Gifted and Talented Education Program

Differentiation for Gifted Students

GATE Teacher Handbook

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Section I:
Differentiation for Gifted Students
Introduction

The Rosedale Union School District is committed to providing our gifted students with a challenging and motivating curriculum that will enable these children to meet and exceed state content standards. We believe that this goal is best attained through differentiated instruction as described by the California Department of Education and the California Association for the Gifted.

This model reflects a philosophy of “quality, not quantity.” We want our gifted students to work at an appropriate pace rather than waiting for other students to catch up, to pursue their studies with greater depth and complexity rather than doing “more of the same” simply because they are able to work quickly, and to demonstrate their understanding of concepts through creative, unique products.

This GATE Teacher Handbook is intended to help both new and experienced GATE teachers implement this model of differentiation in their classrooms.

Acknowledgements

The model for differentiation in this handbook is based in part on the work of Dr. Sandra Kaplan of the Rossier School of Education at USC and Betty Gould. Some of their work was developed under the auspices of OERI, Javits Curriculum Project T.W.O. It also incorporates instructional strategies for differentiation within the regular classroom from authors Carol Ann Tomlinson and Susan Winebrenner, GATE resources from Garden Grove USD, Long Beach USD, Pajaro Valley USD, Redlands USD, lessons contributed by the Rosedale Union School District’s GATE teachers, and by teacher presenters at the CAG Conference.
TWO IMPORTANT NOTES:

Access to the GATE Curriculum

Rosedale Union School District uses GATE cluster grouping within the regular classroom to serve our gifted students in grades 4 - 6. Although the strategies in this Handbook are designed to enrich the learning of our gifted students, it is important to remember that many of them can be used with the whole class. Most of these strategies are very open-ended and will allow each student, regardless of ability, to reach high and live up to his or her own unique potential.

ALL students can enjoy the challenge of becoming true scholars, and ALL students who demonstrate readiness should be given the opportunity to participate in appropriately differentiated activities.

Homework

Rosedale has a clearly written homework policy that sets a certain number of minutes for homework at each grade level. This policy holds true for GATE classrooms. It is not the amount of homework, but the type of homework that is different in a GATE classroom. GATE students (and their parents) should not be “rewarded” for being gifted with volumes of extra homework. However, the work that children do at home ought to be commensurate with their abilities. GATE teachers must therefore increase the pace for their advanced students, which means homework may be more challenging, but not necessarily take more time to complete.
Overview of Differentiation

Differentiating for high achievers can be defined as:

“Varying curriculum and instruction so that students who have already mastered the material continue to progress and so that students who have a particular area of interest can pursue it in greater depth or in a personalized way.”

Differentiating the Core Curriculum and Instruction to Provide Advanced Learning Opportunities
CDE and CAG Publication

What Differentiation is NOT

- Differentiation ≠ Different.
- Differentiation is not just harder, faster, or more
- Differentiation is not a program in which thinking skills are taught in isolation.

What Differentiation IS

- Differentiation is based on, and is an integral part of, the core curriculum
- Differentiation is the modifying of:
  - what students will know (content),
  - how students will think (critical, creative, and problem-solving thinking skills),
  - how students will access and use resources (research skills),
  - how students will summarize and share their learning (products).
  - Kaplan and Gould, 1995
- Differentiation includes teacher instruction and should not be assumed to be self-taught by students.
- Differentiation should be available to any student who demonstrates a readiness for the experience.
Differentiation in a Nutshell

Differentiation of instruction for gifted students is achieved through many different teaching strategies and through the utilization of:

<table>
<thead>
<tr>
<th>Attributes of Scholarliness</th>
<th>Universal Themes</th>
<th>Depth and Complexity</th>
<th>Novelty/Independent Study</th>
<th>Acceleration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarly Pursuits</td>
<td>Change</td>
<td>DEPTH:</td>
<td>Allocation of time for student to conduct a self-selected study in an area of interest relevant to the core curriculum</td>
<td>Adjusting the pace of instruction to the student’s capability for the purpose of providing an appropriate level of challenge.</td>
</tr>
<tr>
<td>Think Like a Disciplinarian</td>
<td>Conflict</td>
<td>Recognize Details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Traits</td>
<td>Exploration</td>
<td>Note the Patterns</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Force</td>
<td>State the Trends</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Order</td>
<td>Identify the Rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patterns</td>
<td>Ethical Considerations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power</td>
<td>Unanswered Questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relationships</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DEPTH:
Language of the Discipline
Recognize Details
Note the Patterns
State the Trends
Identify the Rules
Ethical Considerations
Unanswered Questions

COMPLEXITY:
Change Over Time
Different Perspectives
Points of View
Across Disciplines

CONTENT IMPERATIVES:
Determine origins
Identify paradox
Compare parallel events
Examine contributions
Note convergence

Differentiation of curriculum for gifted students is achieved through the modification of:

<table>
<thead>
<tr>
<th>Process/Thinking Skills</th>
<th>Content</th>
<th>Resources/Research Skills</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Skills</td>
<td>Depth</td>
<td>Many and varied resources</td>
<td>Rigorous and meaningful products that verify students’ understanding of their learning experience</td>
</tr>
<tr>
<td>Critical Thinking Skills</td>
<td>Complexity</td>
<td>More advanced resources</td>
<td></td>
</tr>
<tr>
<td>Creative Thinking Skills</td>
<td>Content Imperatives</td>
<td>Strategies for gathering, organizing, and reporting information</td>
<td></td>
</tr>
<tr>
<td>Bloom’s Taxonomy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Symbols for dimensions of Depth, Complexity, and Content Imperatives were developed by Sandra Kaplan under the auspices of OERI, Javits Curriculum Project T.W.O., 1996
Differentiation in a Nutshell (continued)

Differentiation of Instruction

is a teacher’s response to learners needs

guided by general principles of differentiation, such as

respectful tasks

ongoing assessment and adjustment

flexible grouping

Teachers can differentiate the

PROCESS

CONTENT

RESOURCES

PRODUCT

according to students’ READINESS INTEREST LEARNING PROFILE

through a range of instructional and management strategies such as:

Compacting Independent Study Interest Centers Interest Groups Tiered Assignments Learning Centers Graphic Organizers Questioning Strategies Flexible Grouping Learning Contracts Mentorships Literature Circles Jigsaw Activities Multiple Intelligences AND MORE!

