GIFTED EDUCATION PROGRAM HANDBOOK

SERVING THE NEEDS OF STUDENTS WHO ARE GIFTED

This program handbook is intended as a practical guide for both beginning and experienced teachers. Additional information and support is also available from the

Gifted Program office at the Educational Leadership Center:

445 W. Amelia Street—6th Floor
Orlando, Florida
407-317-3316

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Why is there a gifted program?

The mission of gifted education is to provide programs and services that meet the unique cognitive, social, and emotional needs of gifted students, preparing them to succeed in a global society.

Project GAGE, 1993

Students who are gifted require educational experiences different from those received by their age peers – experiences that reflect the gifted child's accelerated pace of learning, power of abstraction and conceptualization, abilities to plan, organize, execute, and evaluate, and intense sensitivity to his or her environment. To meet the needs of these children, the gifted program must provide a curriculum that is qualitatively different from regular curricular offerings. By varying the *content* taught, the instructional *strategies used* to teach it, the *environment* in which it is taught, and the *student's role* in learning, the gifted curriculum should meet the objectives of challenging and stretching students' academic talents, developing in them a desire for excellence, and fostering their self-awareness and self-esteem. Therefore, the overarching goal of the gifted program is to enable children who are gifted to become independent, lifelong learners who are prepared to assume roles as leaders of and active participants in a world of rapid change and complexity.

This handbook will provide guidance to the teacher of the gifted in creating, developing, and maintaining effective gifted services in Orange County Public Schools.

"High expectations are the key to everything."

Sam Walton

What are the goals of the gifted program?

Because of their unique characteristics, students who are gifted have unique educational needs. Thus, curriculum is adapted or designed to accommodate these needs. The following curricular goals frame the types of educational experiences most appropriate for the student who is gifted:

- to facilitate the mastery of basic skills at a pace and level appropriate to the capabilities of the student who is gifted

- to foster critical thinking and reasoning skills

- to foster creative thinking

- to build research skills that develop a variety of methods for collecting, analyzing, synthesizing, evaluating and documenting information

- to provide an environment that fosters an individual's understanding of his/her strengths, weaknesses, and potentialities

- to develop problem-solving skills

- to facilitate opportunities for students to develop goals, plans for the future, and leadership skills

"For one who has no objective, nothing is relevant."

Confucius

What are the elements of an effective gifted education program?

_____ A teacher endorsed, or working toward endorsement, in gifted education

_____ Evidence that students are being challenged to perform to their maximum potential; genuine differentiated programming, not "more of the same" or simply acceleration of content

_____ Evidence of clearly defined cognitive goals, objectives and activities

_____ Evidence of goals and activities related to social/emotional development; guidance and counseling issues are addressed on a regular basis

_____ Evidence that the teacher recognizes varying student learning styles and needs and presents lessons that honor students' unique talents and differences

_____ Evidence of correctly completed program paperwork (eligibility forms, Gifted EP, Gifted Semester Reports, etc.) and compliance with legal statutes

_____ Evidence that varied and creative teaching strategies and materials are being utilized; less use of lecture/direct instruction method

_____ Evidence that appropriate modifications are being made for students from special populations (twice exceptional, culturally diverse, highly gifted, ESOL, underachievers, etc.)

_____ Evidence of regular, effective communication with students, families, faculty (newsletter, etc.)

_____ Evidence that parent/guardian meetings and/or workshops are offered

_____ Evidence that students are actively engaged during each class meeting (discussions, presentations, group work, conferences, simulations, learning centers, etc.)

_____ Evidence of student mastery of problem solving models and participation in problem solving activities (creative problem solving, Future Problem Solving, Odyssey of the Mind, etc.)

_____ Evidence of the use of futures studies

_____ Evidence that students are participating in service learning projects

_____ Evidence that students are engaged in original product development

_____ Evidence that varying assessment strategies are utilized

_____ Evidence that students participate in self and peer evaluation of performance

_____ Evidence that the student is cognitively stimulated to use analysis, synthesis, and evaluation as regular thinking processes

_____ Evidence that the student uses metacognitive processes regularly

What are the characteristics of an effective teacher of the gifted?

Although a broad base of knowledge is an asset when dealing with students who are gifted, the one attribute that veteran teachers of the gifted rate "number one" is a *sense of humor*. Below you will find other traits that are essential when working with students who are gifted:

Strong self concept

High energy level

Appreciation for giftedness

Creativity

Intellectual, cultural, and artistic interests

Proficiency in a variety of instructional techniques

Enthusiasm

Competence in effectively individualizing instruction

Strong achievement orientation

Commitment to the role of gifted educator

Excellent communication skills

Effective interpersonal skills

Flexibility

Strong process orientation

Proficiency in divergent thinking and creative problem-solving

"The teacher is the most important variable impacting the success of educational approaches for gifted learners." Callahan/Renzulli

How does a teacher obtain an endorsement in gifted education?

