Primary Programs Framework for Teaching and Learning

(Kindergarten to Grade 3)

Guiding Principles

Key Learning Skills

Curriculum Integration

2007

Alberta EDUCATION

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(Kindergarten to Grade 3)

Curriculum Integration: Making Connections

The *Program of Studies: Elementary Schools*

Early childhood educators and researchers know that young children see the world as a connective whole rather than in isolated segments. Although the *Program of Studies: Elementary Schools* describes learning in subject areas that have their own distinctive knowledge and understandings, skills, values and attitudes, these subject areas include outcomes that are common to other subject areas and grade levels.

The *Program of Studies: Elementary Schools* supports planning and instruction that make connections across the subject areas.

> Though organized into separate subject, course or program areas, there are many connections across the curriculum. … Integrating across content areas, and providing ways for students to make connections, enhances student learning.
>
> *Program of Studies: Elementary Schools*, p.1

What Is Curriculum Integration?

Curriculum integration is not a new method of organizing for instruction. Educators first explored the concept of integrating curriculum in the 1890s. Over the years, there have been numerous educational researchers, e.g., Susan Drake, Heidi Hayes Jacobs, James Beane and Gordon Vars, who have described various interpretations of curriculum integration, referring to the curriculum as interwoven, connected, thematic, interdisciplinary, multidisciplinary, correlated, linked and holistic. Many educators, e.g., Robin Fogarty, go beyond a single definition of curriculum integration and view it instead as a continuum.

Curriculum integration can be described as an approach to teaching and learning that is based on both philosophy and practicality. It can generally be defined as a curriculum approach that purposefully draws together knowledge, skills, attitudes and values from within or across subject areas to develop a more powerful understanding of key ideas. Curriculum integration occurs when components of the curriculum are connected and related in meaningful ways by both the students and teachers.

Benefits of Curriculum Integration

Many teachers in the primary grades cite the following benefits of an integrative approach to curriculum and planning.

- **Allowing for flexibility:** Through curriculum integration, teachers can plan for the development of key skills and understandings that transcend individual strands and subjects.
- **Building on prior knowledge and experiences:** Choosing meaningful connections among subject areas helps students build on their diverse prior knowledge and experiences, supports their holistic view of the world and ensures more meaningful learning.
- **Unifying the students' learning:** Curriculum integration enables students to develop a unified view of the curriculum to broaden the context of their learning beyond single subject areas.
- **Reflecting the real world:** When curriculum is organized in a holistic way, it better reflects the real world and the way children learn at home and in the community.
- **Matching the way students think:** Brain research supports the theory that younger students take in many things and process and organize them at one time. Teaching ideas holistically, rather than in fragmented pieces, better reflects how young students' brains process information.

Curriculum integration enables students to:

- identify both the distinctive qualities and related elements of subject areas
- become more involved in their learning because the context is more understandable and meaningful to them
- demonstrate and use their knowledge, skills and attitudes in a variety of learning contexts
- make connections more easily between the content they learn in school and their out-of-school experiences
- focus more clearly on conceptual understanding because content is aligned around key ideas.

Curriculum integration enables primary teachers to:

- identify the connections within and among the content of subject areas
- provide a relevant context for learning, based on the needs of students
- assess students' skills and understandings in a variety of learning contexts
- manage the content of the program of studies more easily because outcomes from different areas or key learning skills are both addressed at the same time and reinforced
- increase students' motivation and participation.

Key Requirements of Successful Curriculum Integration

Curriculum integration is more than a clustering of related learning outcomes. The selection of learning experiences should be based on the extent to which they promote progress or broaden and confirm understanding. There is no one best way to integrate the curriculum; however, the following key requirements should be met for successful integration.

Content Integrity

Having a solid understanding of the various curricula and intentionally linking curriculum outcomes by a central organizing concept, e.g., a topic, theme, issue, project or problem, will ensure the integrity of the content is maintained. The intent of the philosophy, rationale and outcomes of individual subject areas is maintained and linkages between subject areas are made explicit.