Varied level text/ Supplemental Materials Tiered Lessons, Centers, Products, or Homework Journal Prompts
Planning for Differentiated Instruction

- **Student Characteristics**
  - **Readiness**
    - The student’s current preparedness to work with a prescribed set of knowledge, understanding, and skills
  - **Interest**
    - A major motivating factor for learning
    - Allows for independent investigations
    - Helps students develop new interests and passions
  - **Learning Profile**
    - The student’s preferred mode of learning
    - Student’s gender, culture, learning style, intelligence preference
    - Develop learning profile surveys for students

- **Curricular Elements**
  - **Content**
    - What a student should come to know, understand, and be able to do
    - Modify how students gain access to the content
    - Modify the pace at which the content is delivered
    - Modify the depth and complexity of the study of the content
  - **Process**
    - Activities that call on students to make sense of the content
    - Emphasis on higher level thinking skills
  - **Resources/Research Skills**
    - Select resources based on the readiness and interest level of the student
    - Many and varied resources should be available
    - Helps students develop new interests and passions
  - **Products**
    - Provide evidence of what a student has come to know, understand, and be able to do over an extended learning period
    - Guide students from being consumers of knowledge to being producers of knowledge
    - Should be rigorous and meaningful
Planning for Differentiated Instruction (continued)

Instructional Strategies
There are many instructional strategies that will support differentiated instruction. Below are some examples of instructional strategies, listed according to whether they require little or more preparation on the part of the teacher.

<table>
<thead>
<tr>
<th>Low Preparation</th>
<th>Higher Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choices of books</td>
<td>Tiered activities and labs</td>
</tr>
<tr>
<td>Homework options</td>
<td>Tiered products</td>
</tr>
<tr>
<td>Varied journal prompts</td>
<td>Independent studies</td>
</tr>
<tr>
<td>Varied pacing with anchor options</td>
<td>Alternative assessments</td>
</tr>
<tr>
<td>Student-teacher goal setting</td>
<td>Multiple texts</td>
</tr>
<tr>
<td>Flexible grouping based on objective</td>
<td>Learning contracts</td>
</tr>
<tr>
<td>Varied computer programs</td>
<td>Curriculum compacting</td>
</tr>
<tr>
<td>Varied supplemental materials</td>
<td>Spelling by readiness</td>
</tr>
<tr>
<td>Varying scaffolding on the same organizer</td>
<td>Varying organizers</td>
</tr>
<tr>
<td>Open-ended activities</td>
<td>Tiered centers</td>
</tr>
<tr>
<td>Jigsaw activities</td>
<td>Literature circles</td>
</tr>
<tr>
<td>Multiple levels of questioning</td>
<td>Simulations</td>
</tr>
<tr>
<td>Explorations by interest</td>
<td>Graduated rubrics</td>
</tr>
<tr>
<td></td>
<td>Frames</td>
</tr>
<tr>
<td></td>
<td>Extension Menus</td>
</tr>
</tbody>
</table>

Some of these strategies and sample lessons have been included in the Instructional Strategies and Sample Lessons section of this Handbook

Adapted from Differentiation in Practice:
A Resource Guide for Differentiating Curriculum
Carol Ann Tomlinson and Caroline Cunningham Eidson

and

How to Differentiate Instruction in Mixed-Ability Classrooms
(second edition)
Carol Ann Tomlinson
The Hallmarks of a Differentiated Classroom

- There is a strong link between assessment and instruction
  - Pre-assessment is key
  - Progress monitoring is on-going
  - Learner interests and profiles are used
  - Multiple assessments are used

- The teacher is clear about learning goals
  - The teacher specifies what students should know, understand, and be able to do
  - Teacher focuses on essential learning goal with all students, but at varying degrees of complexity, with varied support systems, etc.

- The teacher groups students flexibly
  - Whole group/small group
  - Homogeneous/Heterogeneous
  - Similar interest groups/random groups

- The teacher uses time, space, and materials flexibly
  - Arranges the classroom and classroom time in ways that enable the students to work in a variety of ways
  - Matches materials to student readiness
  - Meets with students in varied formats

- The teacher involves her students in understand the nature of the classroom and in making it work for everyone
  - Shared responsibility between teacher and students

- The teacher emphasizes individual growth as central to the success of the classroom
  - Chart personal growth in relation to designated benchmarks

- The teacher works to ensure that all students have “respectful” work
  - Each student is asked to focus on the essential knowledge, understanding, and skill that is core to each lesson and unit
  - Each student is required to think at a high level to complete the work
  - Each student gets inviting work
    - Not drill and rote for low students
    - Not “tangential” work for advanced students
The Hallmarks of a Differentiated Classroom (continued)

- **Teacher makes sure differentiation is a way up, not a way out**
  - Each task should be difficult but attainable

- **The teacher sets her own sights high, just as she asks her students to set their sights high**
  - Reflective about her students and her own practice
  - Accepts that no teacher can be perfect, but does not accept that she is “doing the best she can”
  - Is as excited about her own growth as she is about growth in her students.

- **The teacher seeks specialists’ active partnership in her classroom**
  - Specialists in second language, special education, giftedness, counseling, etc.

- **The teacher’s differentiation is largely proactive rather than reactive**
  - The teacher systematically plans for student differences
The Thirteen Principles of Differentiation

There are thirteen principles of differentiation that GATE teachers should endeavor to include within a unit of study. These thirteen principles will not be found in a **single** lesson but several should **always** be found in every lesson, no matter what the content.

**Content Principles**
- Content is related to an overarching theme.
- Multiple disciplines are integrated within the area of study.
- Students have an opportunity to study a content piece of their choice in depth.
- Mutually reinforcing experiences are presented within an area of study.

**Process Principles**
- Higher level thinking skills are developed through discussion.
- Students conduct research.
- Open-ended tasks and discussions are encouraged.
- Basic skills are taught using higher level thinking skills.
- Students exhibit self-directed study skills.

**Product/Project Principles**
- Products or projects are assigned that cause students to create new ideas.
- Products or projects are assigned that cause students to present them in original ways and forms.
- Students develop some self-understanding from the project.
- Students peer- and self-evaluate projects.
Scholarliness:
The Scholarly Pursuits, Think Like a Disciplinarian, Intellectual Traits

Purpose:
One of the goals of education for ALL students is to encourage students to become life-long learners. One of the ways to accomplish this goal is to have students examine characteristics of scholarliness through 1) the Scholarly Pursuits, 2) Think Like a Disciplinarian, and 3) Intellectual Traits.

The Scholarly Pursuits
The Scholarly Pursuits listed below help students see themselves not just as students, but as scholars.

- Scholars Actively Participate and Are Ready to Learn
- Scholars Take Time to Ponder
- Scholars Have Curiosity and Ask Questions
- Scholars Conduct Research and Use Many References
- Scholars Save Ideas by Organizing New Facts
- Scholars See Many Points of View
- Scholars Persevere and Exercise Their Intellect
- Scholars Set Goals, both Short-Term and Long-Term
- Scholars Take Pride in the Quality of Their Work

Classroom Application:
- Introduce Scholarly Pursuits early in the school year.
- Take the time to discuss with students what each of these statements mean.
- Use personal and concrete examples of scholars.
- Have the students brainstorm other qualities of scholars.
- Use the statements as the basis for a quick-write or a journal topic.
- Teacher can have students apply scholarly traits to other people in biographies and other literature.