Teachers in the state of Florida become qualified to teach gifted education by obtaining an endorsement that is added to their regular teaching certificate. Completion of the following five courses in gifted education is required:

- **Nature and Needs of the Gifted** *(Prerequisite to other four classes)*
- **Educational Procedures and Curriculum for the Gifted**
- **Guidance and Counseling of Gifted Students**
- **Theory and Development of Creativity**
- **Education of Special Populations of Gifted Students**

Instructional Strands/Major Topics Included

Nature and Needs of the Gifted *(Prerequisite to other four classes in the OCPS Add-on Plan)*	Guidance and Counseling of Gifted Students	Curriculum and Instructional Strategies for Teaching Gifted Students	Theory and Development of Creativity	Education of Special Populations of Gifted Students
• Student Characteristics • Cognitive, Social, and Emotional Needs • History • Current Research • Identification and Placement	• Motivation • Self-Image • Intra- and Interpersonal Skills • Career Options • Emotional and Social Needs for Gifted Students • Communication Strategies for Teachers	• Modification of Curriculum Content • Instructional Process • Student Products • Learning Environment	• Theory • Development and Implementation • Elements of Creativity • Assessment of Creative Outcomes	• Student Characteristics • Programmatic Adaptations • Minorities • Underachievers • Disabled • Economically Disadvantaged • Highly Gifted

There are two ways to obtain credit for the above courses:

1. Inservice credit earned through a school district in the state of Florida offering add-on endorsement classes for gifted education

2. Credit earned through a college or university class

Orange County Public Schools offers standardized gifted endorsement courses through FDLRS (Florida Diagnostic and Learning Resources System) and Orange County Instructional Development. Sixty inservice points are awarded for each of the courses. Instructional Development provides the courses without charge (except for texts and materials) for Orange County Public School teachers. Registration is conducted on the signmeup website (**www.signmeup.ocps.net**), but not completed until payment for the text is received in the Gifted Services office. Contact Gifted Services (407.317.3316) for further details about registration.

Also acceptable through the OCPS Add-on Plan are online courses completed through the Northeast Florida Educational Consortium (**www.nefec.org).** Upon completion of a course through NEFEC, forward a copy of the certificate showing completion and an OCPS Professional Development Services Training & Participation Records to the Gifted Services office (ELC-6th floor).

College or university credit hours are easily convertible to inservice points. Once a teacher receives endorsement, further inservice points in gifted education become usable to renew certification in any subject area. To add gifted endorsement teachers need to contact OCPS Certification and apply for a new certificate.

Some other district-developed add-on endorsement plans may provide courses that could be transferred to the OCPS add-on plan. It is very important to consult with the Gifted Program office or the OCPS Certification Department before registering for a course through another entity, since it may not be acceptable through OCPS.

In order to be considered in field, a teacher must have academic certification for the subject and content of the course and gifted endorsement. An unendorsed teacher assigned as a school's teacher of the gifted is considered to be teaching out of field until the requirements for gifted endorsement are met. Out-of-field teachers must complete a minimum of two endorsement courses per school year. For answers to questions regarding timelines, paperwork, and eligibility for gifted endorsement, contact Orange County Public Schools **Certification Department at 407-317-3221 or certification@ocps.net**.

"Real education consists in drawing the best out of yourself."

Who are the gifted?

Florida's Department of Education defines a gifted student as one who scores two standard deviations above the mean on an individualized test of intelligence. In addition, the gifted student must exhibit a majority of gifted characteristics and demonstrate a need for the program. These characteristics include:*

Note:
Orange County Public Schools documents the demonstration of gifted characteristics and need for the program by using the Gifted Characteristics Checklist (see **Forms** section) for the appropriate grade level of the student (K-3 or 4-12).

Cognitive Characteristics

- unusual retentiveness and the capacity to learn at faster rates

- advanced comprehension

- unusual capacity to manipulate

- unusually varied interests and curiosity

- advanced language development

- accelerated pace of thought process

- heightened capacity for seeing unusual and diverse relationships

- ability to generate original ideas and solutions

- early ability to use and form conceptual frameworks

- persistent, goal-directed behavior

- increased ability to find, solve, and act on problems

- early development of sophisticated thought processes (e.g., thinking in alternatives, abstract terms, sensing consequences, making generalizations)

Affective Characteristics

- unusual emotional depth and sensitivity

- unusual sensitivity to expectations and feelings of others

- keen sense of humor

- heightened self-awareness accompanied by feelings of being different

- idealism and strong sense of justice

- early development of an inner locus of control

- advanced levels of moral judgment

* adapted from Barbara Clark in <u>Growing Up Gifted</u>

How are potentially gifted students located?

The influence of social class, race, English-language acquisition and ethnic origin on the development of talent potential is an issue of concern in gifted education.   Florida schools are working toward more equitably identifying students who are gifted.   Students from under-represented populations may lack life experiences needed to enable them to successfully complete the academic tests for giftedness.   Therefore, it is especially important that school gifted specialists make themselves and referring faculty members aware of characteristics that may be demonstrated by potentially gifted students.

Potentially gifted students from under-represented populations may exhibit the following characteristics:

- be highly creative and productive in small groups when the subject is of interest
- have a broad factual knowledge in areas of interest
- have interest in non-academics, e.g., games, sports, music, humor
- have variable test scores in standardized and teacher made tests
- have incomplete or poorly done daily work
- be tardy or absent often, but still be able to maintain high grades
- be self-taught in subject areas usually not taught in school
- have unrealistic goals -- too high or too low
- be easily distracted and distracting
- have inconsistent motivation and behavior in school

"That most sensitive, most delicate of instruments —
the mind of a child."

Henry Handel Richardson

How does a child receive gifted services?

The process of identifying and placing students who are gifted consists of four steps: **Screening, Evaluating, Staffing,** and **Developing an Educational Plan (EP)**.

Typically, identification begins with **Screening** for potentially gifted children. At this stage of the process, a group IQ test is given to students who have been referred-- usually by teachers, but also by parents, friends, or even themselves--because they demonstrate high achievement or exhibit high ability. Those who score at the required level on the screening test are then scheduled for individual testing.

