Advanced/GT Toolkit Differentiation Strategies

Arts integration
Students explore relationships among the fine arts and other content areas such as science, social studies, mathematics, and reading/language arts. Methodology from two or more disciplines is used to examine a central theme, issue, or problem. Arts integration develops complex thinking skills through a creative, inquiry-based process, and activities address a variety of learning styles to enhance student confidence and motivation.

Authentic product
In response to a real world challenge, students create tangible products that require them to apply, analyze, synthesize, or evaluate essential concepts and skills. Students identify with a real life role or personal experience that challenges them to meet a need or solve a problem. The products simulate those of adults or professionals in the field.

Brainstorming
Brainstorming is a creative thinking technique used to generate a large number of ideas in the process of solving a problem. Popularized by advertising executive Alex Osborne, there are four basic rules to brainstorming that stimulate *quantity*, and thereby theoretically improve the *quality*, of ideas. The four rules for brainstorming are: (1) Focus on quantity; (2) Accept unusual ideas, (3) Reserve judgment; and (4) "Piggyback" on other ideas to form new combinations.

Choice
Providing choices among the content, activities, or products used to accomplish instructional objectives increases student engagement and motivation.

Concept Development
Concepts are big ideas or themes that cross domains, such as *change* or *relationships*. Before, during, and after reading the text, students generate and apply generalizations about the overarching concept, which provides them with opportunities to make personal connections, see interrelationships, and think creatively and critically.

Critical Approaches to Literature
Critical approaches to literature provide frameworks to help the reader to interpret and evaluate literary text.

- The **Moral-Philosophical Approach** assumes a larger purpose in literature which is to present moral and philosophical issues. Readers ask the essential question, "What do we learn about life from reading this work?" While the text is a work of art, it is not without a message with moral implications. This approach is effective in discussing theme, such as the theme of "man's inhumanity to man" in *Huckleberry Finn*.
- The **Archetypal-Symbolic Approach** assumes that there are universal symbols, images, characters, and motifs that evoke the same response in all people. Readers ask the essential question, "What seems familiar about this story?"

Readers can identify these archetypal patterns, trace their development in the text, and evaluate how the archetypes contribute to the timeless power of the literature. This approach is effective with works that are highly symbolic such as *The Old Man and the Sea* by Ernest Hemingway or *The Hobbit* by J.R.R. Tolkien.

- The **Biographical-Historical Approach** assumes that the text is a reflection of the author's life and times. Readers ask the essential question, "What does the work reveal about the author or history? While the text is not biographical, it is important for the reader to understand the context in which the author lived in order to fully interpret and evaluate the text. This approach is effective with works that recreate an historical or social context, such as Lorraine Hansberry's play *A Raisin in the Sun*, Michael Schaara's novel *The Killer Angels*, Charles Dickens' novel *A Tale of Two Cities*, John Whittier's poem "Barbara Frietchie," or Alfred Tennyson's poem "The Charge of the Light Brigade."

Curriculum compacting

Instruction is streamlined due to the student's prior knowledge or ability to grasp concepts quickly. The process of curriculum compacting involves pre-assessing what the students know, determining what has been mastered, addressing any gaps, and planning enriched or accelerated experiences in lieu of the mastered material.

Debate

A parliamentary debate is a contest between two groups where one is on each side of the debate topic. The debate topic, also known as a proposition, resolution, or motion, takes a position that is *directional*, such as, "High-sugar junk foods should be removed from schools." The **proposition** usually argues that a course of action should be done, while the **opposition** may simply disagree with the motion. The **timekeeper** signals the end and beginning of protected time, normally by slapping the table. There is a **judge** or panel of judges to evaluate the outcome of the debate.

Parliamentary debate has a format that is recognized worldwide. The following rules are based on the *Rules for Competition* of the Middle School Public Debate Program accessible at www.middleschooldebate.com.

Rules of Parliamentary Debate

There are six speeches in a parliamentary debate. The first four **constructive speeches** are used to construct arguments for their side and to respond to arguments made by the other side. In the **rebuttal** phase of the debate, each side summarizes the major arguments for their side and proposes the reasons why their team should win the debate. The following time limits are suggested for beginners:

- First proposition constructive speech: 3 minutes
- First opposition constructive speech: 3 minutes
- Second proposition constructive speech: 3 minutes
- Second opposition constructive speech: 3 minutes

Team preparation of rebuttals: 5 minutes

- Opposition rebuttal: 2 minutes
- Proposition rebuttal: 2 minutes

Total time: 25 minutes

Discussions of Moral Dilemmas
Complex text often presents *moral dilemmas*, problems for which there are at least two equally defensible courses of action based on moral or ethical principles. The discussion of moral dilemmas in literary or informational text challenges students to higher levels of critical thinking as they analyze and evaluate a course of action using a hierarchical framework for moral reasoning developed by Lawrence Kohlberg, (1927-87). Students can use this framework to evaluate solutions presented in the text and to pose new ones.