Classroom Resources (included in this Handbook):
- Set of blackline masters for classroom posters of the Scholarly Pursuits.
- Use the posters to refer to these qualities throughout the school year.
- You may wish to have students create their own posters and decorate them appropriately.
Think Like A Disciplinarian

Purpose:
Think Like a Disciplinarian is an aspect of scholarliness that encourages students to explore the advanced, sophisticated, and complex concepts in the various disciplines by assuming the role of the disciplinarians who work in those fields.

Classroom Application:
- Think Like a Disciplinarian can be used as appropriate throughout the year.
- Introduce the concept early in the year with a group activity
  - Select your topic and link to curriculum and standards
  - Identify the discipline and related disciplinarians (e.g., Earth Science → geologist, hydrologist, meteorologist, archaeologist, anthropologist)
  - Define the specific language, tools, skills, and expertise of the disciplinarian
- How does it work?
  - Students work in small groups, in pairs, or independently to focus on one discipline/disciplinarian
  - Students investigate aspects of their particular discipline/disciplinarian
  - Students approach information and tasks within the unit from the perspective of the disciplinarian
  - Students relate and share information with others as the disciplinarian
- Example
  - Unit of Study: Geology/Rocks and Minerals
    - Geologist: Looks at origins, composition and location, conducts chemical tests
    - Archaeologist: Looks at how rocks were used as tools, conducts simulations, tests theories
    - Anthropologist: Looks at how rocks were used as religious ornaments, compares with other evidence
- Later in the year, this strategy can be used with small groups or as a tool for independent study. Teachers might consider including this requirement as part of a formal research paper or project.

Classroom Resources (included in this Handbook):
- Set of blackline masters for classroom posters of Think Like a Disciplinarian for several of the disciplines
- Blank form to complete with the disciplines of teacher's choice
- Additional descriptions of the roles of various other disciplinarians
- You may wish to have students create their own posters and decorate them appropriately.
Intellectual Traits

Purpose:
The Intellectual Traits help students internalize the responsibilities of being a scholar. They can help take the discussion of scholarliness to a deeper level.

- **Intellectual Leadership**
  - Lead by being a role model for others
  - Take the initiative
  - Be prepared
  - Help others with learning

- **Intellectual Courage**
  - Take risks
  - Respectfully challenge others
  - Actively participate
  - Think “outside the box”

- **Intellectual Humility**
  - Practice scholarly behavior without showing off
  - Do not steal others’ opportunities to learn or think

- **Intellectual Aggressiveness**
  - Use evidence to support your ideas
  - Defend your thoughts
  - Use multiple resources

**Classroom Application:**
- The use of Intellectual Traits offers teachers an additional way to reinforce the concept of scholarliness - and addresses some of the social/emotional needs of gifted children.
- Introduce the four concepts of Intellectual Traits whenever appropriate.
- Have students discuss these qualities and brainstorm additional ideas.
- Find examples of these traits in characters encountered in biographies or literature.

**Classroom Resources (included in this Handbook):**
- Set of blackline masters for classroom posters of Intellectual Traits
**Keys to Questioning**

These “Keys to Questioning” help students to DISCOVER, UNLOCK, UNCOVER, REVEAL, and DISCLOSE ideas and information. They may be particularly helpful to students in the area of classification analysis.

**Classroom Resources (included in this Handbook):**
- Set of blackline masters for classroom posters of *Keys to Questioning*

<table>
<thead>
<tr>
<th><strong>Significance</strong></th>
<th><strong>Value</strong></th>
<th><strong>Importance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The quality of being important</td>
<td>Relative worth, merit, or importance</td>
<td>Value in content or relationship</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Traits</strong></th>
<th><strong>Characteristics</strong></th>
<th><strong>Kinds</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinguishing characteristics or qualities</td>
<td>Distinguishing features or qualities</td>
<td>The quality of being Important</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Motivation</strong></th>
<th><strong>Influence</strong></th>
<th><strong>Conditions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Something that prompts an action</td>
<td>The power to cause an effect, sway, persuade</td>
<td>Relevant circumstances</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Consequences</strong></th>
<th><strong>Reactions</strong></th>
<th><strong>Possibilities</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects, results, or outcomes</td>
<td>Actions in response to something that happens</td>
<td>Things that may or can be</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Types</strong></th>
<th><strong>Reasons</strong></th>
<th><strong>Rationale</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups distinguished by some particular characteristic</td>
<td>Statements offered as an explanation</td>
<td>An explanation of controlling principles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Function</strong></th>
<th><strong>Evidence</strong></th>
<th><strong>Purpose</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The action for which a person or thing is specially fitted or used</td>
<td>An outward sign or indication</td>
<td>Objective to be achieved</td>
</tr>
</tbody>
</table>
Universal Themes and Generalizations

Purpose:
Universal Themes and Generalizations help students see and make connections between, within, and across disciplines...to make meaning out of what might initially seem disconnected information. These are the "big ideas" that connect and make sense of all learning.

Universal Themes are also used to increase the complexity of content within an area of study. When used within a specific discipline, the use of a theme will allow students to examine the interrelationships between and among facts, details, rules and concepts. When used across disciplines, a theme will allow students to study the inter-relatedness of areas of study.

The theme is not a curricular topic but a universal idea such as those listed below. (The Westward Movement or Ancient Egypt are NOT considered themes, but topics.) This themes approach requires students to define a set of generalizations: statements that are universally true about the theme. Patterns are found everywhere in nature is an example of a typical generalization. These generalizations help increase the depth and complexity of the classroom instruction and the work students do. All subjects converge on the theme.

Universal Themes:

1. Change
2. Conflict
3. Exploration
4. Force or Influence
5. Order
6. Patterns
7. Power
8. Structure
9. Systems
10. Relationships

Universal Themes and Generalizations are from S. Kaplan and J. Curry, 1985

Classroom Application:
Below are the three themes that were selected by GATE teachers in the Rosedale Union School District for use in our GATE classrooms. Teachers will introduce the annual theme to students early in the year. The annual themes for Rosedale GATE classrooms are shown below:

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change</td>
<td>Relationships</td>
<td>Conflict</td>
</tr>
</tbody>
</table>
Generalizations:

Classroom Application:
For a theme to be effective, it is essential for students to examine generalizations that can be verified and/or disputed in the course of study. When the theme is first introduced to students early in the school year, teachers should:

- Discuss with students the classroom theme for the year.
- Provide examples of generalizations for the theme (see chart below).
- Have students brainstorm other generalizations related to the theme.
- Create a classroom poster of teacher-provided and class-generated generalizations.
- Throughout the year, the teacher can refer to these or use them as the basis for lessons as the students make connections within and between areas of study.

