NORTH HALEDON SCHOOL DISTRICT

GIFTED AND TALENTED FRAMEWORK

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Regulation and Policy

The state of New Jersey Department of Education defines gifted as, "those students who possess or demonstrate high levels of ability, in one or more content areas, when compared to their chronological peers in the local district and who require modification of their educational program if they are to achieve in accordance with their capabilities." The NJ Department of Education requires local district boards of education to provide appropriate K-12 educational services for gifted and talented students. (N.J.A.C.6A:8) This framework aligns with North Haledon Board of Education Policy and Regulation 2464: Gifted and Talented Students.

https://www.nhschools.net/nh/Board/Board%20Policies/Series%202000%20-%20Program/2464%20POLICY-%20Gifted%20and%20Talented%20Students.pdf?1593176959

https://www.nhschools.net/nh/Board/Board%20Policies/Series%202000%20-%20Program/2464%20REGULATION-%20Gifted%20and%20Talented%20Pupils.pdf?1593176959

2019 Pre-K-Grade 12 Gifted Programming Standards

"Standards provide a basis for policies, rules, and procedures that are essential for providing systematic programs and services to any special population of students. While standards may be addressed and implemented in a variety of ways, they provide important direction and focus to designing and developing options for gifted learners at the local level.

The 2019 *Pre-K-Grade 12 Gifted Education Programming Standards* were developed with input from a variety of stakeholders and review of current research and best practice. The standards continue the focus on diversity and collaboration – two powerful principles that guide high quality programs and services. The standards use student outcomes for goals, rather than teacher practices, keeping them in line with the thinking in education standards generally. Because these standards are grounded in theory, research, and practice paradigms, they provide an important base for all efforts on behalf of gifted learners at all stages of development."
-https://www.nagc.org/resources-publications/resources/national-standards-gifted-and-talented-education/pre-k-grade-12

The Six Gifted Education Programming Standards

1. Learning and Development
2. Assessment
3. Curriculum & Instruction
4. Learning Environments
5. Programming
6. Professional Learning

For information, please visit-
https://www.nagc.org/resources-publications/resources/national-standards-gifted-and-talented-education/pre-k-grade-12

District Mission Statement

Gifted children are an important resource for solving problems of the future and have the potential to become leaders in society. The North Haledon School District will use the six gifted education programming standards and model an Integrative STEAM (iSTEAM) approach to inspire and challenge our 21st century learners. With special emphasis on Science, Technology, Engineering, Art and Math (STEAM), this rich and rigorous gifted framework will provide students the opportunity to reach their fullest potential and satisfy their intellectual curiosity. Opportunities will be provided for gifted students to engage in meaningful research, to foster critical and creative thinking, and develop problem solving strategies which will allow them to make connections between the STEAM disciplines. The Gifted & Talented Program will capitalize on students' unique abilities, talents, interests, and needs. Students will also be given other programming opportunities which will be provided in the form of Math and Literacy Skills (MLS grades K-4), Enrichment (grades K-4), STEAM classes (grades 5-8), and Advanced classes in ELA (English Language Arts) and Mathematics (grades 6-8).

District Philosophy

The philosophy of the Schoolwide Gifted and Talented Program is that all children have potential for learning. North Haledon's School Wide Gifted and Talented Program will cultivate this potential so that all children achieve success in their school experiences. An appropriate education for all students is the foundation on which this belief is established. North Haledon School District believes all children should be provided a variety of educational opportunities designed to foster maximum development and personal actualization. We believe that giftedness exists across all cultures and socioeconomic levels and must be cultivated correctly in order to grow.

In order to realize their contributions to self and society, Gifted and Talented students require differentiated educational services beyond those normally provided by the regular school program. We support the development and implementation of services, which will assist gifted and talented students to reach their full cognitive and creative potential. Many gifted students will be able to make a beneficial difference to the world, if we give them the tools to do so. North Haledon's School Wide Gifted and Talented Program will cultivate this potential so that all children achieve success in their school experiences. An appropriate education for all students is the foundation on which this belief is established.

