities over several years, engaging students, parents, and educators in quality learning.

What is a Learning Community?

A learning community is a trusting relationship that develops over time among students, teachers, administrators, and parents as they become engaged in learning and teaching in the multilevel classroom.

How can I help?

Multilevel classrooms depend on parents as partners. You may

- ❑ volunteer in the classroom regularly
- ❑ visit occasionally to share your expertise on a topic
- ❑ help at home by collecting or preparing materials
- ❑ ask the teacher how you can help

Where can I get more information about multilevel classrooms?

You may

- ❑ ask your school principal or teacher
- ❑ visit a multilevel classroom
- ❑ visit the following website: <http://www.edu.gov.mb.ca/ks4/cur/multilevel/index.html>

Parents As Partners in the Multilevel Learning Community

Within a relationship of trust, parents share in a commitment to the independent learner's interpersonal, emotional, and academic development.

Frequently Asked Questions about Multilevel Classrooms

- ***How long will my son be in the multilevel classroom?***

  In many communities in Manitoba multilevel classrooms are common, and span from two to nine grades in the same classroom. Some multilevel classes are formed of necessity. Other communities establish multilevel classrooms because of the advantages they offer learners, teachers, and parents. Research says that students should be in a multilevel classroom for at least two years to take advantage of the benefits.

- ***How can my daughter learn what she needs to when there are so many other grades in her classroom?***

  Students in multilevel classrooms are assessed according to provincial learning outcomes. This means that they are guided to set learning goals that meet their learning needs, as well as curricular outcomes. Teachers guide students along their learning journey as they work in groups and individually to study a broad topic that addresses many subjects. Students work at their own level on different projects about the same topic. They become *independent together* as they grow in confidence, gain a deeper understanding from a wide age range of learners, and develop skills and strategies. Grades become benchmarks for final assessments at the end of a unit, term, or school year.

- ***How will learning in this classroom be challenging for my daughter when she is in her third year?***

  Teachers in multilevel classrooms design a range of learning experiences so that students at every developmental level are challenged. Because different themes rotate over the years, there is little or no repetition of content. Experienced students generally are independent learners and ready for more complex tasks. Furthermore, in their last year(s) in multilevel programming, students gain valuable experience in exercising leadership and acting as mentors.

- ***My son is working with students who are younger than he is. How does this affect his learning?***

  Older students become role models for younger classmates in multilevel classrooms. This may provide opportunities to practise learning or to present a project with an appreciative younger audience. These opportunities are valuable and enriching learning experiences as older students grow in knowledge and confidence, and become "teachers," too.

- ***What if my son has a conflict with the teacher or a peer and has to stay in his class for three years?***

  The multilevel classroom may offer individuals time to learn to understand each other and work out any difficulties that may occur. Within a learning community, conflicts are often resolved as they are in everyday living because of the respect and values that develop over time. In some cases, both parties may need to agree on a plan to accept and respect differences.

- ***In a multilevel class my son will have fewer friends his own age. How will this affect him?***

  In the multilevel classroom, students establish valuable friendships with others of the same age as well as with younger and students. The fluid student makeup of a multilevel classroom is sometimes an advantage. Rather than being limited to the same peer group for several years, students may gradually be introduced to new classmates.

- ***After my daughter has had the same teacher in the multilevel classroom for several years, how will moving to a new school affect her?***

  Research shows that students in multilevel classrooms tend to be more socially adept and more positive about school. These traits can equip students in dealing with the challenge of moving to a new classroom.

- ***What will happen if we transfer to a new school during the time my daughter is in the multilevel classroom?***

  The learning of all Manitoba students is based on the same learning outcomes, regardless of whether they are in a multilevel or single-grade classroom. So students may explore different topics from one classroom to another, but the learning outcomes are the same for everyone. Students who move from multilevel classrooms to a new school usually take with them portfolios, learning logs, and goal sheets, which provide powerful evidence of what they know and can do.

Appendices

APPENDIX A: ASSESSMENT AND EVALUATION IN THE MULTILEVEL CLASSROOM

Formative and summative classroom assessments may be described in the following ways: **assessment as learning**, **assessment for learning**, and **assessment of learning**. Each makes a relevant contribution to the quality of learning and teaching in the multilevel learning community.