<table>
<thead>
<tr>
<th>Universal Themes and Generalization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Change</strong></td>
</tr>
<tr>
<td>- Generates additional change</td>
</tr>
<tr>
<td>- Can be either positive or negative</td>
</tr>
<tr>
<td>- Is inevitable</td>
</tr>
<tr>
<td>- Is necessary for growth</td>
</tr>
<tr>
<td>- Can be evolutionary or revolutionary</td>
</tr>
<tr>
<td><strong>2. Conflict</strong></td>
</tr>
<tr>
<td>- Is composed of opposing forces</td>
</tr>
<tr>
<td>- May be natural or man-made</td>
</tr>
<tr>
<td>- May be intentional or unintentional</td>
</tr>
<tr>
<td>- May allow for synthesis and change</td>
</tr>
<tr>
<td>- Is progressive</td>
</tr>
<tr>
<td><strong>3. Exploration</strong></td>
</tr>
<tr>
<td>- Requires recognizing purpose and responding to it</td>
</tr>
<tr>
<td>- Confronts the &quot;unknown&quot;</td>
</tr>
<tr>
<td>- May result in new findings or the confirmation of old findings</td>
</tr>
<tr>
<td><strong>4. Force or Influence</strong></td>
</tr>
<tr>
<td>- Attracts, holds, or repels</td>
</tr>
<tr>
<td>- Influences or changes</td>
</tr>
<tr>
<td>- Force and inertia are co-dependent</td>
</tr>
<tr>
<td>- May be countered with equal or greater force</td>
</tr>
<tr>
<td><strong>5. Order</strong></td>
</tr>
<tr>
<td>- May be natural or constructed</td>
</tr>
<tr>
<td>- May allow for prediction</td>
</tr>
<tr>
<td>- May have repeated patterns</td>
</tr>
<tr>
<td>- Order and chaos are reciprocals</td>
</tr>
<tr>
<td>- Order leads to chaos and chaos leads to order</td>
</tr>
<tr>
<td><strong>6. Patterns</strong></td>
</tr>
<tr>
<td>- Have segments that are repeated</td>
</tr>
<tr>
<td>- Allow for prediction</td>
</tr>
<tr>
<td>- Have an internal order</td>
</tr>
<tr>
<td>- Are enablers</td>
</tr>
<tr>
<td><strong>7. Power</strong></td>
</tr>
<tr>
<td>- Is the ability to influence</td>
</tr>
<tr>
<td>- May be used or abused</td>
</tr>
<tr>
<td>- Is always present in some form</td>
</tr>
<tr>
<td>- May take many forms</td>
</tr>
<tr>
<td><strong>8. Structure</strong></td>
</tr>
<tr>
<td>- Has parts that interrelate</td>
</tr>
<tr>
<td>- Has parts that support and are supported</td>
</tr>
<tr>
<td>- May combine to form larger structures</td>
</tr>
<tr>
<td>- Is no stronger than its weakest component</td>
</tr>
<tr>
<td><strong>9. Systems</strong></td>
</tr>
<tr>
<td>- Have parts that work together to complete a task</td>
</tr>
<tr>
<td>- Are composed of sub-systems</td>
</tr>
<tr>
<td>- Follow rules</td>
</tr>
<tr>
<td>- May be influenced by other systems</td>
</tr>
<tr>
<td>- Interact</td>
</tr>
<tr>
<td><strong>10. Relationships</strong></td>
</tr>
<tr>
<td>- Everything is related in some way</td>
</tr>
<tr>
<td>- Are powerful</td>
</tr>
<tr>
<td>- Are purposeful</td>
</tr>
<tr>
<td>- Change over time</td>
</tr>
<tr>
<td>- Follow rules</td>
</tr>
</tbody>
</table>
## Generalizations (continued):

On this page and the next are some additional generalizations that were generated by teachers working with the Universal Themes. Teachers might wish to have students generate their own generalizations through classroom brainstorming and discussion before introducing these additional ideas.

<table>
<thead>
<tr>
<th>Change</th>
<th>Patterns</th>
<th>Order</th>
<th>Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change can have a ripple effect OR change leads to change</td>
<td>Patterns can be natural or person-made</td>
<td>Order organizes ideas and information</td>
<td>Systems are procedures</td>
</tr>
<tr>
<td>Change can be helpful or harmful</td>
<td>Patterns have segments that are repeated</td>
<td>Order serves a purpose</td>
<td>Systems have order</td>
</tr>
<tr>
<td>Change can be natural or person-made</td>
<td>Patterns may have symmetry</td>
<td>Order can be natural or imposed (artificial)</td>
<td>Systems have parts that work together to perform a function</td>
</tr>
<tr>
<td>Change is inevitable</td>
<td>Patterns can predict</td>
<td>Order and chaos are systems</td>
<td>Systems interact</td>
</tr>
<tr>
<td>Change is constructive and destructive</td>
<td>Patterns are subject to change</td>
<td>Order can be fixed or fluid, static or changeable</td>
<td>There are systems within systems</td>
</tr>
<tr>
<td>Change can be progressive or regressive</td>
<td>Patterns can be cycles, correlations, cause and effect, or trends</td>
<td>There is order within order</td>
<td>Systems follow rules</td>
</tr>
<tr>
<td>Change causes friction</td>
<td></td>
<td>The order of things provides information</td>
<td>The structure of a system is dependent on its function</td>
</tr>
<tr>
<td>Change can be planned or spontaneous</td>
<td></td>
<td>Order comes out of chaos</td>
<td>Systems work in patterns</td>
</tr>
<tr>
<td>Change can occur in cycles</td>
<td></td>
<td></td>
<td>Some systems are dominant and others are subordinate</td>
</tr>
<tr>
<td>All change leads to some form of transformation but all transformations are not permanent</td>
<td></td>
<td></td>
<td>Systems are interdependent</td>
</tr>
<tr>
<td>Some change is a result of passive actions or interactions</td>
<td></td>
<td></td>
<td>A cycle is a system in which things happen within a given time period</td>
</tr>
<tr>
<td>Some change is systematic</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Generalizations (continued):

On this page and the previous are some additional generalizations that were generated by teachers working with the Universal Themes. Teachers might wish to have students generate their own generalizations through classroom brainstorming and discussion before introducing these additional ideas.