Gifted Student Characteristics

(Based on research compiled by Dr. J. Renzulli)

Learning Characteristics:
● Has unusually advanced vocabulary for age or grade level.
● Has quick mastery and recall of factual information.
● Wants to know what makes things or people tick.
● Usually sees more or gets more out of a story, film, etc., than others.
● Reads a great deal on his or her own; usually prefers adult-level books; does not avoid difficult materials.
● Reasons things out for him or herself.

Motivational Characteristics:
● Becomes easily absorbed with and truly involved in certain topics or problems.
● Is easily bored with routine tasks.
● Needs little external motivation to follow through in work that initially excited him or her.
● Strives toward perfection; is self-critical; is not easily satisfied with his/her own speed and products.
● Prefers to work independently; requires little direction from teachers.
● Is interested in many "adult" problems such as religion, politics, and race.
● Stubborn in his or her beliefs.
● Concerned with right and wrong, good and bad.

Creativity Characteristics:
● Constantly asking questions about anything and everything.
● Often offers unusual, unique or clever responses.
● Is uninhibited in expressions of opinion.
● Is a high-risk taker; is adventurous and speculative.
● Is often concerned with adapting, improving and modifying institutions, objects and systems.
● Displays a keen sense of humor.
● Shows emotional sensitivity.
● Is sensitive to beauty.
● Is nonconforming; accepts disorder; is not interested in details; is individualistic; does not fear being different.
● Is unwilling to accept authoritarian pronouncements without critical examination.

Leadership Characteristics:
● Carries responsibility well.
● Is self-confident with children his or her own age as well as adults.
● Can express him or herself well.
● Adapts readily to new situations.
● Is sociable and prefers not to be alone.
● Generally directs the activity in which he or she is involved.

The Identification Process and Sample Program Opportunities

Students in grades K-8 will have multiple measures in identification which may include, but are not limited to, the areas of cognitive development, academic achievement, creative ability, and gifted characteristics. Services will include classroom modifications and may include additional enrichment where appropriate. Information on entry for Memorial and High Mountain will follow on the next page.

All students in grades K-4 will participate in enrichment programs. Students in grades 5-8 will participate in STEAM classes and, if they qualify, in Advanced classes in ELA (English Language Arts) and/or Mathematics (grades 6-8). The classroom teachers and the GIfted and Talented teacher will provide differentiation, learning center activities, flexible grouping, tiered assignments, learning menus, curriculum compacting, independent study projects, and STEAM activities. *(See definitions below.)

*Program Definitions

Differentiation means tailoring instruction to meet individual needs. Whether teachers differentiate content, process, products, or the learning environment, the use of ongoing assessment and flexible grouping makes this a successful approach to instruction.

A **learning center** is typically a designated area within the classroom that provides students with exciting and interesting experiences to practice, enrich, reteach, and enhance their learning. These types of centers are filled with manipulatives, art materials, books, and other instructional tools. Students visit the centers to complete an assignment or learn through different activities.

Flexible grouping is a range of grouping students together for delivering instruction. This can be as a whole class, a small group, or with a partner. Flexible grouping creates temporary groups that can last an hour, a week, or even a month. It's not permanent, but it is a temporary way for students to work together in a variety of ways and configurations depending upon activity and learning outcomes.

Tiered assignments are a method that varies the level of assignments, so all students have a chance to find success and make progress. Teachers tier learning so students are working at different levels of the same task, some more difficult and challenging than others. All students work on, explore, investigate, and learn the same basic material but on differing levels, or tiers.

Learning menus are forms of differentiated learning that give students a choice in how they learn. Each choice on the menu encourages students to engage in an activity that requires actively reading, re-reading, and then summarizing important textbook content. After a student has completed an activity on the menu, the teacher assesses his or her work before she or he can move on. Learning menus come in various forms and can include tic-tac-toe boards, restaurant-like menus, multiple choice grids, etc. For example, students can be given a learning

menu structured like that of a dinner menu with the headings "Appetizer," "Entrée," and "Dessert" and be instructed to follow the order of the menu just as they would in a restaurant. Within each "course" students choose from a list of activities. The assignment sheet includes a well-defined description for how to complete a chosen activity, the possible points one can earn for it, and the textbook section it covers. At least one task must be completed for each book section, although students are always free to choose their own tasks from the menu choices. After the completion of each "course," the teacher assesses before the student moves to the next one.