At the scheduled time, a psychological **Evaluation** is made. A school psychologist administers an individualized IQ test--the Wechsler Intelligence Scale for Children, 4th Ed. (WISC-IV), Differential Abilities Scales, 2nd Ed. (DAS-II), Stanford- Binet Intelligence Scale, 5th Ed., , Reynolds Intellectual Assessment Scales (RIAS) Universal Nonverbal Intelligence Test (UNIT), or other approved measure--to determine the student's intellectual potential. In Florida, a student must score two or more standard deviations above the mean in order to qualify for the gifted program, scoring at least 130 on most of the evaluation instruments. Standard error of measurement can be considered in the evaluation on a case-by-case basis.

In conjunction with the testing, the EP team considers a checklist of gifted student characteristics, submitted by regular classroom teachers, to determine if the student does indeed exhibit the traits of gifted children. In addition, the child's demonstrated need for a gifted program is examined.

Students from under-represented populations in gifted programs (English Language Learners and low-income) can be considered for gifted placement based on Orange County's Plan B matrix. Generally, the testing psychologist refers children who are from one of the specified populations and who achieve an IQ score of 115 or above and have received at least two-thirds of the possible points on the Gifted Characteristics Checklist. A portfolio is collected and scored using the Gifted Assessment Matrix. While each district in the state may identify and place students using its own Plan B criteria, students placed in gifted programs in other Florida districts are eligible for services in any area of the state. **For further information regarding Plan B criteria and procedures, contact the Gifted Program Office at 407.317.3316.**

Once the evaluation is completed, a group comprised of the psychologist, the staffing coordinator at the school, the school principal or designee, the gifted and regular education teachers, the child's parent(s) or guardian(s), or others who can contribute information meet to conduct a **Staffing**, during which time the information previously gathered is further evaluated. The staffing committee determines the student's eligibility

for the gifted program, and ultimately, an appropriate placement is made based upon the student's identified needs.

If the staffing committee indicates that the child should enter the program, the committee completes the entire process by **Developing an Educational Plan (EP)** in accordance with the data presented in the meeting.   Essentially, the EP establishes cognitive and affective goals for the student to meet during the school year. EP goals are based on the student's strengths and needs due to their giftedness.

In conjunction with developing the student's educational plan, the Exceptional Student Education (ESE) Funding Matrix must be completed for each new student in the gifted program.   The funding matrix should reflect the student's needs and the services provided as detailed on the EP or IEP.   For assistance and/or training in completing this instrument, check with the school staffing coordinator or placement specialist. The Matrix Training Handbook will also provide guidance in this process and is available through the ESE contact for the school.

Although the above steps conclude the process of identifying and placing students who are gifted in the program, it should be noted here that there are several follow-up procedures as well.   For instance, at appropriate intervals the parent(s), gifted education and regular education teachers, and staffing chairperson (or designee) review the EP to see if goals have been met and to develop a new EP if indicated. In addition, the parent(s), the gifted and regular education teachers, and the staffing coordinator at the school may opt to meet at any time to re-evaluate the student's placement in the program. A characteristics checklist is completed and used to determine if the program still meets the student's needs. No new IQ testing is required.

For further information and forms relating to the procedures and requirements for writing and reviewing Educational Plans and other paperwork requirements and an online tutorial, *Identifying Our Gifted Learners*, refer to the OCPS gifted education website at https://www.ocps.net/cs/ese/programs/gifted/Pages/default.aspx.   The   placement specialist or coordinator at each school or the ESE contact for each learning community also provides assistance to teachers with questions concerning eligibility and review procedures.

How do students qualify for more gifted services?

A relatively small percentage of elementary students who are gifted whose needs cannot be met in the regular gifted service model may be considered for extended gifted services, or AAIM (Academically Accelerated Individualized Model). After an observation period in the regular gifted classroom of at least six months, referral for AAIM could be considered, based on the student's demonstrated need.

The first step, the referral, must be made through the child's gifted education teacher or the principal. A local school re-evaluation review team, composed of the gifted education teacher, regular education teacher, school guidance counselor and/or staffing coordinator, and parent(s), is first to consider the referral. Team members examine the student's academic performance to determine if the student's needs are being met in the regular class and in the gifted program. If the team determines that they are not being met even after several classroom interventions (such as curriculum compacting, acceleration, enrichment activities, multi-level grouping, additional time in the gifted classroom, etc.) have been provided, Consent for Re-evaluation is obtained and the process of AAIM referral can begin.

The re-evaluation team will collect the data needed to complete the AAIM portfolio (e.g., behavioral checklists, cognitive and achievement test results, letters of recommendation, academic records, and a portfolio of work). The gifted teacher, who functions as the case manager throughout this part of the process, will then send the completed portfolio to the district gifted office.

In March and April, a group of select personnel and the district gifted program specialist (or designee) will review the student's portfolio. If the student's total score exceeds an established minimum, he or she is considered eligible for AAIM Services. Regardless of the score, the results of the review will be returned to the home school, and a re-evaluation educational planning committee meeting will be held. Parents are invited to the meeting, which will also be attended by the school principal (or designee), the gifted and regular education teachers, the staffing coordinator at the school, and the program specialist or designee. At this time, an appropriate placement for the student will be decided.

The AAIM services are currently provided at Blankner School. The district provides transportation if requested for identified students.

"Children are not born knowing the many opportunities that are theirs for the taking. Someone who does know must tell them."

Ruth Hill Viguers

Who are the special populations of students who are gifted and how can their needs be met?