<table>
<thead>
<tr>
<th>Structures</th>
<th>Power</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structures are made of elements</td>
<td>Power exerts different types of influences</td>
<td>Relationships can be helpful or harmful</td>
</tr>
<tr>
<td>Structures serve or perform a purpose</td>
<td>The use of power can have positive and/or negative consequences</td>
<td>Relationships can be natural or imposed</td>
</tr>
<tr>
<td>Structures follow function</td>
<td>Power can be harnessed and contained or it can be random and chaotic</td>
<td>Relationships can be positive or negative</td>
</tr>
<tr>
<td>The materials used to create a structure define the structure itself</td>
<td>Power necessitates relinquishing or giving up something</td>
<td>Relationships can be correlations and/or cause and effect</td>
</tr>
<tr>
<td>Structures reflect the times</td>
<td>Power provides the opportunity for change of the status quo</td>
<td>Relationships can cause interdependence</td>
</tr>
<tr>
<td>Structures can be natural or person-made</td>
<td>Power can be natural or manufactures</td>
<td>Relationships can cause the exchange of ideas and values</td>
</tr>
<tr>
<td>Structures have parts that interrelate</td>
<td></td>
<td>Relationships are purposeful</td>
</tr>
<tr>
<td>Parts of structures support and are supported by other parts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A structure is no stronger than its weakest component</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ways of Differentiating for Gifted Students

❖ Acceleration

Students who demonstrate high levels of understanding or learn a particular content more quickly might benefit most by proceeding at a faster pace than the rest of the class. If their abilities warrant, the teacher may choose to allow these students to participate in out-of-grade-level activities, selecting and using resources beyond the grade level.

"Acceleration is a strategy that adjusts the pace of instruction to the gifted student's capability for the purpose of providing an appropriate level of challenge. Acceleration can take many forms, including: (1) early entrance to formal schooling, which can occur at kindergarten, high school, or university levels; (2) moving through age-graded classes in less time by grade skipping, moving through cross-age grouped or non-graded classes in two rather than three years, or advanced placement; and (3) moving through curriculum materials and concepts at an accelerated rate by curriculum compacting, telescoping content, or receiving credit by examination. Students may be accelerated in one discipline or across disciplines. However acceleration is implemented, it should result in a match between appropriate learning opportunities and student abilities.

For students, acceleration offers the opportunity to select an educational program that is challenging and that meets both their academic and emotional needs. For schools, acceleration offers a way to meet the needs of highly able students when other forms of differentiation at grade level do not provide enough challenge.

Research documents the academic benefits and positive emotional outcomes of acceleration for gifted students when the needs of the student are carefully matched with the form of acceleration used."

From California Association for the Gifted
A Position Paper

Classroom Application:

Acceleration can be implemented in a variety of ways. The most common will be:

- Advancing a student who is exceptionally capable in all areas into the next grade.
- Arranging for a student who excels in a single academic area (e.g., math) to attend lessons for that subject in a more advanced class or grade.
- Using pre-assessment and flexible grouping to compact the curriculum for students who have demonstrated mastery of concepts.

The first two options listed above should be implemented with care and with the consent of the school and parent. Considerations such as transportation to other schools must be considered as students make the transition from elementary to middle school or from middle school to high school. Individual tutoring may be a better alternative for some students. The third option, Curriculum Compacting, is described in greater detail in the Instructional Strategies included in this Handbook.
Depth - Complexity - Content Imperatives

Depth, complexity, and content imperatives were developed to enrich students’ learning. The elements described below are skills and strategies used by good thinkers to observe and organize or make sense of information. The use of depth, complexity, and content imperatives should be an integral part of the curriculum. They can be used with all students. The “icons” or symbols for each concept are simply tools to help introduce and reinforce these concepts throughout the school year.

**Depth** is the exploration within a discipline. Differentiation is achieved by increasing the depth to which a student explores a curricular topic. Depth refers to approaching or studying something from the concrete to the abstract, from the familiar to the unfamiliar, and from the known to the unknown.

**Complexity** is the understanding within and across the disciplines. The teacher may change the complexity of the subject matter by extending the content to the study of issues, problems, and themes. Complexity involves making relationships between and among ideas, connecting other concepts, and using an interdisciplinary approach to the content.

**Content Imperatives** extend and enrich learning. They help to deepen student understanding through examination of origins, paradoxes, parallels, contributions, and convergences.

**Classroom Application:**

- Use the “icons” (symbols) for depth, complexity, and the content imperatives on the next three pages to introduce students to these concepts.
- Classroom posters of the icons have been provided to each teacher. There are many ideas for introducing these concepts to students on the reverse side of the posters.
- Use the elements of depth, complexity, and content imperatives to modify the presentation of content, whenever appropriate.
- Specific lesson ideas have been included in the Instructional Strategies and Sample Lessons section of this Handbook.

Symbols for dimensions of Depth, Complexity, and Content Imperatives were developed by Sandra Kaplan under the auspices of OERI, Javits Curriculum Project T.W.O., 1996
Elements of Depth

Use the Language of the Discipline
- Students use the language used by the experts in the discipline.
- Students note and use discipline-specific vocabulary and nomenclature.

Note Details
- Students elaborate on ideas and information.
- Students embellish a description, answer, or idea.

Note Patterns
- Students identify recurring elements or repeated factors.
- Students determine the order of events.
- Students predict what comes next in a pattern.

State Trends
- Students note factors or events - social, political, economic, geographic, or other - that cause events to occur.
- Students identify changes over time.

Define Unanswered Questions
- Students identify any unclear ideas.
- Students name the areas yet to be explored or proven.
- Students note conclusions that need further evidence or support.

Identify Internal Rules
- Students state the explicit or implicit factors that affect the information or body of knowledge.
- Students define the organizational elements affecting the information - structure, hierarchy, order.
- Students identify and/or describe the natural and/or person-made factors affecting the information.

Note Ethical Considerations
- Students identify value-laden ideas.
- Students determine the elements that reflect bias, prejudice, discrimination.
- Students examine controversies and differing opinions.

State the "Big Ideas": generalizations, principles, theories
- Students make conclusions from evidence that explains a collection of facts or ideas.
Elements of Complexity

Define Change over Time
- Students describe the effects of time on the information.
- Students identify the elements that change or remain the same.
- Students explain how and why things change or remain the same.

Recognize Multiple Points of View
- Students recognize or make differing observations of the same idea or thing.
- Students identify many and varied opinions or reactions to the same idea, thing, or information.
- Students may examine information from the perspectives of disciplinarians in different fields.
- Students define how personal relationships to something may obscure or clarify perceptions and use of the thing.

Make Connections Across Disciplines
- Students examine ideas, facts, concepts, etc. from the point of view of different academic disciplines.
Content Imperatives

Determine Origins
- Students investigate the origins of ideas or events.
- Students determine the impact of origins.

Note Paradoxes
- Students identify things or ideas that are opposite or oppose each other.
- Students note inconsistencies.
- Students confront dilemmas arising from paradox.

Recognize Parallels
- Students identify ideas or events that are similar.
- Students compare similar ideas or events.