Curriculum compacting is a technique for differentiating instruction that allows teachers to make adjustments to curriculum for students who have already mastered the material to be learned, replacing content students know with new content, enrichment options, or other activities. Independent study/and or research projects are a practical way for students to have curriculum enhanced.

Independent study helps students to establish purpose and direction for the pursuit of individual interests under the supervision of the gifted or subject area teacher. This type of project involves community resources, classrooms, laboratory, media center, etc. This type of study develops higher cognitive skills through a format which places emphasis on the assimilation of content, the acquisition of information and the processing of data. Products which represent the study are a concrete expression of what is learned. Finally, by capitalizing on individual interests, student involvement is effectively channeled.

Acceleration of learning is available to those students showing high levels of performance in a content area, by their respective teachers. Teachers take into consideration the student's achievement test scores, class performance, recommendations, and grade-level ability, in order to determine the need for placement in a higher grade level, flexible pacing or cluster grouping.

Entry Criteria- Memorial School

Multiple Measures for entry into the program are used- please see chart below.

Grade	CSI (IQ) Score of 124+*	Adapted Renzulli/Hartman Score	F & P Above Grade Level
3rd	x	x	x
4th	x	x	x

Grades K -2 Weekly Enrichment Classes and MLS classes, including Makerspace, will occur for all students Grades K-2.

Grades 3

A CSI score of 124+*, an adapted Renzulli/Hartman scoring 8-16 in Learning Characteristics, 9-18 in Motivational Characteristics, 10-20 in Creativity Characteristics, and F&P above grade level.

Grade 4

A CSI score of 124+*, an adapted Renzulli/Hartman scoring 8-16 in Learning Characteristics, 9-18 in Motivational Characteristics, 10-20 in Creativity Characteristics, and F&P above grade level.

*Students must meet the criteria for InView scores to be considered for the program. This assessment is standardized and given in two different grade levels.

Administration and Gifted and Talented Teachers annually review all students who meet this mark, and further evaluate their performance from there. Other relevant data related to the student's academic performance, such as NJSLA scores, critical thinking skills, etc. may be taken into consideration.

Adapted Renzulli/Hartman Teacher Checklist of Behavioral Characteristics of Gifted (Kindergarten)

Please complete the following inventory.

Student's Name: **Date:**

School: **Grade:**   **Age:**

Teacher Completing This Form:

The characteristics listed below are shown by the child:

1. **to a great degree**
2. **somewhat**
3. **to a small degree**
4. **not observed**

Check the appropriate blank and give an example for all ratings of 1, 2, or 3.

Characteristic	1	2	3	4
Is mature beyond his/her years. *Give an example of how this child shows this trait:*				
Has many different ways of approaching problems. *Give an example of how this child shows this trait:*				
Has interests similar to those of older children or adults in games and reading. *Give an example of how this child shows this trait:*				
Is observant. *Give an example of how this child shows this trait:*				

Is aware of problems others often do not see. *Give an example of how this child shows this trait:*				
Wants to know how and why. *Give an example of how this child shows this trait:*				
Asks many questions about a variety of subjects. *Give an example of how this child shows this trait:*				
Is able to plan and organize. *Give an example of how this child shows this trait:*				
Sticks to a task once it is begun. *Give an example of how this child shows this trait:*				
Reads books independently. *Give an example of how this child shows this trait:*				
Sets high standards for self. *Give an example of how this child shows this trait:*				
Likes to solve difficult problems. *Give an example of how this child shows this trait:*				

13. When you compare this child with others the same age, do you think she/he is:

_____about average   ____somewhat above average   ____considerably above average

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Adapted Renzulli/Hartman Teacher Checklist of Behavioral Characteristics of Gifted
(Grades 1-4)

Please complete the following inventory.

Student's Name: **Date:**

School: **Grade:**   **Age:**

Teacher Completing This Form:

The items listed on these pages represent those characteristics most frequently noted in children who possess outstanding talents or academic abilities. Please read each item and rate the child on a scale of one to four as follows:

1.   I have noticed this characteristic so often that I believe it occurs almost all of the time.
2.   I have noticed this characteristic frequently, but there have been a few occasions when this did not seem to be the case.
3.   I have noticed this characteristic occasionally, but it is not generally true of the child.
4.   I have never observed this characteristic.