Assessment and Evaluation			
Classroom Assessment	**Purpose**	**Formative Methods/Tools**	**Summative Methods/Tools**
Assessment as learning is the active engagement of the learner in the learning-teaching process. Learning and assessment are seamless as the learner reflects on the continuous process of reflecting, adjusting, and planning for the next steps. Students and teachers are learners and share the responsibility of learning and teaching in the classroom.	To improve learning and teaching and to facilitate higher-order thinking skills and independent learning. *Student:* To set, monitor, and revise learning goals as an independent learner. *Teacher:* To facilitate and enhance the needs of the independent learner. *Parent:* To provide support.	*Methods:* Observation, goal setting, reflection, construction of assessment criteria, self-assessment, peer assessment, conferences… *Tools:* Portfolios, journals or learning logs, continua, observation records…	*Methods:* Student-led conferences, reflection, celebrations… *Tools:* Portfolios, continua…
Assessment for learning involves learners (teachers and students) in ongoing dialogue, descriptive feedback, and reflection throughout instruction.	To adjust instruction and improve learning through descriptive feedback. *Student:* To set learning goals and plan next steps. *Teacher:* To facilitate learning and inform instruction. *Parent:* To provide support.	*Methods:* Observation, goal setting, reflection, construction of assessment criteria, self-assessment, peer assessment, conferences… *Tools:* Portfolios, journals or learning logs, continua, observation records…	*Methods:* Student-led conferences, reflection, celebrations… *Tools:* Portfolios, continua, interim reports, Grade 3 Assessment Report…
Assessment of learning is observing performance tasks or summative assessments to determine the quality of the learning that has taken place at the end of a unit or theme, term, semester, or school year. Specific learning outcomes and standards are the reference points, and grade levels may be the benchmarks for reporting.	To • culminate or celebrate a theme or unit of study • report explicit information about learning • evaluate an end-of-unit study or course • assess or evaluate a teaching strategy, methodology, or program *Student:* To share learning with the teacher, peers, and/or parent(s). *Teacher:* To share learning with parent(s); to assess a teaching strategy, methodology, or program. *Student, Teacher, and Parent(s):* To plan for future learning and teaching.	*Methods:* Observation, conferences, performance tasks, products, responses, quizzes… *Tools:* Student-generated criteria, portfolios, journals or learning logs, continua, checklists…	*Methods:* Student-led conferences, performance tasks, products, responses, celebrations (performance, Gallery Walk, book launch, math olympics)… *Tools:* Portfolios, learner profiles, continua, report cards, action plans, criteria or rubrics developed from student-generated criteria, tests… For reporting purposes in Manitoba, students from Grade 6 through Senior 4 are assigned marks in percentages at the end of a term or semester. Marks can be determined from rubrics that have developed from student-generated criteria. See Appendix B in *Reporting on Student Progress and Achievement* (Manitoba Education and Training).

APPENDIX B: PLANNING MODEL (THE THIRD COLUMN)

This example of a planning model represents a sampling of possible learning contexts that may take place during inquiry. It reflects the Model of Explicit Instruction (see Chapter 2) and allows for a variety of entry points for both students and teachers.

Planning with the end in mind, teachers may target three to five learning outcomes from selected Foundation for Implementation documents to guide formative assessment. The targeted learning outcomes may shift as the inquiry evolves and as students and the teacher reflect on the learning journey and plan for summative assessment.

Instruction: Learning, Teaching, and Assessment Strategies **Activating:** How will I find out what students already know? / What will I see and hear?			
Inquiry Process			
Inquiry Stage	**Teacher-Led**	**Shared / Negotiated**	**Student-Led (Class, Group, or Individual)**
Activating ❑ Choosing a theme or topic.	Teacher: • chooses topic(s) from content subject for class, group, or individual inquiry • collects resources 🔑 Think about putting topics into a curricular context. For example, the general learning outcomes (GLOs), clusters, and strands suggest BIG ideas from which topics can be derived.	Teacher and students: • negotiate a topic for class, group, or individual inquiry • collect resources 🔑 Think about putting topics into a curricular context. For example, the GLOs, clusters, and strands suggest BIG ideas from which topics can be derived.	Students: • choose a topic to support learning goals • suggest and collect resources Teacher: • supports student needs and goals 🔑 Think about making connections between students' topics and the BIG ideas in curricula.
❑ Identifying and recording prior knowledge.	Teacher: • leads brainstorming, **K-W-**[L], mind map, web… with whole class 🔑 Think about: • assessing prior knowledge to determine instructional needs • setting learning goals (For information on differentiating instruction, see Chapter 4.)	Teacher: • guides brainstorming, **K-W-**[L], mind map, web… with whole class Students: • engage in brainstorming, **K-W-**[L], mind map, web… in groups or individually 🔑 Think about: • involving students in assessing prior knowledge to determine learning goals and instructional needs (See Chapter 4.)	Students: • choose a strategy such as **K-W-**[L], mind map, web… Teacher and students: • reflect on prior knowledge to identify learning needs and plan for inquiry 🔑 Think about: • students' reflections on their prior knowledge and learning goals to determine instructional needs (See Chapter 4.)