Celebrating Diversity in the Gifted Classroom

To teach effectively in a multi-cultural setting with students who are gifted of varying exceptionalities, we need to self-examine: "Who am I?" "What is my value system?" "What are my educational beliefs about learning, students and teaching?" "Do I see my students' strengths or do their disabilities govern how I perceive them and their capabilities?"

James Baldwin reminds us in "A Talk to Teachers" (1988) that teachers need to be "color conscious," to recognize not only the students' cultural connection to their literacy and learning but to recognize their own connections. For example, teachers need to allow the students to write about their own cultural identity rather than giving them ideas and literature exclusively chosen by the teacher. Self-esteem rises, which will affect future writing in a positive way.

The teacher of the gifted also needs to recognize the impact of a disability on a student who is gifted in terms of his/her ability to learn and create. To be gifted and to have the limitations imposed by other exceptionalities creates a frustration for the student almost beyond comprehension. Pretending that a disability does not exist denies part of the child's identity. Working with the child and allowing him/her to share the world in which he/she lives encourages the child to process feeling, learn compensating strategies, and receive support from peers. Because almost all students who are gifted experience some frustration at the disparity between their different intelligences and abilities, the multi-exceptional child may discover a peer group who can identify with personal experiences.

Addressing the social/emotional needs of students who may be culturally different or have a disability requires an awareness of the world in which they live. Teachers should gather and use information about the cultural backgrounds and value systems of the minority groups with whom they come in contact. They should familiarize themselves with the students' disability and discover the challenges imposed by the disabilities. Working closely with other exceptional education teachers to become familiar with compensating strategies will help maximize the benefits the students receive in both exceptional programs.

Teachers should assist with problems of alienation. Students need help in developing a strong self-image and communication skills. They also need to realize available options and alternatives. In designing a program that will meet the needs of the culturally diverse and multi-exceptional students, the teacher should design curriculum with the strengths of these students in mind. Unreasonable economic demands should be

avoided and resources for study and information gathering need to be made accessible. Special care should be taken to create a support, nurturing environment where all students are valued and respected. Locating and using appropriate mentors can provide essential, positive connections with successful role models.

Multi-Exceptional Students Who Are Gifted

Multi-exceptional students who are gifted are persons of outstanding ability or potential who are capable of high performance despite additional conditions such as visual, hearing or orthopedic impairments, emotional disturbances, or learning disabilities. They require services beyond those normally provided in the regular classroom that are designed to consider both their giftedness and talents and the special conditions.

Even though it may seem like a contradiction in terms, students can clearly be gifted and have disabilities. Some prominent examples of gifted and talented people with disabilities include Helen Keller, Leonardo da Vince, Albert Einstein, Vincent Van Gogh, Franklin D. Roosevelt, Steven Hawking, and Stevie Wonder. Helping students who are gifted find examples of other gifted individuals with disabilities may increase their realization that they can indeed be active, contributing members of society.

Because each child must be viewed as an individual, it is impossible to say conclusively what the effect of a given disability will be on a gifted child's performance.   The disability may disguise the person's true abilities and potential. Educating with only the student's disability in mind often results in inappropriate educational placement and underdevelopment of talents.   A collaborative relationship between the teacher of the gifted and the other exceptional teachers is crucial in gathering information and in creating a program that will best meet the needs of that child.

However, a physical disability can often impair development in other areas because it limits access to information, resources, and opportunities. If care is taken to improve the total educational environment, negative effects can be minimized and often reversed to give positive results.   If a concentrated effort is made to serve the physical, intellectual and creative needs of these students, a better balance between physical and mental development can be achieved.

An emotional disability impacts a student who is gifted in many ways. This disability can be expressed differently in various situations and to differing degrees. An emotionally disabled student may not exhibit the disability in all situations.

The teacher's understanding attitude, acceptance, and expectations are instrumental in successfully meeting the needs of emotionally disabled students who are gifted. Sharing with the student the valuable contributions he/she may be able to make to the class may increase the likelihood of positive behaviors. Since planning is the key

to success, the program should reflect thoughtful activities and lessons designed to include the child with his/her disability.

Including students who are gifted with disabilities in classroom activities requires that the teacher make deliberate efforts to create a positive, supportive atmosphere where every student's strengths are the focus. By treating **all** students with respect and appreciating the gifts that each child brings to the classroom, the teacher can serve as a powerful role model. Most students who are gifted are eager to discuss how it feels to be different and the prejudices that they have encountered. These discussions provide the student who is gifted, regardless of disabilities, an opportunity to find out what they have in common.

Teacher and assessing with multiple intelligences allows all students to be successful. By providing many ways to learn information and explore ideas, **all** students have access to the curriculum. By allowing students to select the format a final product will assume, the teacher provides **every** student in the class with a way to be successful. The disabled gifted child is not the only one whose product is different. **All** children receive an opportunity to shine in the medium that best displays their talents.

Characteristics of the Gifted Child with a Disability

- May exhibit a specific learning disability which hampers performance in one or more basic academic skills areas
- May be hampered in academic tasks because of a language barrier or other significant cultural differences
- May exhibit strong compensatory ability and positive self-concept if nurturing from home and early schooling experiences have been positive
- May exhibit superior large-motor skills, physical coordination
- May prefer to learn through kinesthetic mode
- May exhibit superior verbal skills
- May exhibit uneven achievement test results
- May exhibit superior results on a standardized "intelligence" test if acknowledged areas of learning deficit are taken into consideration
- May exhibit superior leadership ability

Meeting the Needs of Low SES Students in the Gifted Program

The experiences of many students from low socio-economic status (SES) backgrounds are sometimes markedly different from those of their intellectual peers. Often these children have assumed responsibilities and roles within their homes far beyond their chronological years. Limited financial resources may have precluded their participation in activities often regarded as inherent experiences of childhood. Adult family members' energies as well as resources are necessarily focused on the survival of the family unit rather than on the enrichment of childhood.