Whenever possible, please give an example of the behavior. **Always** give an example when giving a one (1) rating.

Please total the scores on each page and record in the table below:

	Score
Learning Characteristics	
Motivational Characteristics	
Creativity Characteristics	

Please return completed forms to: _____

Part I: Learning Characteristics

1. Has unusually advanced vocabulary for age or grade level, uses terms in a meaningful way, has verbal behavior characterized by "richness" of expression, elaboration, and fluency.	
2. Possesses a large storehouse of information about a variety of topics (beyond the usual interests of youngsters his/her age)	
3. Has quick mastery and recall of factual information.	
4. Has rapid insight into cause-effect relationships, tries to discover the how and why of things; asks many provocative questions (as distinct from informational or factual questions); wants to know what makes things (or people) "tick".	
5. Has a ready grasp of underlying principles and can quickly make valid generalizations about events, people, or things; looks for similarities and differences in events, people, and things.	
6. Is a keen and alert observer; usually "sees more" or "gets more" out of a story, film, etc. than others.	
7. Reads a great deal on his/her own; usually prefers adult level books; does not avoid difficult material, may show a preference for biography, autobiography, encyclopedias, and atlases.	
8. Tries to understand complicated material by separating it into its respective parts, reasons things out for himself/herself; sees logical and common sense answers.	
Total (add # 1-8)	

Part II. Motivational Characteristics

1. Becomes absorbed and truly involved in certain topics and problems, is persistent in seeking task completion. (It is sometimes difficult to get him/her to move on to another topic.)	
2. Is easily bored with routine tasks.	
3. Needs little external motivation to follow through in work that initially excites him/her.	
4. Strives toward perfection; is self critical; is not easily satisfied with his/her own speed or products.	
5. Prefers to work independently; requires little direction from teacher.	
6. Is interested in many "adult" problems such as religion, politics, race-- more than usual for age level.	
7. Often is self assertive (sometimes even aggressive), stubborn in his/her beliefs.	
8. Likes to organize and bring structure to things, people, and situations.	
9. Is quite concerned with right and wrong, good and bad; often evaluates and passes judgment on events, people, and things.	
Total (add # 1-9)	

Part III. Creativity Characteristics

1. Displays a great deal of curiosity about many things; is constantly asking questions about anything and everything.	
2. Generates a large number of ideas or solutions to problems and questions; often offers unusual ("way out"), unique, clever responses.	

3. Is uninhibited in expressions of opinion; is sometimes radical and spirited in in disagreement; is tenacious.	
4. Is a high-risk taker; is adventurous and speculative.	
5. Displays a good deal of intellectual playfulness; fantasizes; imagines (I wonder what would happen if…), manipulates ideas (i.e. changes, elaborates upon them), is often concerned with adapting, improving and modifying institutions, objects, and systems.	
6. Displays a keen sense of humor and sees humor in situations that may not appear to be humorous to others.	
7. Is unusually aware of his impulses and more open to the irrational in himself/ herself, shows emotional sensitivity.	
8. Is sensitive to beauty, attends to aesthetic characteristics of things.	
9. Nonconforming, accepts disorder; is not interested in details; is individualistic, does not fear being different.	
10. Criticizes constructively; is unwilling to accept authoritarian pronouncements without critical examination.	
Total (add #1-10)	

Entry Criteria- High Mountain School

To qualify for Gifted & Talented, a student needs to:

- Attain a 124 or higher* on the InView Cognitive Skills Assessment. This is administered to students in Grades 3 and 6.

- Read at least one grade level above expectations on Fountas and Pinnell reading assessment.

- Fall within the designated range on the adapted Renzulli-Hartman Scale.

*Students must meet the criteria for InView scores to be considered for the program.

Administration and Gifted and Talented Teachers annually review all students who meet this mark, and further evaluate their performance from there. Other relevant data related to the student's academic performance, such as NJSLA scores, critical thinking skills, etc may be taken into consideration.

<p align="center">**ADAPTED RENZULLI-HARTMAN RATING SCALE (GRADES 5-8)**</p>

Please complete the following inventory.