Example of Content Integrity
A Grade 2 classroom teacher has created an integrated unit on legends as a genre study in language arts. Students will respond to texts by appreciating their artistry and by understanding the forms, elements and techniques of legends. Students will also produce an original text through the creation of a fictional Inuit legend. As part of the Grade 2 social studies program, students will investigate the physical geography of northern Canada and how it shapes the identity of the Inuit. Students will also explore the cultural and linguistic characteristics of the Inuit while examining one of Canada's dynamic communities.

The students will create an Inuit legend and be assessed on both English language and social studies outcomes.

Authenticity

The connections made as part of the integrative process must make sense and be significant. Topics need to be challenging so profound generalizations and a deeper understanding of fundamental ideas can be developed through different content and contexts.

Example of Authentic Integration
The general concept of Change is present in numerous subject areas; e.g., studying animal life cycles and seasons in science and examining personal and community changes in a historical context in social studies. Change is also a concept that is part of the real-life experiences of all students.

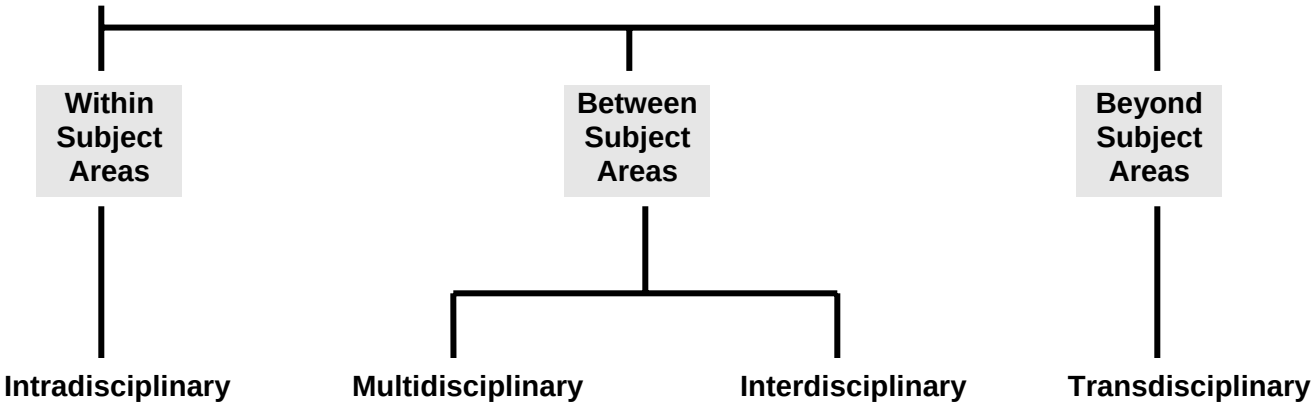
Building on students' personal understanding of change and using relevant outcomes from the program of studies enables students to understand the generalizations that change is a normal and inevitable phenomenon and occurs in many contexts.

Planning for an Integrated Curriculum

There is no best way to plan for instruction and it is up to teachers to use their professional knowledge and skills to best meet the needs of their students. Teachers should use integration as a pedagogical tool and their professional judgement to determine when it is best to integrate the curriculum.

> Within any group of students there is a range of individual differences. … Therefore, school organization and teacher methodology are not mandated at the provincial level and may vary from class to class and school to school in order to meet student needs.
>
> Program of Studies: Elementary Schools, p.1

Curriculum Integration Continuum[1]



Within Subject Areas

Intradisciplinary

- Knowledge and skills are connected within one subject area.
- Knowledge and skills are learned through individual subject areas.
- The distinctive nature of learning is recognized in each subject area.
- The students' personal meaning and the social relevance of learning are enhanced by the integration of cognitive, affective and social domains with subject-area knowledge and skills.

