Content Extension

Content extension is the process of extending the curriculum beyond what is typical or expected in a class or grade level. Content extension includes:
- Exposure beyond the regular curriculum - to new ideas, skills, and concepts not encountered before.
- Extension of the regular curriculum - going more broadly and deeply into the ideas already introduced in that curriculum. Extend learning beyond level through advanced content, materials, and complexity.
- Concept development - using a concept introduced within the regular curriculum and exploring its meaning and implications across the curricular areas.

Some classroom approaches for enhancing content extension include
- Focus on broad-based issues, themes, problems.
- Integrate disciplines (multi-disciplinary studies).
- Engage in self-selected independent study.
- Use new techniques, resources, materials.
- Examine multiple perspectives of events (time, culture, people).
- Challenge existing ideas; produce new ideas.
- Focus on open-ended questions and tasks.
- Create real-world products.
- Evaluate problems for inconsistencies, missing elements.

Suggestions for District Leaders in Gifted Education

- Pre-assess student learning and accommodate the level of instruction for depth, complexity, and novelty, based on the individual student data.
- Develop school board policies and/or district protocol to ensure that content extension is a systemic and comprehensive option.
- Build understanding and on-going support of content extensions among staff:
  - o Associate interrelated concepts.
  - o Evaluate facts and arguments critically.
  - o Create new ideas and originate new lines of thought.
  - o Reason through complex problems.
  - o Consider alternative environmental surroundings.
- Coordinate vertical collaboration and curriculum mapping to facilitate long term planning.
- Provide students with exit options if needs are not addressed.
- Involve parents and students in the decision-making process for the success of the student. Flexibility of programming is important; what works for one child may not work for all.
- Combine content extensions with other provisions and modifications, such as:
  - o Research skills.
  - o Higher order thinking skills.
  - o Metacognitive skills.
  - o Multidisciplinary or thematic connections.
  - o Independent study.
  - o Mentorships.
  - o Enrichment triad model.
  - o Curriculum compacting to support time for extension.

Parent Involvement

- Provide input/perspective to advanced learning plans in collaboration with teachers, support people, and child.
- Seek out and share information about community resources with schools.

• Coordinate, facilitate, or provide transportation for content extension opportunities as needed.
• Collaborate with teacher and student on content extension assignments.
• Monitor student progress and satisfaction.
• Commit to attend parent, teacher, student conference to review academic achievement and social-emotional development.

Special Considerations

Rural/Outlying Towns, Gender: Examine options such as mentorship, alternative assessments, problem-based learning, local higher education resources, local/community issues, and distance learning.

Linguistically and Culturally Diverse Learners: Implement acceleration strategies for ESL students in an area of demonstrated need while English skills are being developed. Focus on individual strengths and needs. Provide hands-on activities and creative problem solving to expand language skills.

Children of Poverty: Consider the importance of age-level peers and cultural biases. Focus on individual strengths and needs. Provide hands-on activities and creative problem solving to expand language skills.

Content Extension Components

Content extension increases student motivation, engagement, challenge and requires depth, complexity, and novelty. It is important to realize that these components interact. For example, depth of learning at some point demands both novelty and complexity -- a student cannot study extinction without recognizing the relationship between areas of biology, natural phenomena and man's influence. Personal interests may also come into play.

Depth encourages students to venture further, deeper, with greater elaboration, through quality of subject matter, rules and ethics, language and patterns. It involves learning from:
• Concrete to abstract;
• Familiar to unfamiliar;
• Know to unknown;
• Literal to synthesized.

Depth						
	Details (Essentials)	**Patterns**	**Trends**	**Unanswered Questions**	**Rules & Ethics**	**Big Ideas**
Questions	What are the gaps in the information?	What else might students need to know to increase their knowledge?	What other information would clarify/ explain this?	How have experts in this and other fields dealt with this information?	What rule(s) characterize the area of study?	What facts and ideas form the foundation of your information?
Research Skills	Collections of readings.	Draw conclusions.	Check for accuracy, authenticity.	Locate and cite related questions.	Look for changes in rule(s).	Gather information on current issues.
Thinking Skills	Describe in detail.	Prove or verify with evidence.	Identify the most important (prioritize and judge).	Categorize, classify substantive from superficial information.	Analyze the impact of policies and rules.	Create a model or analogy to express the big idea(s).

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Complexity helps students make connections and identify relationships and associations between, within, and across subjects and disciplines. It focuses on:
- Varying perspectives;
- Issues, problems, and themes;
- Conceptual learning.

Complexity				
Relate Over Time	**Relate From Different**	**Perspective**	**Relate Between the Disciplines**	**Relate Across the Disciplines**
Questions	What influence might time have on knowledge related to the area of study?	What might be puzzling about this? What might be perplexing, difficult connections or interactions?	What might be the recognizable links between elements of the information?	What attributes might describe the various interactions?
Research Skills	Paraphrase	Use multiple and varied resources.	How would people in various disciplines research the same concepts?	Collect media evidence.
Thinking Skills	Define part/whole relationships.	Combine or form essential parts to create new wholes.	Note ambiguity.	Explain the reasons why.

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Novelty encourages students to create a personal understanding or connection to the subject area, thereby making content more memorable. It provides opportunities to:
- Interpret meaning and give personal insights;
- Use non-traditional study methods;
- Approach content through inquiry, experimentation, invention, and exploration;
- Synthesize information using irony, paradox, and metaphors.

Novelty				
	Exploration	**Inquiry**	**Interpretations**	**Unique Approaches of Study**
Questions	What do people in this field do and think about? What does this information mean? How is the information organized to help people use it better?	To what degree is this familiar, surprising, or intriguing to me? How do people in this discipline handle ambiguity, uncertainty, persistence, failure, success, collaboration, compromise?	What is the significance of the topic? In what other contexts can I use what I have learned? How are perspectives shaped by time, place, culture, events, and circumstances?	How do experts in the field go about research in this field? What are the methods used by practitioners and contributors in the field to generate new questions, to generate new knowledge, and to solve problems?
Research Skills	In collections of readings, locate and cite related questions.	Generate questions, focus on topic, valuate resources.	Draw conclusions. Check for authenticity and accuracy.	Use of primary, multiple, varied, and non-traditional resources.
Thinking Skills	Combine, evaluate, provide alternative perspectives.	Prove or verify with evidence. Analyze impact of policies and rules.	Note ambiguity. Explain reasons why.	Assess, evaluate, judge "power" of resources.

Questions adapted from Parallel Curriculum, 2002

Adapted from Colorado: Gifted Education guidelines and Resources Volume II: Programming