Student's Name: **Date:**

School: **Grade:**   **Age:**

Teacher Completing This Form:

The items listed on these pages represent those characteristics most frequently noted in children who possess outstanding talents or academic abilities. Please read each item and rate the child on a scale of one to four as follows:

       1 – Seldom or never observed

2 – Observed this characteristic occasionally
3 – Observed this characteristic frequently or often
4 – Observed this characteristic most or almost all of the time

LEARNING CHARACTERISTICS

1. Has unusually advanced vocabulary for age or grade level; uses terms in a meaningful way; has verbal behavior characterized by "richness" of expression, elaboration, and fluency.

2. Possesses a large storehouse of information about a variety of topics.

3. Has quick mastery and recall of factual information.

4. Has rapid insight into cause-effect relationships; tries to discover the how and why of things; asks many provocative questions; wants to know what makes things "tick."

5. Has a ready grasp of underlying principles and can quickly make valid generalizations about events, people, or things; looks for similarities and differences in events, people, and things.

6. Is a keen and alert observer; usually "sees more" or "gets more" out of a story, film, etc. than others.

7. Reads a great deal on his/her own; usually prefers adult level books; does not avoid difficult material; may show a preference of biography, autobiography, encyclopedias, and atlases.

8. Tries to understand complicated material by separating it into its respective parts; reasons things out for himself/herself; sees logical and common sense answers.

MOTIVATIONAL CHARACTERISTICS

1. Becomes absorbed and truly involved in certain topics or problems; is persistent in seeking task completion (It is sometimes difficult to get him/her to move on to another topic).

2. Is easily bored with routine tasks.

3. Needs little external motivation to follow through in work that initially excites him/her.

4. Strives toward perfection; is not easily satisfied with his/her own speed or products.

5. Prefers to work independently; requires little direction from teachers.

6. Is interested in many "adult" problems such as religion, politics, race – more than usual for age level.

7. Often is self assertive (sometimes even aggressive); stubborn in his/her beliefs. ☐

8. Likes to organize and bring structure to things, people, and situations. ☐

9. Is quite concerned with right and wrong, good and bad; often evaluates and passes judgment on events, people, and things. ☐

6. Displays a keen sense of humor and sees humor in situations that may not appear humorous to others. ☐

7. Is usually aware of his/her impulses and more open to the irrational in himself/herself; shows emotional sensitivity. ☐

8. Is sensitive to beauty; attends to aesthetic characteristics of things. ☐

9. Nonconforming; accepts disorder; is not interested in details; is individualistic; does not fear being different. ☐

10. Criticizes constructively; is unwilling to accept authoritarian pronouncement without critical examination. ☐

CREATIVITY CHARACTERISTICS

1. Displays a great deal of curiosity about many things; is constantly asking questions about anything and everything. ☐

2. Generates a large number of ideas or solutions to problems and questions; often offers unusual "way out", unique, clever responses. ☐

3. Is uninhibited in expressions of opinion; is sometimes radical and spirited in disagreement; is tenacious. ☐

4. Is a high risk taker; is adventurous and speculative. ☐

5. Displays a good deal of intellectual playfulness; fantasizes; imagines; manipulates ideas; is often concerned with adapting, improving and modifying institutions, objects, and systems. ☐

LEADERSHIP CHARACTERISTICS

1. Carries responsibility well; can be counted on to do what he/she promised and usually does it well. ☐

2. Is self confident with children his/her own age as well as adults; seems comfortable when asked to show his work to the class. ☐

3. Seems to be well liked by his/her classmates. ☐

4. Is cooperative with teacher and classmates; tends to avoid bickering and is generally easy to get along with. ☐

5. Can express himself/herself well; has good verbal facility and is usually well understood. ☐

6. Adapts readily to new situations; is flexible in thought and action and does not seem disturbed when the normal routine is changed.

7. Seems to enjoy being around other people; is sociable and prefers not to be alone.

8. Tends to dominate others when they are around; generally directs the activity in which he/she is involved.

9. Participates in most social activities connected with the school;
can be counted on to be there
if anyone is.

10. Excels in athletic activities; is well coordinated and enjoys all sorts of athletic games.

Please list any additional information about this student on the bottom of this form.