Recognize Contributions
- Students note the effects or consequences of ideas or events.
- Students determine the value of contributions.

Note Convergence
- Students identify how or where things intersect or come together.
- Students examine the consequences of convergence.
Novelty/Independent Study

Unlike acceleration, depth, and complexity, novelty is primarily student-initiated. Novelty means that the teacher can stimulate students in the following ways: encouraging them to seek original interpretations, reinterpretations, or restatements of existing information; suggesting that they look for new implications among and within disciplines; and helping students approach areas of study in personalized, individualistic, and nontraditional ways.

Classroom Application:

Novelty may be achieved in a variety of ways.
- Teachers may work with students to develop independent learning contracts.
- Teachers may present students with a variety of rigorous, meaningful products and allow students to choose the manner in which they will demonstrate their understanding of content.
- Teachers may create independent learning centers.
- Samples of independent studies are included in the Instructional Strategies and Sample Lessons section of this Handbook.
Analysis of Core Content

In addition to acceleration, depth and complexity, and novelty, curriculum can be differentiated for gifted students through analysis skills. The list of skills below may be helpful to teachers in designing appropriate activities for students.

GATE students should be analyzing Core Content in three areas:

Classification Analysis
- Students should group and sort content, vocabulary works, ideas, concepts, etc.
- Students should be able to sort material without always being given the categories.
- Students should be able to sort the same content in several ways.
- The *Keys to Questioning* will greatly help with this area of analysis.

Structural Analysis
- Students should be given opportunities to diagram and design.
- Students should be able to label and identify the parts of content.
- Activities could include: sentence diagramming, dissecting in science, charting and graphing, creating games and puzzles, solving puzzles.

Operation Analysis
- Students should sequence events in time and create timelines.
- Students should use writing procedures to solve math problems.
- Students should understand and produce flow charts.
Section II:

Pulling It All Together
What Would a Visitor See in a GATE Classroom?

While GATE classrooms share many of the fine teaching strategies and strong learning environments that should be in every classroom, the following are characteristics specific to GATE classrooms:

❖ The following items should be posted in the classroom and students should be knowledgeable about their meaning and use:
  o Universal Theme
  o Generalizations about the Theme
  o The Scholarly Attributes
  o The Icons for Depth, Complexity, and Content Imperatives

❖ The following items MAY be posted in the classroom:
  o Posters of Keys to Questioning
  o Posters of Think Like a Disciplinarian
  o Posters of Intellectual Traits

❖ The Thirteen Principles of Differentiation should be in evidence

❖ GATE Students should be observed:
  o Reading books at their level
  o Working at an advanced pace through flexible grouping strategies
  o Working on projects that require students to understand content in greater depth and complexity
  o Using advanced technology: Hyperstudio, PowerPoint, web page design, internet use, etc.
  o Participating in classroom discussions that emphasize application, analysis, and synthesis, with less emphasis on comprehension questions about facts
  o Analyzing core content through: classification analysis, structural analysis, and operation analysis

❖ Instructional Strategies may include:
  o Curriculum Compacting
  o Extension Menus
  o Tiered Lessons
  o Frames
  o Independent Learning Contracts
  o Any instruction that promotes deep thinking.
Lesson Plan Format with Menu of Options for Differentiation

A Differentiated Learning Task is achieved through the modification of:

<table>
<thead>
<tr>
<th>PROCESS (THINKING SKILLS)</th>
<th>CONTENT</th>
<th>RESEARCH SKILLS/RESOURCES</th>
<th>PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual objectives that differentiate the standards-based curriculum</td>
<td>Differentiation activities that incorporate the listed Thinking Skills and modify content through depth/complexity/content imperatives</td>
<td>Students use many and varied resources to gather, organize, and report information.</td>
<td>Rigorous and meaningful products that verify students’ understanding of their learning experience.</td>
</tr>
</tbody>
</table>

The examples of thinking skills, differentiation of content, research skills, and products below are adapted from The Flip Book, by Kaplan, Gould, and Siegel.

**Basic Skills:**
- Compare and contrast
- Determine cause and effect
- Identify attributes
- Recognize relationships
- Summarize
- Sequence

**Critical Thinking Skills:**
- Determine fact from fiction and relevant from irrelevant
- Gather evidence to support
- Judge with criteria
- Note ambiguity
- Judge authenticity
- Prove with evidence
- Prioritize
- State and test assumptions

**Creative Thinking Skills:**
- Redesign
- Combine
- Substitute
- Add to

**Depth:**
- State trends
- Note patterns
- Identify the rules
- Identify/note details
- State ethical considerations
- Define unanswered questions
- Use language of the discipline
- State the big idea (generalization, principle, or theory)

**Complexity:**
- View from different perspectives
- Recognize multiple points of view
- Define change over time
- Make connections across disciplines

**Content Imperatives:**
- Identify paradox
- Compare parallel events or ideas
- Examine contributions
- Note convergence

**Gathering information:**
- Using resources
- Use pictures
- Experiment
- Use a computer
- Use video and audio technology
- Read/use books
- Use the news media
- Interview
- Use primary source documents
- Field trips
- Lectures
- Mentors
- Advanced texts

**Organizing information:**
- Draw conclusions
- Paraphrase
- Outline
- Graphic organizers
- Use self-directed study skills

Listed below are just a few of the many possible products:
- Dramatize
- Make a model
- Survey and graph
- Write a report
- Illustrate
- Construct something
- Make a chart
- Develop a photo essay
- Teach a lesson
- Debate

Many other ideas for meaningful products may be found in Teaching Gifted Kids in the Regular Classroom, by Susan Winebrenner.

Grid model for differentiation was developed by Sandra Kaplan under the auspices of OERI, Javits Curriculum Project T.W.O., 1996.
Sample Lesson Plan

Start with the content standard:
Grade 5 Social Science, Standard 5.2: *Students trace the routes of early explorers and describe the early exploration of the Americas.*

Add an element of scholarliness: Think like an Historian

Look for ways to relate the lesson to the classroom’s Universal Theme: (Power, Exploration, Conflict, etc.)

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</tr>
</tbody>
</table>

Set up the thinking or analysis skill:

Students will **judge with criteria** the impact of European exploration upon the indigenous peoples of the explored region.

Add the elements of depth, complexity, and content imperatives:

Students will examine the **ethical considerations** of the early explorations of the Americas by examining a selected exploration from **multiple perspectives**, e.g., from the perspectives of the explorers and of the indigenous peoples of the region. Students will consider the **paradox** inherent in exploration – that growth for one group can mean destruction for another.

Select appropriate resources and teach necessary research skills (e.g., note-taking, the steps in writing a report):

Students will use a **variety of resources**, such as maps, text, primary source documents, reference books, and the internet.