Essential questions
Essential questions provide an organizing focus for approaching text. They center on major issues, problems, concerns, interests, or themes relevant to students' lives, such as "What does it mean to be a good friend?" Good essential questions are open-ended, spark curiosity, and invite exploration. Essential questions set the stage for further questioning to foster the development of problem solving and critical thinking skills.

Higher level thinking
Benjamin Bloom identified six levels of cognitive demand arranged hierarchically from simple to complex: knowledge, comprehension, application, analysis, synthesis, and evaluation. Bloom's taxonomy was later revised to place synthesis (creation) as the highest level of demand above evaluation (judgment). Instruction for advanced/gifted and talented students should emphasize analysis, evaluation, and synthesis.

- **Analysis**
  Students distinguish, classify, or hypothesize evidence or structure. Questions stems include *analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, infer.*
- **Evaluation**
  Students appraise, critique, or assess based on specific standards and criteria. Question stems include *assess, decide, rank, grade, test, measure, recommend, convince, judge, discriminate, conclude.*
- **Synthesis**
  Students originate, integrate, and combine ideas in ways that are new to them. Students generate ideas, create plans, and produce products. Question stems include *combine, integrate, modify, rearrange, substitute, plan, create, design, invent, compose, formulate, prepare, generalize, recreate.*

Interdisciplinary connections
Interdisciplinary or cross-curricular connections apply curricular objectives to more than one content area. Students use the knowledge and skills learned in one context as a knowledge base in another context. Interdisciplinary connections promote student engagement, higher level thinking, and the transfer of learning.

Learning styles

When teachers plan instruction to address a balance of learning modalities, all students have opportunities to use their preferred styles and to increase proficiency in their less-preferred styles.

Auditory learning style
Students learn by listening and talking. Auditory learners can recall what they have heard, follow oral directions, and use oral language effectively. Auditory activities include discussion and debate, listening, oral memorization techniques, oral reading, phonics, poetry and rhythmic sounds, stories with dialogue, and repeating ideas orally.

Kinesthetic/tactile learning style
Students learn by doing and demonstration. Kinesthetic/tactile learners prefer psychomotor activity and learn from experience, activity, and teaching others what they have learned. Kinesthetic/tactile learning activities include associating emotions with concepts, building models, dance, demonstrations, drama, drawing and designing, experiments, field trips, using manipulatives, memorizing while moving, playing games, role playing, and writing/tracing.

Visual learning style
Students learn by observation and visualization. Visual learners can recall what they have seen, use written notes, and follow written or pictorial instructions. Visual learning activities include demonstrations, charts, diagrams, and maps, color coding, highlighting key ideas, films, flash cards, pictures and graphics, written instructions, and silent reading.

Mock trial
Students take on the roles of judges, witnesses, lawyers and jurors in a simulated trial. Mock trial allows for the critical analysis of problems and issues and promotes skills of questioning, listening, organization, oral presentation, and cooperation. A guide for educators produced by the American Bar Association, *Putting on Mock Trials*, may downloaded at http://www.abanet.org/publiced/mocktrialguide.pdf.

Multiple intelligences
Howard Gardner's theory of multiple intelligences accounts for a broader range of human potential beyond the linguistic and logical-mathematical intelligences measured by IQ tests. To date, he has identified eight abilities that meet his definition of an intelligence.

Verbal-linguistic intelligence (word smart)
the ability to use words and language
Logical-mathematical intelligence (number smart)
the ability to think logically, recognize abstract patterns, and use numbers
Visual-spatial intelligence (picture smart)
the ability to visualize and internalize images, pictures, and spatial dimensions
Bodily-kinesthetic intelligence (body smart)
the ability to control the body in physical motion
Musical-rhythmic intelligence (music smart)

the ability to recognize tonal pattern, sounds, and rhythms
Interpersonal intelligence (people smart)
the capacity for personal communication and relationships
Intrapersonal intelligence (self smart)
 the capacity for self-reflection and self-awareness; metacognition
Naturalist intelligence (nature smart)
the ability to identify and classify natural forms; sensitivity to nature

Socratic seminar
The Socratic seminar engages students in a collaborative dialogue that requires them to think critically, examine multiple meanings of text, explore and evaluate ideas. The seminar begins with an open-ended question that leads students back to the text and in turn generates other questions. The seminar format is effective when students have studied the text closely in advance. The participants sit in a circle as the leader-participant poses the seminar question. Students listen and respond to each other's ideas, citing evidence from the text. In larger classes, an inner and outer circle model can be used, with the outer circle given directed-listening seminar evaluation questions, such as, "What was the most significant issue raised? How many times was the text quoted?"

Technology integration
Students use technology in the regular instructional program as a tool for communication, information gathering, and problem solving. Technology integration enhances students' abilities to access, manage, integrate, evaluate, create, and communicate information.