Eligibility of Special Education Students and English Language Learners

All students within the North Haledon have their individual data reviewed for entrance to Gifted and Talented, regardless of other services received. The Cognitive Skills Index of all students is assessed in multiple grade levels to gauge an understanding of holistic cognitive abilities.

Special Education students received a detailed battery of assessments during the identification and re-evaluation processes. This data provides specific insight into the strengths of the learner

and can assist with identifying those who meet the definition of Gifted and Talented. This data is in addition to the multiple forms of data gathered for all students.

English Language Learners data is gathered from the ACCESS for ELL and W-APT assessments given at the beginning and end of the school year. These assessments and instructor observations during these assessments provide valuable feedback as to the learners abilities.

All students participate in placement testing for Advanced level Mathematics and English courses in grades 5, 6, and 7 to determine eligibility for these classes.

Should a student meet criteria and enter the Gifted and Talented program and/or an advanced level course, modifications can be made to the alternate subject area in which the learner may need assistance.

Parental Complaint Process

Pursuant with Chapter 338, and the supplement to Chapter 35, Title 18A of New Jersey Statute,

"C: 35-38 5:

 a. An individual who believes that a school district has not complied with the provisions of this act may file a complaint with the board of education. The right to file a complaint shall be set forth in the board's policy on gifted and talented education. The policy shall be linked to the homepage of the board's Internet website. The board shall issue a decision, in writing, to affirm, reject, or modify the district's action in the matter.

b. The individual may then file a petition of appeal of the board's written decision to the Commissioner of Education through the Office of Controversies and Disputes in accordance with N.J.S.18A:6-9 and the procedures set forth in State Board of Education regulations."

Out of District Gifted Peer Interaction Opportunities

The Gifted and Talented Program is one that continually emphasizes that learning goes beyond the walls of a classroom/school. In line with the research on curriculum for gifted/talented students, the program seeks to achieve its objectives by a wide variety of strategies. Frequently these strategies include going outside the school. Field trips are not objectives of the program;

they are necessary strategies to achieve objectives. The district will take part in the Passaic County Gifted and Talented Consortium, so students in Grades 4-8 can interact with other Gifted and Talented students outside of their school district. The students will be afforded the opportunities, depending on their grade levels, to take part in a variety of events, such as, but not limited to the following: Battle of the Books, Quiz Bowls, Technology Days, Symposium Days, and others.

High Mountain Program Exit Protocol

Those students participating in pull-out programs are expected to continue to meet the criteria set for identification. The following criteria must be maintained for continued participation:

1. New Jersey State Testing should rate at the meeting or exceeding expectations level in at least one content area.

2. Students need to have achieved a cumulative grade of 90% or better in all core subject areas.

3. Students should not have failing grades in any of their subject areas.

4. Students should be willing to be challenged and therefore complete assignments pursued.

5. Students need to attend each meeting (unless a regular scheduled classroom teacher requests a student to remain in class), arrive at meetings on time, and be prepared to work.

6. Students should complete any required missed classwork or assignments for their classroom teachers.

 7. Students need to show respect for the program, each other, and the materials.

A failure to meet any of the above requirements will result in probation and parents will be notified. Continued/multiple offenses will result in removal from the programming options offered. Any student dismissed from the program may have the opportunity to be reviewed for possible re-admission, during the following academic year. Students that decide to remove themselves from program offerings are asked to advise the Gifted and Talented Enrichment coordinator in writing, with a guardian's signature.

Curricular Program Resources: Curricular Dimensions

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It is important to understand certain rules which govern curricular dimensions for the gifted:

No single dimension constitutes an appropriately differentiated curricula for all gifted learners.

An appropriate differentiated curriculum is based on the intersection and interaction of all the curricular dimensions: content, process, product, and affect.

An appropriate curriculum for the gifted includes the elements of the regular curriculum that are responsive to the gifted student's needs.

An appropriate curriculum for the gifted adapts any or all of the dimensions of the curriculum to provide for the individual gifted learner and allows both teacher-directed and student-directed learning.

An appropriate curriculum for the gifted is comprehensive and includes opportunities for acceleration when appropriate and enrichment where necessary; it does not favor one type of curricular form over another.