Determine the way in which the student will demonstrate understanding of the learning experience.

Students will **write a report** that analyzes their selected exploration from the perspective of the explorer (including the explorer’s motives, obstacles, and accomplishments) and from the perspective of the indigenous peoples of the region, (examining the impact of the explorer’s arrival on their culture).
Asking the Hard Questions
Level up your questions by drawing from these nine areas

BLOOMS TAXONOMY
Application
How is it related to the real world?
Analysis
Classification (sorting)
Structure (parts/functions)
Operation (sequence/order)
Synthesis
Creativity/Combining
Evaluation
Judgment with criteria

UNIVERSAL THEMES
Change
Conflict
Exploration
Force/Influence
Order
Patterns
Power
Structure
Systems
Relationships

RESEARCH SKILLS
Note taking
Summarizing
Fact vs. Opinion
Use of Encyclopedia
Outlining
Citing references
Interpreting graphs/charts
Using the Internet
And search engines
Using glossaries
Using indexes
Using table of contents

PRODUCTS
Letter
Oral Report
Chart
Poster
Diary
Mobile
Display
Timeline
Experiment
Brochure
Graph
Survey
Interview
Skit
Illustration
Poem
Map
PowerPoint
Newspaper
Pop-Up Book
Written Report
AND MANY MORE!

KEY TERMS
Kinds
Types
Traits
Conditions
Reasons
Reactions
Purpose
Functions
Significance
Value

CONTENT IMPERATIVES
Origins
Beginning
Source
Cause
Parallel
Similarities
Analogies
Matches
Contribution
Impact
Significance

UNANSWERED QUESTIONS

THANKS TO THE REDLANDS UNIFIED SCHOOL DISTRICT GATE WEBSITE
Section III: Instructional Strategies and Sample Lessons
Universal Themes and the Icons
(Depth, Complexity, Content Imperatives)

The use of the Universal Theme and the icons of depth, complexity, and content imperatives should be woven into daily instruction whenever appropriate.

The following lesson was observed in a 6th grade classroom in the Rialto School District and models a more formal, structured use of these elements of differentiation.

Science Lesson – Grade 6:
Comparison of the Water Cycle and the Solar System
Using the Universal Theme “Relationships”

- The selected Universal Theme for the year was Relationships.
- A class poster of Relationships and its generalization statements was posted on the wall.
  - Everything is related in some way
  - Relationships are powerful
  - Relationships are purposeful
  - Relationships change over time
  - Relationships follow rules
  - Relationships are inevitable
- The class was just concluding its study of the water cycle and the solar system.
- Students were placed in groups of four.
- Each group was given a chart with one of the generalizations for Relationships.
- Groups worked together to complete the chart and provide examples of how each of these two systems reflected the assigned generalization.
- Some groups used the icons on their charts to show patterns, trends, rules, etc. displayed by the two systems. Students were very familiar with the meanings of the icons and used them to discuss their topic with greater depth and complexity.

<table>
<thead>
<tr>
<th>Relationships Change Over Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Water Cycle</td>
</tr>
</tbody>
</table>

34
Sample of a 5th Grade Bulletin Board
Universal Theme: Conflict

CONFLICT IS EVERYWHERE

<table>
<thead>
<tr>
<th>LANGUAGE ARTS</th>
<th>MATH</th>
<th>SOCIAL STUDIES</th>
<th>SCIENCE</th>
<th>VISUAL ARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Story Conflict</td>
<td>$\pi$</td>
<td>Stamp Act Taxes</td>
<td>Chemical Reactions</td>
<td>Colors</td>
</tr>
<tr>
<td>Infinity</td>
<td></td>
<td>Stamp Act Taxes</td>
<td>Chemical Reactions</td>
<td></td>
</tr>
</tbody>
</table>

Students can add to this chart as examples of conflict become evident through the year’s curriculum.
Curriculum Compacting

Curriculum compacting is a three-step process in which a teacher
- pre-assesses students' skills or knowledge about content prior to instruction,
- plans for teaching what is not known and excuses the student from what is already known, and
- plans for freed up time to be spent in enriched or accelerated study.

This strategy:
- honors the large reservoir of knowledge that some students have
- satisfies students' hunger to learn more about topics than school sometimes allows
- encourages independence
- eliminates boredom and lethargy resulting from unnecessary repetition of material.

Curriculum Compacting Process

1. Identify the relevant learning objectives in a subject area or grade level.

2. Find or develop a means of pre-testing students on one or more of these objectives, prior to instruction.

3. Identify students who may benefit from curriculum compacting and should be pretested.

4. Pretest students to determine mastery levels of the chosen objectives.

5. Eliminate practice, drill, or instructional time for students who have demonstrated prior mastery of those objectives.

6. Streamline instruction of those objectives for students who have not yet mastered, but are capable of mastering more quickly than their classmates.

7. Offer enrichment or acceleration options for students whose curriculum has been compacted: (Extension Menus, Individual Learning Contracts, Challenge Activities in student text, etc.)

8. Keep records of this process and the instructional options available to compacted students.
Compacting Strategies

The Most Difficult First

- Teach for 10 - 15 minutes; assign homework.
- Allow 15 - 20 minutes for in-class practice.
- Offer Most Difficult First option to all students.
- Any student who can complete the most difficult first, neatly, legibly, and accurately (and without help) doesn’t need more practice.
- Offer help only to those students who do not choose to do the most difficult first.
- Teacher corrects work until a model paper is corrected.
- Appoint “checker” to correct other Most Difficult First volunteers
- Collect all the volunteers' work.
- Enter all grades at the same time.

Pre-Test and Choose from Alternate Work (Spelling, Grammar, Vocabulary, Penmanship - all skills)

- Offer pretest for volunteers at beginning of each unit - Those who demonstrate mastery receive mastery grade
- Those who demonstrate mastery do choice activities: read, write, independent study (no extra credit).
- Favorite activity: With a partner, choose alternate words; learn spelling and meaning; partners test each other;
- unmastered words go to next list.

The Golden Rules of Compacting

❖ Don’t bother anyone.
❖ Don’t call attention to yourself.
❖ Work on something the entire period.

Remember: It’s their time. Trust them to use it wisely.

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Extension Menus

PURPOSE:
Extension menus are a valuable tool for designing instruction for students who are ready to move ahead or do enrichment activities. They are especially valuable for teachers who use Curriculum Compacting, as they provide students with a variety of learning experiences for extending and deepening their understanding of concepts.