Six conditions affecting the impact of socio-economic status on the child's performance are:

- pressure to achieve
- language modeling
- academic guidance
- family activeness
- the intellectuality of the home
- the work habits of the family

Some characteristics have been found to differentiate low SES children from the more affluent gifted populations. Differences in the quantity and quality of their reading, their awareness of parental aspirations for school and college success, their attitudes toward school, and the attitudes toward sports have been documented (Frierson, 1965). However, the personalities and interests of low SES gifted children had more commonality with more affluent gifted children than they did when compared with average children. Frierson also found that when low SES children are placed in a gifted program by the second grade, their attitudes, achievement, and aspirations differ markedly from other low SES children by the time they reach the upper grades.

Although not all children will express all the traits, the following strengths and limiting attitudes and abilities are often observed in students who are gifted from low SES families:

<u>**Observed Strengths**</u>	<u>**Limiting Traits**</u>
• High math ability • Alert, curious • Fluency in nonverbal communication • Imagination, originality, creativity in thinking • Flexibility in problem solving • Responsive to visual media • Responsible social behavior • Entrepreneurial ability • Spatial (not temporal), physical (not aural), inductive, and content-centered learning styles • Independence of action • Learning quickly through experience • Retaining and using ideas and information well • Showing a desire to learn in daily work • Leadership ability in peer group • Ability to generalize learning to other areas and to show relationships • Resourcefulness • Imaginative story telling, language rich in imagery • Mature sense of humor • Responsiveness to the concrete	• Less experience in reading • Negative attitude toward school • Deficiency in listening skills • Decreased cognitive functioning skills (sequence, cause-effect, categorizing, etc.) • Problems in language skills • Inability to focus on long-term goals • Low self-concept

Teachers can address the learning needs of these students by insuring the implementation of a variety of strategies. Most of these are compatible with activities already common in the gifted program and may simply need to occur more frequently to better address all students' learning needs.

Teacher Strategies for Working with Low SES Students Who are Gifted

- **Flexible organization of the classroom** when allowing for learning groups and individualized instruction is essential.

- **Mentorship and community involvement** provide a real connection between the world of school and the world in which the student lives.

- **Business or agency partnerships** with companies that are interested in developing the potential of the under-represented populations.

- **Counseling** to assist in the development of self-esteem and positive attitudes toward school and society helps empower the child and provide the tools necessary to enter the world of success.

- **Resources for study and learning must be made accessible to students and family members.** By making parents and students aware of access to free resources in the community, the student's home learning environment can be greatly expanded. A parent newsletter detailing upcoming events at public libraries, recreation departments, cultural fairs, municipal concerts, art shows, summer and after-school programs, etc., will increase family awareness of ways in which their child's life can be enriched.

- **Unreasonable economic demands must be avoided.** For example, some students cannot bring in foods for an ethnic foods day. Always provide students with a list of options including some that do not require financial resources. Save old magazines, colored paper scraps, etc., and allow students to select materials they will need to complete projects at home. Be aware that some students may not have scissors, paste, markers, typewriters, or computers available to them and should not be penalized or stigmatized because they do not.

- **Consider fund-raising activities** to raise money to pay for field trips in which all students can participate.

- Remember that some students' family members' work schedules preclude their supervision and/or involvement with the homework process and attendance at school functions. Be sure to **invite ALL family members and family friends to participate in school activities.**

- **Suggest that family members read to and with their children.** Maintain a classroom library that can be used by older family members.

- **Form partnerships with the child's regular education teacher(s) and guidance counselor** to share strategies and information.

By welcoming students from all economic and social classes into the gifted classroom, celebrating their diversity, and identifying the gifts they bring to the classroom, the cycle of poverty can be broken and students can be taught the tools necessary for success in work and in life.

CHARACTERISTICS OF CULTURALLY DIFFERENT GIFTED PUPILS

INTELLECTUAL ABILITY:
1. Accelerated mental development relative to socio-cultural and age peers
2. Ability to integrate conflicting and discrepant cultural information
3. Ability to recognize what is appropriate in different cultural systems
4. Ability to use knowledge from a variety of traditions
5. Ability to cope with a variety of cultural settings; exhibits problem solving and reasoning skills in a variety of languages

SPECIFIC ACADEMIC ACHIEVEMENT:
1. High achievement in a specific area, in-depth, focused achievement, self-propelled and motivated, deep commitment to any area of learning
2. High academic achievement in traditional academic areas relative to socio-cultural and chronological peers
3. High achievement and knowledge of cultural traditions other than the mainstream culture

HIGH ACHIEVEMENT:
1. High adaptive behavior in the home, community, peer group, organizations
2. Ability to produce something outstanding and valued by own culture
3. Distinguished contributions to the community, church, youth group, etc.
4. Consistent ability to accept adult responsibilities