Source: Kaplan, Sandy, National/State Leadership Training Institute for Gifted/Talented

Curricular Program Resources: Principles of a Differentiated Curriculum

Present content that is related to broad-based issues, themes, or problems.

Integrate multiple disciplines into the area of study.

Present comprehensive, related, and mutually reinforcing experiences within an area of study.

Allow for the in-depth learning of a self-selected topic within an area of study.

Develop independent or self-directed study skills.

Develop productive, complex, abstract, and/or higher level thinking skills.

Focus on open-ended tasks.

Develop research skills and methods.

Integrate basic skills and higher level thinking skills into the curriculum.

Encourage the development of products that challenge existing ideas and produce "new" ideas.

Encourage the development of products that use new techniques, materials, and forms.

Encourage the development of self-understanding, i.e., recognizing and using one's abilities, becoming self-directed, appreciating likenesses and differences between oneself and others.

Evaluate student outcomes by using appropriate and specific criteria through self-appraisal, criterion referenced and/or standardized instruments.

Source: National/State Leadership Training Institute on the Gifted and Talented

Curricular Program Resources: Bloom's Learning Domains

The Cognitive Domain
The Cognitive Learning Domain is exhibited by a person's intellectual abilities. Cognitive learning behaviors are characterized by observable and unobservable skills such as comprehending information, organizing ideas, and evaluating information and actions.

Evaluation	judges the value of information
Synthesis	builds a pattern from diverse elements
Analysis	separates information into part for better understanding
Application	applying knowledge to a new situation
Comprehension	understanding information
Knowledge	recall of data

These skills are arranged into six hierarchical levels, beginning from the simple and building to the most difficult. These six categories are arranged on scale of difficulty, meaning that a learner who is able to perform at the higher levels of the taxonomy, is demonstrating a more complex level of cognitive thinking.

The Affective Domain
The Affective Learning Domain addresses a learner's emotions towards learning experiences. A learner's attitudes, interest, attention, awareness, and values are demonstrated by affective behaviors. These emotional behaviors which are organized in a hierarchical format also, starting from simplest and building to most complex, are as follows:

Internalizing Values	behavior which is controlled by a value system
Organization	organizing values into order of priority
Valuing	the value a person attaches to something
Responding to phenomena	taking an active part in learning; participating
Receiving phenomena	an awareness; willingness to listen

These five categories can be thought of in a scaffolding manner, one must be learned in order to move onto the next category.

The Psychomotor Domain

The psychomotor domain refers to the use of basic motor skills, coordination, and physical movement.

Origination	a learner's ability to create new movement patterns
Adaptation	a learner's ability to modify motor skills to fit a new situation
Complex Overt Response	the intermediate stage of learning a complex skill
Mechanism	the ability to perform a complex motor skill
Guided Response	the early stage of learning a complex skill which includes imitation
Set	a learner's readiness to act
Perception	the ability to use sensory

Curricular Program Resources: Domain Scaffolding Outline

The Gifted and Talented Program will model a scaffolding of higher order skills, as outlined below, based on the educational needs of students with demonstrated gifted behaviors.

I. Cognitive Domain

  A. Thinking Skills

    1. Critical Thinking (Bloom)
      a. Knowledge- the remembering of previously learned material.
      b. Comprehension- the ability to grasp the meaning of material.
      c. Application- using old principles to solve new problems.
      d. Analysis- breaking down material into constituent parts.
      e. Synthesis- putting together and rearranging elements into a new whole.
      f. Evaluation- giving judgment concerning ideas, things or events.