HOW TO DESIGN EXTENSION MENUS:
1. Divide a paper into two columns.
2. In the left column, make a list of Key Concepts related to the unit of study.
3. In the right column, list Related Topics; that is, topics related to the unit of study, but not included in the Key Concepts list:
   a. Topics you would have included if you had more time
   b. Topics you think would appeal to the students' interests
4. Teach the Key Concepts to the class.
   a. You can use Curriculum Compacting to allow students to "test-out" of the whole class instruction and go directly to extensions
   b. You can design learning contracts that allow GATE students to learn the Key concepts at their own pace and then move on to extensions
5. Create an Extensions Menu that includes 8 of the Related Topics. Leave the center space free for Student Choice.
   a. Use a thinking model such as Bloom's Taxonomy to design activities that promote Application, Analysis, Evaluation, and Synthesis. Use trigger words for those 4 levels.
   b. Use the icons of depth, complexity, and content imperatives to design activities that promote thinking with greater depth and complexity.
   c. Allow students choice in how they will display what they have learned.
6. Decide with the student which and how many choices should be completed.

Adapted from Teaching Gifted Kids in the Regular Classroom
Used with permission of Susan Winebrenner
**Sample Extension Menu Lesson on Grammar**

<table>
<thead>
<tr>
<th>Choose 5 parts of speech from your grammar book. Create a “pop-up” book that illustrated and explains each part of speech.</th>
<th>Create a “Mad Libs” story that requires using the eight parts of speech. Include an answer key.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compose a song explaining the parts of speech and rules that apply.</td>
<td></td>
</tr>
<tr>
<td>Create a picture dictionary for the parts of speech. Each page should include the part of speech, definition, an example, and a colorful illustration.</td>
<td>Design a flip chart that includes the parts of speech. Illustrate each page and include examples.</td>
</tr>
<tr>
<td>Your Choice!</td>
<td></td>
</tr>
<tr>
<td>Design a flip chart that includes the parts of speech. Illustrate each page and include examples.</td>
<td></td>
</tr>
<tr>
<td>Rewrite the story of the Three Little Pigs, beginning each sentence with a subordinate clause and ending with an independent clause. Use your text as a reference.</td>
<td>Make a list of spelling or grammatical errors you have seen in signs, menus, newspaper, etc. Write a letter to the merchant or editor suggesting corrections.</td>
</tr>
<tr>
<td>Use its and it’s correctly in a greeting card that welcomes a new person to our school.</td>
<td></td>
</tr>
</tbody>
</table>
Extension Menu Form

Your Choice!
Tiered Assignments

What are Tiered Assignments?
Tiered assignments are assignments that are based on the same general concept and geared to different ability levels. In a heterogeneous classroom, the teacher uses varied levels of activities to ensure that students explore ideas at a level that builds on their prior knowledge and prompts continued growth. Student groups use varied approaches to explore the same essential ideas.

When Should Teachers Use Tiered Assignments?
Tiered assignments are especially appropriate when you are teaching content to which the whole class must be exposed and when you know the students will approach the content with different levels of readiness. It allows for reinforcement or extension of concepts based on student readiness.

How Do Teachers Develop Tiered Assignments?
- Start by clarifying your objectives for the lesson – focusing on a key essential concept.
- Develop three (or more) assignments that meet those objectives but are at different levels of difficulty.
- Adjust the task by complexity, abstractness, number of steps, concreteness, and independence to ensure appropriate challenge.
- Gather or prepare a variety of resource materials at differing levels of complexity.
- Assign students to groups based on their readiness.
Examples of Tiered Lessons:

**Literature:** A discussion of setting using Bloom’s Taxonomy  
**Objective:** Students will be able to identify and describe the setting and to discuss the ways in which the setting contributes to the theme of the story.

- **Group 1 (Below Grade Level):** Knowledge  
  - Describe the setting, using adjectives and phrases from the story
- **Group 2 (At Grade Level):** Analysis  
  - Analyze how the author’s description of the setting adds to our appreciation of the mood of the story.
- **Group 3 (Above Grade Level/GATE):** Synthesis  
  - Imagine that this story took place in another setting. Describe the new setting that you have chosen. Predict what changes would happen in the story as a result of the new setting.

**Social Studies or Literature:** Content Analysis using Icons  
**Objective:** Students will be able to discuss the content critically.

- **Group 1 (Below Grade Level):** Reread the piece and select a number of details that you find especially interesting. Explain why you chose them and how they contribute to your understanding of the content.
- **Group 2 (At Grade Level):** Reread the piece and identify any patterns. Does anything reoccur in the content or in its presentation? How does the author use patterns to add to our understanding of the content?
- **Group 3 (GATE):** Reread the piece and identify several different points of view. How do the different points of view increase our understanding of the content?
Frames

*Frames* is an instructional tool that can be used in a variety of ways. The use of frames can help students:

- Focus on the *Big Idea*
- Clarify understanding
- Guide thinking towards analysis, synthesis, and evaluation
- Support understanding of the elements of depth and complexity

**Frames can be used to:**

- A Frame places the concept to be examined in the center of the page.
- The four bordering quadrants of the page are used to explore the concept and extend learning.
- Teachers can use frames in a variety of ways:
  - Develop four activities or tasks to deepen understanding.
  - Place the icons of depth and/or complexity into each of the quadrants and have students respond to the topic through the lenses of the icons.
  - Use frames as a daily journal response opportunity.

Frames were developed by Dr. Sandra Kaplan and Bette Gould. A complete description of the uses and designing of Frames may be found in their book, *Frames: Differentiating the Core Curriculum*. 
Frames (continued)

Frames can be used for Follow-Up Assignments:
- Whole Group or Small Group Instruction
- Use the icons to challenge thinking
- Allow for choice

Frames can be used as an Independent Study Guide:
- Guides discussion in Literature Circles
- Supports independent research
- Provides organizations structure for responding to literature or writing a report
- Helps focus thinking about unanswered questions and promotes curiosity

Frames can be used as Extension Activities:
- Use a frame to analyze one topic
- Use a frame to organize subtopics of a Big Idea
- Use a frame to “go deeper” into complex icons such as Ethics, Change Over Time, or Different Perspectives

Frames Lesson Example for Secondary Students:

List the **details** of copyright law.

What are the current **trends** related to copyright?

Examine the **ethics** of protecting copyright.

Define the **rules** and how and why they should be addressed.

Use the **language** of the **discipline** to explain.
Using Frames and Icons of Depth and Complexity

This activity serves several purposes:

- Daily Journal
- Good thinking and discussion prompt
- Practice on using and understanding the icons of depth and complexity

Procedures:

- Teacher
  - select a “Quote of the Day” to place in the center of the frame.
  - selects three of the depth and complexity icons that seem to be the most applicable to the quote of the day.
  - Language of the Disciplines is included each day.

- Students:
  - use a blank Frame form to respond to the quote.
  - copy the quote in the center box.
  - in Language of the Disciplines quadrant, write key words from the quote and why they feel these words are important.
  - complete the other three quadrants with their own responses to the quote, focusing on ideas raised by the selected depth and complexity icons.