CREATIVE ABILITY:
1. Creative use of words and symbols in more than one language
2. Creative use of language; development of own verbal games, songs, puns, etc.
3. Creative compensation for disadvantages—use of adversity, restructuring available resources, creative toys and games with limited resources
4. Innovative solutions, generating original ideas, intellectually challenging ideas of teachers, asking "why/why not?"
5. Psycho-motor creativity, instantaneous decision-making, integrating physical agility, problem solving, visual-motor skills to specific situations
6. Creative divergent thinking, takes initiative, persistent, dominant, perseverant, with strong sense of purpose

LEADERSHIP ABILITY:
1. Respect for peers in school and/or socio-cultural group
2. Recognized as a leader in socio-cultural group
3. Acceptance of responsibility as a role model
4. Ability to organize group activities and influence others
5. Ability to inspire confidence in others, make people feel important and valued
6. Keen awareness of the group process and ability to manipulate
7. Charismatic, humor, spontaneity, people-oriented, empathetic

Students who are Gifted who are English-Language Learners (ELL)

Second language acquisition is affected by many factors and variables. A student arriving from a war-torn country, an under-developed country, or fleeing an oppressive political system will take longer to adjust to our schools than an exchange student or one arriving with parents. Teachers must look at all the following variables and provide the student with time, kindness, comfort, sympathy, and cultural awareness.

• **Language Proficiency –** A student who is proficient in his/her native language has an advantage learning the second language over the student who has not learned the proper structure and grammar of his/her native language.

• **Ethnicity or Nation of Origin –** National or ethnic groups who use alphabets and sound systems not used in English will find learning and speaking English more difficult.

• **Quantity and Quality of Interaction –** Students who have begun to learn their English in a formal setting (school or through the family's fluent English) will have advantages over the students who are self-taught through the processes of movies, television, and street conversation. The former will be able to go ahead to higher levels of learning through their reading and writing skills. The latter may be unwilling to learn the more formal English by repairing the grammatical errors learned and thus become fossilized in English. This fossilization may occur in young teens through elderly people.

• **Amount of Time Spent in the Process –** When a student is newly arrived from the native country, the cultural shock may hinder the student from learning until the adjustment period is completed. In general, students who are gifted who are not native English speakers acquire their new language rapidly, but for all ELL students there will be a period of functioning in both languages. It is important that access to gifted services not be delayed because of language acquisition and students who are gifted are identified and served.

ADAPTING MATERIALS/STRATEGIES TO TEACH ENGLISH-LANGUAGE LEARNER (ELL) STUDENTS WHO ARE GIFTED

1. Learn your student's name(s). Find out how he/she like to be addressed. Learn the names of your students' parents or other family members who may come to school on behalf of your LEP students.

2. Whenever possible, place your LEP student next to another student who speaks the same first language. Have the peer take notes to share with the LEP student.

3. Record class lessons for LEP students to review.

4. Speak naturally, using intonation and pauses as you speak.

5. Keep directions concise and easy to understand.

6. Use hands-on activities and visual aids whenever possible.

7. Check comprehension on a regular basis. Make sure students are seated where they can see and hear well.

8. Provide an alternate assignment when the lesson is not easily understandable.

9. Adjust or shorten assignments, if needed, to allow for success.

10. Let the student know you value his/her language and culture. If translators are available, allow students to complete written assignments in their first language.

11. Invite the student to teach class members his or her language or about his/her cultural background.

12. Encourage peer interaction. Group work facilitates learning through sharing and reinforcing concepts.

13. Encourage the student to indicate when he/she does not understand you. This may be difficult for some cultural backgrounds.

14. If the student is having difficulty with specific vocabulary items, encourage the use of a dictionary (bilingual and/or English).

15. Avoid forcing the student to speak until he or she is ready. Don't overstress correct grammar or pronunciation.

16. Provide some accommodations when testing or use alternative forms of evaluation.

17. Communicate on a regular basis with the ESOL Teacher and guidance counselor.

18. Integrate instruction of reading, writing, listening and speaking.

19. Provide opportunities for the practical use of the English language.

20. Enjoy the uniqueness the student brings to you and your class. Working with LEP students can be one of the most personally and professionally rewarding experiences in teaching.

THE CULTURALLY DIVERSE GIFTED CLASSROOM: ESSENTIAL ELEMENTS

➢ The program should encourage and provide opportunities for the students who are gifted to develop special skills and talents that build and expand on individual and cultural strengths.

➢ The program should make changes in the learning environment allowing for more individual and cultural preferences.

➢ The program should provide the time and the flexibility for students to work on self-selected topics, to pursue in-depth topics and to share the learning with appropriate audiences.

➢ The program should provide time for the students who are gifted to be with other students who are gifted as well as with all other students.

➢ The program should focus on fostering ongoing, positive emotional and social development and enhance interactions with individuals of similar and differing backgrounds.

➢ The program should include a guidance component that encourages the gifted to develop special talents/skills, focus on special aspects of being gifted, and delve into moral, social and ethical dimensions.

➢ The program should focus on helping students develop a sense of responsibility to self and others.

➢ The program should focus on the acceptance, exploration and celebration of divergent views and cultures.

➢ The program should focus on decision- making and problem-solving.

➢ The program should provide opportunities for students to acquire goal-setting and self-evaluation techniques.

➢ The program should provide access to varied resources of materials and places, and experts in the field of study. These resources should reflect diversity in our culture.

➢ The program should focus on helping students explore various career options, considering abilities, cultural traditions and family and personal values.

How is the curriculum differentiated for students who are gifted?