(continued)

Instruction: Learning, Teaching, and Assessment Strategies (continued)

Activating: How will I find out what students already know? / What will I see and hear?

Inquiry Process

Inquiry Stage	Teacher-Led	Shared / Negotiated	Student-Led (Class, Group, or Individual)
Activating *(continued)* ❑ Asking initial questions.	Teacher: • leads questioning for the inquiry 🔑 Think about assessing prior knowledge, curiosity, and questioning to plan for instruction and resources.	Teacher and students: • generate questions 🔑 Think about engaging students in assessing prior knowledge, curiosity, and questioning to plan for instruction and resources.	Students: • generate own questions 🔑 Think about monitoring students' reflections on prior knowledge, curiosity, and questioning to facilitate next steps and resources.
❑ Exploring and selecting primary and secondary sources.	Teacher: • assesses students' knowledge base • plans field trip • invites "experts" • provides a text set 🔑 Think about: • strategic teaching • involving the community • involving students as "experts" • collecting a variety of texts, such as picture books, magazines, journals, videos, software…	Teacher and students: • reflect on what students know • reflect on sources they will need • plan field trip • invite "experts" • build a text set 🔑 Think about: • strategic teaching • involving the community • involving students as "experts" • collecting a variety of texts, such as picture books, magazines, journals, videos, software…	Students: • reflect on what they know to determine sources they will need Teacher and students: • plan field trip • invite "experts" • collaborate to plan for and gather sources 🔑 Think about: • strategic teaching • involving the community • involving students as "experts" • collecting a variety of texts, such as picture books, magazines, journals, videos, software…
❑ Planning for inquiry.	Teacher: • models revision of initial questions • models an inquiry plan for the class to follow • introduces criteria building for quality inquiry by asking, "What does quality inquiry look/sound like?" 🔑 Think about: • differentiating for learning styles, skills, reading ability…	Teacher and students: • revise initial questions • chart an inquiry plan • begin to construct criteria with students by asking, "What does quality inquiry look/sound like?" 🔑 Think about: • differentiating for learning styles, skills, reading ability…	Students: • begin the first steps in constructing criteria for "What does quality inquiry look/sound like?" • revise initial questions • create, share, and assess their inquiry plan with peers and/or the teacher 🔑 Think about: • differentiating for learning styles, skills, reading ability…

(continued)

Instruction: Learning, Teaching, and Assessment Strategies (continued)

Acquiring: How will I facilitate student inquiry? / What learning will I see and hear?

Inquiry Process

Inquiry Stage	Teacher-Led	Shared / Negotiated	Student-Led (Class, Group, or Individual)
Acquiring ❑ Gathering, processing, and recording information.	Teacher: • suggests some specific sources to answer students' questions • models and guides students' use of appropriate strategies for processing and recording • models the shift from initial to guiding questions Think about: • guiding students to identify assumed prior knowledge and gaps in information • modelling reflections on learning to focus inquiry plan(s)	Teacher and students: • choose appropriate sources to answer their questions Teacher: • models or guides students' use of appropriate strategies for processing and recording • models or guides students' shift from initial to guiding questions Think about: • guiding students to identify assumed prior knowledge and gaps in information • guiding students' reflections on their learning to focus their inquiry plans	Students: • choose appropriate sources to answer their questions • choose appropriate strategies for processing and recording Teacher: • monitors students' choices • monitors students' shift from initial to guiding questions Think about: • facilitating students' identification of assumed prior knowledge and gaps in information • facilitating students' reflections on their learning to focus their inquiry plans
❑ Focusing the inquiry.	Teacher: • suggests possibilities for a culminating performance, demonstration, or product • suggests/guides an action plan for the class, groups, or individuals to follow • models answering of guiding questions using appropriate sources Think about: • students' learning goals • assessment criteria • differentiating for learning styles, multiple intelligences, skills, interests…	Teacher and students: • brainstorm for possible culminating performances, demonstrations, or products • collaborate to choose or create an action plan • choose sources to answer guiding questions Think about: • guiding students to reflect upon learning goals and assessment criteria • differentiating for learning styles, multiple intelligences, skills, interests…	Students: • propose a possible culminating performance, demonstration, or product • choose or create an action plan • choose sources to answer guiding questions Teacher: • monitors students' choices Think about: • facilitating students' reflections on learning goals and assessment criteria, learning styles, multiple intelligences, skills, interests…

