Overview of the Integrated Curriculum Model

The Integrated Curriculum Model (ICM), a theoretical model of curriculum design for gifted learners (Figure 1), emphasizes the inclusion of advanced processes, advanced content, and connections to overarching concepts through themes and issues as the foundation for curriculum development.

The greatest student learning occurs when emphases are given to each of these dimensions within a given curriculum unit (VanTassel-Baska, 2001). The ICM was derived based on the characteristics of gifted students and how curriculum may be designed to best match the characteristics of these learners. For example, since gifted students are precocious learners, advanced content within a given subject area will provide opportunities for students to develop expertise in the content domains.

The intensity of gifted students can be addressed through the provision of advanced processes and organizers that help them reason through situations and think critically about given advanced topics and real world issues. Moreover, since many gifted students thrive on complexity, the provision of interdisciplinary connections and the linkage of content to issues and themes is a necessary component of curriculum for these students.
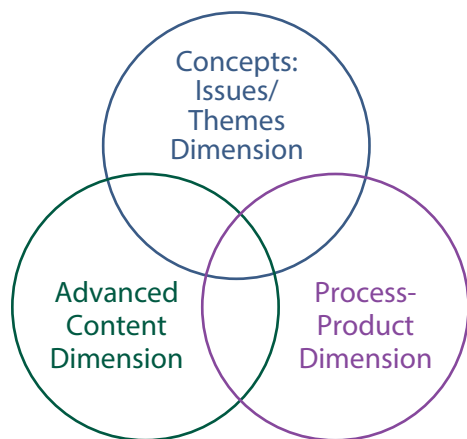

Figure 1: Integrated Curriculum Model

The three components of the ICM (advanced content, issues/themes connected to overarching concepts, and advanced processes/products) comprise a framework for curriculum design and differentiation.

Overarching concepts provide students with a framework to guide learning and bring order to the complex and often ambiguous information they gather (National Research Council, 2005). Sample overarching concepts include change, systems, and cause and effect. Specific generalizations that are associated with each concept help to provide additional understanding.

Advanced Content Dimension

A curriculum for the gifted needs to be designed with an advanced content focus that incorporates subject matter that is two to three grade levels above what is normally expected of a typical learner. Advanced content is derived based on standards within a given discipline. These educational standards serve as the basis for content inclusion.

In addition to advanced content standards, students need to understand how the advanced content is used to develop expertise within a given domain by using tools of the discipline and developing skills used by experts.

Process-Product Dimension

Gifted learners show great intensity and the process-product dimension of the ICM supports students' concentration and passion by providing students with higher-level thinking challenges and reasoning skills. Advanced processes and products that would be appropriate for any content-based curriculum for gifted learners include problem-based learning, issue-based research, real-world connections, oral and written presentations to real-world audiences, and situation or issue reasoning and analysis.

Issues/Themes Dimension: Connecting to Overarching Concepts

Students who are gifted thrive on complex and ambiguous situations. These students need a curriculum that helps them integrate isolated pieces of information in a cohesive way. The issues/themes dimension provides a framework for students to connect observations and facts to an overarching concept. These concepts span multiple disciplines and allows students to gain an in-depth understanding of their world (American Association for the Advancement of Science, 1993).

William & Mary Teaching Models

Within the William & Mary curriculum units, specific teaching models are used to strengthen students' critical thinking skills. Each of the models is used within the context of a particular unit of study. Each of the models is flexible and may be adapted for use in many classroom lessons.

- Literature Web
- Concept Development Model
- Hamburger Model for Persuasive Writing
- Vocabulary Web
- Reasoning Web
- Analyzing Primary Sources
- Research Model

Examples of how the ICM is used within a curriculum framework and how the teaching models relate are outlined in Table 1. Within the advanced content dimension, accelerated grade level standards and advanced organizers are vehicles to provide gifted students with advanced content in specific subject domains. Advanced instructional processes should also be used to teach students how to think, write, solve problems, and investigate major issues of importance within a given curriculum. Advanced products provide an opportunity for students to make real-world connections and practice the skills of the discipline.

Reasoning Web
based on Paul, 1992
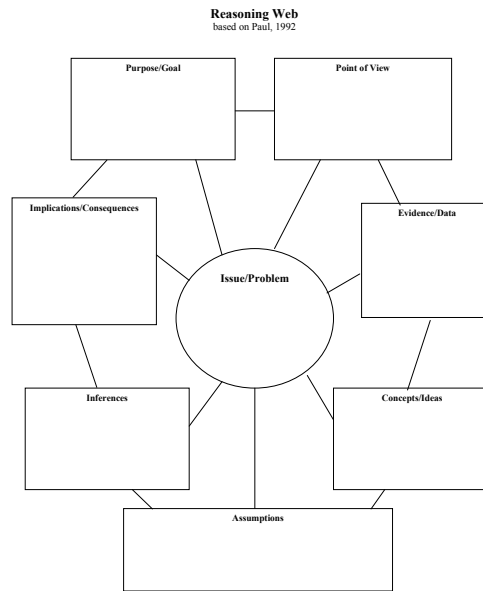
The Reasoning Web, based on Paul's Elements of Reasoning (1992), is a teaching model used to strengthen students' critical thinking skills.

Finally, overarching concepts are used to provide inter- and intra- disciplinary connections in order to help students make generalizations about the world around them. Specific examples of each of the models listed in Table 1 are further explained in each content section.

Advanced Content	Advanced Process/Products	Issues/Themes: Connecting to Overarching Concepts
• Links to content standards at or above the students' grade level • Incorporates models for how students develop expertise within a given discipline (e.g., literature web, vocabulary web, concept mapping, primary document analysis)	Advanced thinking and process models include: • Reasoning Web • Reasoning Through a Situation • Issues-Based Research • Problem-Based Learning • Persuasive Writing	Issues and themes are connected to overarching concepts such as: • Systems • Change • Cause and Effect

Table 1: Examples of How the ICM is Used Within A Curriculum Framework