In order to meet the special needs of students who are gifted, curriculum must be differentiated in its *content, process, product, and environment*. To provide activities that are appropriate for the student who is gifted, the curriculum must be modified to provide greater depth, breadth, and a higher level of complexity. Outcomes for students who are gifted are based on *Florida's Frameworks for K-12 Gifted* Learners, available at the OCPS Gifted Education website, https://www.ocps.net/cs/ese/programs/gifted/Pages/. While gifted education teachers should use the complete document for curriculum planning purposes, the student outcomes from the *Frameworks* appear below.

Student Outcomes – Framework Goals and Objectives

1. By graduation, the student identified as gifted will be able to critically examine the complexity of knowledge: the location, definition, and organization of a variety of fields of knowledge.
   a) Locate, define, and organize a field of study as it relates to the broad spectrum of knowledge.
   b) Identify and illustrate basic principles and the foundational concepts that are central to understanding the essence of a field of study.
   c) Identify and apply investigative methodologies that are followed in a selected field of knowledge.

2. By graduation, the student identified as gifted will be able to create, adapt, and assess multifaceted questions in a variety of fields/disciplines.
   a) Identify significant questions within and across disciplines.
   b) Generate significant questions within and across disciplines.
   c) Evaluate and refine significant questions within and across disciplines.

3. By graduation, the student identified as gifted will be able to conduct thoughtful research/exploration in multiple fields.
   a) Use a variety of research tools and methodologies.
   b) Use and manipulate information sources.
   c) Detect bias and reliability in the process of research.
   d) Apply ethical standards to research and analyses.

4. By graduation, the student identified as gifted will be able to think creatively and critically to identify and solve real-world problems.

a) Identify and investigate a problem and generate supportive arguments from multiple perspectives of a complex issue.
b) Analyze the relevance, reliability, and usefulness of data to draw conclusions and forecast effective problem solutions.
c) Use and evaluate various problem-solving methods to determine effectiveness in solving real-world problems.

5. By graduation, the student identified as gifted will be able to assume leadership and participatory roles in both gifted and heterogeneous group learning situations.
a) Accept divergent views to positively effect change.
b) Identify leadership traits and qualities as they appear in different individuals and situations.
c) Manifest significant leadership skills and organize group(s) to achieve project goals.

6. By graduation, the student identified as gifted will be able to set and achieve personal, academic, and career goals.
a) Identify personal strengths and weaknesses and accept challenges in both areas to maximize learning.
b) Assume primary responsibility for learning, including identifying needs and setting reasonable goals.
c) Design plans of action to address benefits and obstacles in achieving goals of personal interest.

7. By graduation, the student identified as gifted will be able to develop and deliver a variety of authentic products/performances that demonstrate understanding in multiple fields/disciplines.
a) Develop products that communicate expertise in multiple fields and disciplines to a variety of authentic audiences.
b) Create products that synthesize information from diverse sources illustrating divergent solutions or perspectives.

What are some instructional strategies for differentiating the curriculum for students who are gifted?

Brief explanations of effective differentiation methods are listed below. Look for more detailed information in the printed sources cited in the **Resource** section of this handbook.

Compacting: In compacting, the essentials of the curriculum are compressed, making sure skills are mastered and concepts understood without belaboring or excessively repeating what the child already knows and can do. Compacting is used only in those areas that represent the student's strengths. After mastery, **extensions** are provided to take the place of work rather than repeat the same work. (See <u>Teaching Gifted Kids in Today's Classroom, ch. 2-3</u>)

Conceptual Techniques: The teacher centers curriculum around a concept-based theme that connects course content across disciplines. Several "Big Ideas" provide a framework for asking essential questions and integrating specific content. *See the "Teaching with Universal Themes"* portion of this section.

Creative Problem Solving: The Osborn-Parnes problem solving process uses fact-finding, problem-finding, idea-finding, solution-finding, and acceptance-finding to identify problems and solutions in real world situations. (See <u>Exploring the Future</u>, pg. 21; <u>The Ambidextrous Mind Book</u>, pg. VI). Several other problem-solving models (e.g., the Future Problem Solving program) have steps that are similar.

Distance Learning: A vehicle for providing off-site instruction via technology to students and teachers.

Externship: An apprenticeship in a professional setting. The student receives credit for the experience and gains insight into facets of professional life. The Florida Course Code Directory outlines externship as a for-credit course for high school students who are gifted (see the Service Model section of this handbook for further details).

Flexible Grouping Practices: Various student grouping techniques allow students who are gifted the potential to fully respond to any curriculum. Key grouping strategies are cooperative learning, cluster grouping, multi-age grouping, large group learning, and independent learning. (See *Flexible Pacing for Able Learners,* <u>Teaching Young Gifted Children in the Regular Classroom</u>, pg.41).

Futures Studies: Developing thinking skills and creativity through the forecasting of possibilities for the future, the generating of alternative actions based on the forecast, and the developing of solutions to problems.   From futures studies, the students gain three significant benefits:

1. Students learn thinking processes and research skills that will be valuable throughout life.
2. Students learn to think about the future in a flexible way, an essential skill in times of rapid change.
3. Students are less likely to be surprised by future occurrences and thus are more likely to shape their future rather than merely react to it.

It is difficult to train students for employment and other life skills that do not yet exist. Still, there are certain elements that, if included in the child's education, would better equip him or her to succeed in a quickly changing future. Participants in the gifted program learn the effective use of futures tools, tools most often used in the business world in strategic planning to predict the long-term effects of trends. The tools included in futures studies may include **futures wheels, Delphi Technique, cross-impact matrix, scenario writing, trend analysis, simulations, and creative problem solving.** (See the following pages for examples of futures tools, Exploring the Future, and Charles Whaley's Enhancing Thinking and Creativity With Futures Studies).