(continued)

Instruction: Learning, Teaching, and Assessment Strategies (continued)

Applying: How will I/they know what they have learned? / What quality of learning will I/we see and hear?

Inquiry Process

Inquiry Stage	Teacher-Led	Shared / Negotiated	Student-Led (Class, Group, or Individual)
Applying ❑ Planning to express learning.	Teacher: • models/guides planning of performance, demonstration, or product for audience • models/guides development of student-generated criteria for a quality performance task 🔑 Think about: • monitoring students' progress: students' learning goals, processes, foci, reflections, use of criteria for assessment… • reflecting on targeted specific learning outcomes (SLOs) for student success	Teacher and students: • plan performance, demonstration, or product for audience • negotiate assessment criteria based on learning goals and a quality performance task 🔑 Think about: • guiding or facilitating students' decisions regarding form, purpose, audience, timeline, presentation… • reflecting on targeted SLOs and students' learning goals for assessment	Students: • plan performance, demonstration, or product for audience and follow action plan(s) • develop assessment criteria based on their learning goals and a quality performance task Teacher: • monitors students' decision making: students' learning goals, processes, foci, reflections, criteria… 🔑 Think about: • facilitating student decision making regarding form, purpose, audience, timeline, presentation… • reflecting on targeted SLOs and students' learning goals for assessment
❑ Creating performance(s)/ demonstration(s)/ product(s).	Students: • apply learning to create a performance, demonstration, or product Teacher and students: • revise criteria for clarity Teacher: • provides supports or scaffolding for success 🔑 Think about: • using a workshop format • providing ongoing feedback and assessment • recording focused observations	Students: • apply learning to create a performance, demonstration, or product Teacher and students: • revise criteria for clarity Teacher: • guides and monitors students' needs: resources, time, instruction, reflection… 🔑 Think about: • using a workshop format • providing ongoing feedback and assessment • recording focused observations	Students: • synthesize learning to create a performance, demonstration, or product • revise criteria for clarity Teacher: • monitors students' needs: resources, time, instruction, reflection… 🔑 Think about: • using a workshop format • providing ongoing feedback and assessment • recording focused observations

(continued)

Instruction: Learning, Teaching, and Assessment Strategies (continued)

Applying: How will I/they know what they have learned? / What quality of learning will I/we see and hear?

Inquiry Process

Inquiry Stage	Teacher-Led	Shared / Negotiated	Student-Led (Class, Group, or Individual)
Applying *(continued)* ❑ Celebrating and reflecting.	Students: • share learning with audience Teacher: • models/guides students' self-assessment and peer assessment, using criteria • assesses and reflects on learning • models/guides setting of new learning goals Think about: • celebrating students' learning: praise, reflection, Gallery Walk… • Grades 6 to 8: using student-generated criteria to develop rubric for summative assessment(s)	Students: • share learning with audience Teacher: • guides students through self-assessment and peer assessment, using criteria • assesses and reflects on learning • models/guides setting of new learning goals Think about: • celebrating students' learning: praise, reflection, Gallery Walk… • Grades 6 to 8: guiding students in developing a rubric from their criteria for summative assessment(s)	Students: • share learning with audience • do self-assessment and peer assessment, using criteria • reflect and think about new learning goals Teacher: • assesses and reflects on learning • facilitates setting of new learning goals Think about: • celebrating students' learning: praise, reflection, Gallery Walk… • Grades 6 to 8: facilitating students' development of a rubric from their criteria for summative assessment(s)

APPENDIX C: SOURCES OF STRATEGIES FOR MULTILEVEL CLASSROOMS

Many learning strategies that lend themselves to whole-class contexts are equally practical for group work during instruction, practice, application, or personal inquiry. Strategies are also valuable assessment tools. The following chart lists some strategies that work well in multilevel classrooms, and identifies where they can be located in the respective Manitoba publications:

- *Kindergarten to Grade 4 English Language Arts: A Foundation for Implementation* ("English Language Arts Strategies That Make a Difference"—abbreviated as K-8 ELA Strategies)
- *Grades 5 to 8 English Language Arts: A Foundation for Implementation* ("English Language Arts Strategies That Make a Difference"—abbreviated as K-8 ELA Strategies)
- *Success for All Learners: A Handbook on Differentiating Instruction: A Resource for Kindergarten to Senior 4 Schools*

Strategy	Document	
	Success for All Learners	K-8 ELA Strategies
Admit and Exit Slips	pp. 6.60–6.61	
Before, During, and After Reading (B-D-A)		p. 146
Brainstorming		p. 12
Collaborative Reading	p. 6.45	p. 132
Community Check		p. 21
Concept Overview	pp. 6.67–6.69	
Co-op Co-op	p. 5.8	
DRTA (Directed Reading-Thinking Activity)	p. 6.48	p. 120
Fact-Based and Issue-Based Article Analysis	p. 6.70	
Gallery Walk	p. 6.80	p. 202
Herringbone/Fishbone		pp. 63; 116
Inquiry Chart		pp. 83–87
I-Search		p. 87
Jigsaw	p. 5.9	p. 22
KWL, KWL Plus, Co-operative KWL	pp. 6.20–6.22; 6.94	p. 89
Learning Log	pp. 6.56–6.57	p. 110
LINK (List-Inquire-Note-Know)	p. 6.27	p. 14

(continued)

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Strategy	Document	
	Success for All Learners	K-8 ELA Strategies
Look It Over	p. 6.40	p. 152
Mind Map	pp. 6.14–6.15; 6.24; 6.49–6.50	
Model of Explicit Instruction	p. 6.4	
Note Making	pp. 6.82–6.84	pp. 114–117
Readers' Theatre		p. 42
Reciprocal Reading	pp. 6.46–6.47	p. 164
Seven-Step Knowledge Chart	pp. 6.96	
Sharing Circle		p. 106
Sort and Predict	pp. 6.33–6.35; 6.100	p. 214
Story Maps		p. 53
Talking Chips		p. 29
Talking Circles/Talking Sticks	pp. 7.5–7.6	p. 29
T-Chart		p. 26
Think-Aloud		pp. 181; 288
Think-Pair-Share		p. 15
Venn Diagram		p. 64
Word Cycle	pp. 6.31–6.32	p. 216
Word Splash	pp. 6.28–6.29	
Y-Charts		p. 28

Glossary

GLOSSARY

Assessment—the systematic process of gathering information about what a student knows, is able to do, and is learning to do. Student assessment is integrated with learning and teaching, thus engaging students, parents, teachers, and administrators (the learning community) in insightful observation, descriptive feedback, reflection, goal setting, adjusting instruction, and celebrating learning.

Assessment literacy—a common understanding among partners in the learning community regarding current research-based classroom assessment and evaluation.

Best practice—learning and teaching that is theoretically grounded in the research base of current curricula (social constructivism).

Continuum of learning—the representation of learners in a multilevel classroom along a Kindergarten to Grade 8 continuum of learning (or part thereof) that evolves naturally as a result of formative assessment. When teachers reflect on their continuum of learning, they have a guide for differentiating instruction in the multilevel classroom. "Grades" may become benchmarks along the continuum of learning, which then facilitates reporting of summative assessments to parents.

Cooperative learning groups—heterogeneous groups of approximately four members that are formed for an extended period of time to develop a "micro" community of learners in the multilevel classroom community. This grouping allows for a wide range of ages and abilities to work together. (Also see *flexible groups*.)

Criteria—clear descriptors of what a quality process, performance, demonstration, or product looks and/or sounds like. Student-generated criteria are constantly evolving as students make meaning and gain a deeper understanding of concepts.

Descriptive feedback—non-evaluative information given to learners to show how they are progressing in relation to criteria and/or to their learning goals. Descriptive feedback is the main outcome of formative assessment and enables reflective thinking for students and teachers.

Developmental continua—assessment tools that describe observable behaviours (knowledge, skills and strategies, and attitudes) during learning processes and/or authentic performances. Continua profile student growth and achievement over time. They can be used by students, teachers, and parents to see what learning looks like, to determine next steps or learning goals, and to report student progress and achievement.