Example: Writing is linked to reading within English language arts.

1. Source: Manitoba Education and Training. *Curricular Connections: Elements of Integration in the Classroom: A Resource for Kindergarten to Senior 4 Schools*. Winnipeg, MB: Manitoba Education and Training, 1997. 5–9, 12. Adapted by permission. All rights reserved.

Between Subject Areas

Multidisciplinary

- Topics, themes, issues or big ideas bring together outcomes from more than one subject area.
- The subject-area outcomes remain distinct.
- Knowledge and skills are learned through individual subject areas but at times connect to cross-curricular topics, themes, issues or big ideas.
- The distinctive nature of learning is recognized in each subject area.
- The students' personal meaning and the social relevance of learning are enhanced by the integration of cognitive, affective and social domains with subject-area knowledge and skills.
- The students are guided to see linkages between subject areas.

Example: Graphing skills learned in mathematics are applied in science.

Interdisciplinary

- Topics, themes, issues or big ideas are used based on interdependent knowledge and skills from more than one subject area.
- Common learning, embedded in subject areas, is identified.
- Interdependent or common knowledge and skills from subject areas are integrated in cross-curricular topics, themes, issues or big ideas.
- The students' personal meaning and the social relevance of learning are enhanced by the integration of cognitive, affective and social domains with subject-area knowledge and skills.
- The students are guided to develop and apply meaningful and relevant interdisciplinary knowledge and skills across subject areas and in real life.

Example: Exploring the theme of communities in social studies is connected to examining communities of small, crawling and flying animals in science.

Beyond Subject Areas

Transdisciplinary

- Focuses on student-initiated questions and projects.
- Emphasizes world contexts.
- Knowledge and skills are interconnected and interdependent; there is less emphasis on the subject area.
- Knowledge and skills from different subject areas are the focus of student-initiated projects.
- The real-life context is emphasized.
- Subject-area knowledge and skills are acquired informally.
- The students initiate and direct purposeful projects that are centred and connected to real-life experiences.
- The students' initiative, imagination and creativity are enhanced.

Examples:

- **A news story on bridges turns into a class project on examining structures and constructing bridges.**
- **Patterns are explored in a variety of contexts.**
- **A nutrition poster leads to an exploration of foods and exercise for humans and animals.**

There are many ways to make connections across the curriculum or within one subject area. When looking for linkages across the curriculum or between any grade level, as in the case of a combined-grade class, some topics can emerge as major thematic threads that tie knowledge, skills, attitudes or values together; e.g., the concepts of Change, Caring for the Earth or Stories. At other times, the topic can come from students' interests or current events; e.g., the Olympics. Outcomes that support this theme or topic are then selected from the program of studies. A topic can also act as a magnet to pull together elements of the program of studies.

Curriculum Integration: Reflective Planning Questions

Outcomes

Which curricular outcomes are best:

- **addressed through integration?**

_____

_____

_____

_____

- **met in an independent context?**

_____

_____

_____

_____

Themes/Concepts

What themes or concepts can be used to integrate the chosen curriculum outcomes?

_____

_____

_____

_____

	Yes	Not Yet
Do these themes or concepts align with the Primary Programs guiding principles of how children learn?	☐	☐

Instructional Planning

Does instructional planning:

	Yes	Not Yet
• help students understand and appreciate the nature and relevance of what they are studying?	☐	☐
• increase students' understanding of the topic?	☐	☐

Student Processes and Products

What key processes will students use to develop and personalize their learning?

What kinds of products will students create?

Do these processes and products take into account the variety of student abilities in my classroom:

	Yes	Not Yet
• by offering modified options and opportunities?	☐	☐
• by offering options and opportunities to extend their learning?	☐	☐

Assessment

How will curriculum integration affect my assessment **of** students' learning and understanding?

How will curriculum integration affect my assessment **for** students' learning and understanding?