    2. Creative Thinking
      a. Fluent Thinking- to think of the most:
          1. Generation of a quantity
          2. Flow of thought
          3. Number of relevant responses
      b. Flexible Thinking- to take different approaches:
          1. Variety of kinds of ideas
          2. Ability to shift categories
          3. Detours in direction of thought
      c. Original Thinking- to think in novel or unique ways
          1. Unusual responses
          2. Clever ideas
          3. Production away from obvious
      d. Elaborate thinking: to add on to:
          1. Embellishing upon an idea
          2. Embroider upon a simple idea or response to make it more elegant
          3. Stretch or expand upon other ideas

  B. Communication

    1. Receptive
      a. Reading
      b. Listening
    2. Expressive
      a. Speaking

b. Writing

C. Research Skills

II. Affective

A. Self-Knowledge

B. Risk-taking- to have courage to:
1. Expose oneself to failure or criticism
2. Take a guess
3. Function under conditions devoid of structure
4. Defend own ideas

C. Decision Making- to have the ability to:
1. Define problem
2. Select alternatives
3. Evaluate consequences
4. Make decisions
5. Reflect on decisions

D. Curiosity- to be willing to:
1. Be inquisitive and wonder
2. Toy with an idea
3. Be open to puzzling situations
4. Ponder the mystery of things

Curricular Program Resources: Overview of STEAM

Using STEAM education results in students who take thoughtful risks, engage in experiential learning, persist in problem-solving, embrace collaboration, and work through the creative process. These are the innovators, educators, leaders, and learners of the 21st century!

Why is STEAM important for students?

- It will prepare students for college and to learn 21st century skills (workplace readiness)
- It improves academic performance by a hands-on, minds-on methods (engagement and interest)
- It's not just about passing a test, it's about transitioning theoretical academics into action or applied academics
- It places students in the role of problem solvers which is good for all students
- It provides students opportunities to be creative, innovative, entrepreneurs, collaborators, and how to work in teams
- It allows students to see the connections between STEAM disciplines

*STEAM

S — Science, which deals with and seeks the understanding of the natural world.

Science is very concerned with what is (that already exists) in the natural world.

T — Technology is the modification of the natural world to meet human wants and needs. In the broadest sense, technology extends our abilities to change the world; to design, cut, shape, or put together materials; to move things from one place to the other; to reach further with our hands, voices, and senses.

E — Engineering is the profession in which acknowledgement of the mathematical and natural sciences gained by study, experience, and practice is applied intentionally with judgment to develop ways to utilize economically the materials and forces of nature for the benefit of mankind.

A- Art integration establishes a hands-on creative learning environment, engaging students with the content on multiple levels and better developing problem solving skills.

M — Mathematics is the science of patterns and relationships. It provides an exact language for technology, science, and engineering.

Curricular Program Resources: Features of iSTEAM

In today's age, new jobs will require a background in the STEAM fields, according to the National Commission on Mathematics and Science for the Twenty-first Century. The Gifted and Talented program will use the iSTEAM approach which is highlighted as follows:

The basic premise behind an integrative approach to STEAM education is for students to be able to understand the connections between the disciplines, identify, problem solve and apply solutions to real world situations. In grades K-4, the inquiry will be guided learning/project based and in grades 5-8 it will be project/problem based.

iSTEAM is the integration of Science, Technology, Engineering, Art, and Mathematics into a new transdisciplinary (focus on an issue, both within and beyond discipline boundaries with the possibility of new perspectives) subject in schools.

The Features of an integrative STEAM (iSTEAM) program:

• Is collaborative (teachers, students, community)
• Is student centered
• Is focused on real world problem solving
• Is linked to 21st century workforce readiness skills
• Is delivered in a problem or project based (hands-on, minds-on method promoting applied academics
• Is relevant, meaningful and purposeful to the student's life (interesting and engaging)
• Is connected to core content areas and beyond
• Teaches systems thinking (beyond the technical) social, economic, etc. (integrated)
• Is not restricted to the four walls of the classroom (the world is the classroom)
• Includes peer teaching, coaching and reflection
• Has connections to corporate experts
• Has strong connection to parents and community
• Has ongoing Professional Development for teachers
• Has learning extensions and connections to science centers, museums and informal education resources
• Is career oriented based on global forecast
• Has elements of play with a purpose (make it fun but intentional)
• Has an evaluation component to continually modify to mirror technology and global workforce needs

The iSTEAM approach models the Problem Based Learning (PBL) Process as outlined below.

PBL Process

Present and implement your solutions

Analyze options, plan events, who will do what, when, where, why and how — Develop an Action Plan

Narrow your list of Essential Questions to specific points

List what you know need to know about the Scenario

List what you know about the Scenario

Read and Analyze Scenario

Gather Information

Brainstorm