Evaluation—the process of interpreting assessment information, determining to what extent students have attained learning outcomes and standards, and describing the quality of student learning. Evaluation is used primarily for communicating student achievement.

Flexible groups—groups of two to six members that are formed for the purpose of assessment, strategic instruction, practice, or personal inquiry. These groups change frequently, depending upon the needs of the learners. On occasion, individuals may work independently as part of a flexible group. (Also see *cooperative groups*.)

Form—the way in which a text is presented, or formatted, for a particular purpose and audience. Some examples of form are: narrative, diary, non-fiction, cinquain, letter, media broadcast, play, dance, and so on.

Formative assessment—ongoing assessment information (what teachers see and hear) gathered during instruction to determine what students know and can do and to provide descriptive feedback to improve learning and inform teaching. Feedback is generally directly connected to student learning goals and referenced to student-generated criteria.

General learning outcomes—broad statements identifying knowledge, skills and strategies, and attitudes that students are expected to demonstrate with increasing competence and confidence from Kindergarten to Senior 4.

Guiding questions—the questions that students create to focus their inquiry. These questions evolve from the initial questions at the start of the inquiry.

Individual Education Plan (IEP)—a written document developed and implemented by a team, outlining a plan to address the individual learning needs of students. Individual education planning is the process by which educators, support personnel, and parents collaborate to meet the needs of students who require a range of accommodations and supports. (See *Individual Education Planning*, Manitoba Education and Training.)

Initial questions—the first questions that students ask as they begin their inquiry. These questions arise from students' prior knowledge and curiosity.

Learning community—a trusting relationship that develops over time among students, teachers, administrators, and parents as they become engaged in learning and teaching in the multilevel classroom.

Manipulatives—hands-on materials for investigating and demonstrating mathematics and science concepts. Manipulatives include authentic materials, artifacts, and commercial models or products.

Marks—percentages representing student achievement based on summative assessments and/or evaluations. In Manitoba, students from Grade 6 to Senior 4 are assigned percentages at the end of a school semester or year in all subject areas.

Multilevel classrooms—student-centred classrooms in Manitoba in which students learn across two or more grades and are taught by the same teacher for two or more years.

Observation—a purposeful, systematic, and cumulative classroom assessment method that focuses on what the learner knows and can do in a variety of authentic contexts in order to inform instruction, improve learning, and assess or evaluate achievement.

Performance tasks—authentic processes, performances, demonstrations, or products by which students demonstrate or apply the knowledge, skills and strategies, and attitudes that they have acquired as a result of instruction and practice. Assessment of performance tasks is based on criteria that, for summative assessment, may be extended into a rubric to describe the quality of the performance.

Portfolio—a student's purposeful collection of work over time, which serves as the evidence of learning and achievement. Selection is made with regard to student learning goals and/or criteria and involves self-assessment and reflection. Portfolio assessment involves both process and product. Portfolios become powerful student-centred assessment tools to share with the learning community.

Professional judgement—teachers' decisions about learning and teaching based on their classroom experience and sound academic knowledge of developmental learning, curriculum, assessment, and pedagogy.

Rubric—a set of criteria that describes levels of performance (what it should look or sound like). Rubrics should be developed from student-generated criteria and with student involvement. From Grade 6 through Senior 4, rubrics can be used to measure achievement for summative assessments at the end of a theme, unit, semester, term, or school year, and percentages may be calculated by allocating numeric values to each performance level.

Specific learning outcomes—concise descriptions of the knowledge, skills and strategies, and attitudes that students are expected to demonstrate at the end of a grade.

Scaffolding—instructional approaches or strategies that activate prior knowledge of a topic or concept; or a strategy that provides adjustable and temporary assistance or support to the student in his or her achievement of the learning task.

Standards test—an evaluation based on end-of-year learning outcomes and grade-level standards.

Summative assessment—the celebration, summary, evaluation, or judgement at the end of a theme, unit, semester, term, or school year based on performance tasks/products and formative assessment data.

Text set—a variety of different expository and narrative texts (e.g., stories, picture books, poetry, magazines, images, multimedia) across a wide range of reading abilities to augment content textbooks for inquiry purposes and strategic instruction. A text set may include up to 100 texts on the same topic or theme.

Workshop—a timetabled uninterrupted block of time that supports an authentic learning-teaching context for whole-class experiences and instruction, small groups for practice, strategic instruction, independent inquiry or work, and response and reflection.

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