Graphic Organizers: Visual, cognitive tools that help students better learn and understand information and skill (e.g., Venn diagrams, fishbone diagrams, flow charts).

Mentorships: Program experiences in which the student works directly with an individual on a one-to-one basis. Mentors may be adults in the community or other students with similar interests and abilities.

Metacognition: This process describes the identification and assignment of specific thinking skills and strategies to specific problems and situations. It is literally "thinking about thinking."   (See Robin Fogarty's Teach for Metacognitive Reflection.)   Skills associated with metacognition are:

- Planning an approach to a problem
- Selecting a strategy to use
- Application of strategies
- Monitoring (assessing and altering) application of strategies
- Evaluation of Performance

Also helpful in planning for the use of metacognition in the classroom is Creating the Thoughtful Classroom: Strategies to Promote Student Thinking, by Udall and Daniels (see resource section).

Multiple Intelligences: Dr. Howard Gardner from Harvard University proposes that there are at least eight types of intelligence: linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, intrapersonal, interpersonal, and naturalist, and that schools should look for and nurture these multiple intelligences in all children. (See examples on the following pages and Carolyn Chapman's If the Shoe Fits...)

Performance Learning: Learning by doing. Students are immersed in the act of performing an actual learning task. (See Problem-Based Learning and other Curriculum Models for the Multiple Intelligences Classroom, Pg. 125)

Problem-Based Learning: A curricular model that uses an authentic problem as the impetus for learning. It begins with an ill-structured, open-ended problem. Addressing the problem leads students to an investigation from which subject matter, content, and instruction springs. (See Problem-Based Learning in K-8 Classrooms and Problem-Based Learning in Middle and High School Classrooms (both by Ann Lambros).

Project Learning: A curricular model that promotes student interest and involvement. Project learning provides the reason for learning abstract and complex ideas and principles by providing tangible, visible opportunities to create a product. (See Problem-Based Learning and Other Curriculum Models for the Multiple Intelligences Classroom, pg. 77)

Questioning Techniques: Asking probing, higher-level questions that challenge the student to think deeply about an issue and to explore it from all sides is sometimes called divergent questioning. The process might include quantity questions, compare/contrast questions, feelings/opinions/personification questions, and "What would happen if. . .?" questions. (See Nancy Johnson's Questioning Makes the Difference .)

Service Learning: Service learning is a teaching/learning process which involves students in meaningful learning through community service activities. A service learning project enables the teacher to integrate the classroom curriculum with real-life situations and helps students develop skills necessary for success in the adult world. (See Problem-Based Learning and other Curriculum Models for the Multiple Intelligences Classroom, pg. 101 and The Kid's Guide to Social Action, by Barbara A. Lewis.

Technology: Students learn word processing skills, desktop publishing, accessing information from a variety of data sources to enhance their content, process and product development (see technology sources).

Telescoping Content: Instruction that entails less time than is normal (e. g., completing a one year course in one semester, or three years of middle school in two). Telescoping differs from curriculum compacting in that time saved from telescoping always results in advanced grade placement. (From *A Nation Deceived*, volume 2, page 14.)

Tiered Teaching: A strategy in which the teacher presents a concept or idea and the

student assignments or activities match the students' abilities and/or needs. This strategy works particularly well in the classroom that has a wide range of ability and can be used with either individual or group activities. Teachers may wish to group students who are gifted according to their ability to engage in abstract thinking. (See <u>Differentiation: Simplified, Realistic, and Effective</u> (Kingore) and <u>How to Differentiate Instruction in Mixed-Ability Classrooms</u> (Tomlinson).

On the following pages several of the curricular models and strategies are discussed further and examples provided. Components included are:

- **Teaching with Themes**
- **Complex Thinking Skills**
- **Multiple Intelligences**
- **Futures Studies**
- **Developing Creativity**
- **Service Learning**

Consult the Professional Resources section of this handbook for books and other materials that will further aid in the curricular differentiation necessary for gifted and able learners.

A RECIPE FOR SUCCESSFUL TEACHING

1. Begin with the knowledge of learners and learning.
2. Add large quantities of love for the discipline.
3. Stir in guidance and encouragement for learners.
4. Simmer with a passion for learning.

The result—Lifelong Learners!

Teaching with Themes

Universal themes provide teachers with a powerful vehicle for the delivery of instruction. Thematic teaching lends itself to the innate structure of learning because the mind naturally seeks to connect ideas by identifying relationships between concepts, ideas, and pieces of information. Some themes that could be considered "universal" include the following:

Patterns	*Honor*	*Conflict*	*Heroism*	*Power*
Liberty	*Communication*	*Influences*	*Quest*	*Time*
Celebrations	*Order*	*Will*	*Beauty*	*Discovery*
Bridges	*Barriers*	*Justice*	*Truth*	*Cause*
Traditions	*Necessity*	*Revolution*	*Duty*	*Keys*
Structure	*Change*	*Prophecy*	*Symbols*	*Progress*
Generations	*Ignorance*	*Law*	*Experience*	*Humanity*
Prejudice	*Journeys*	*Courage Systems*		
Relationships	*Adaptation*	*Principle*	*Connections*	

Benefits for the Learner:
- A year-long or extended theme lends the learner a strategic and consistent vantage point from which he or she can view his or her educational goals. Wherever the path may lead the individual learner, there is still the unifying point for the group.
- Thematic learning gears information and concepts to the natural learning process by providing "hooks" (Big Ideas) on which the student can "hang" new information and ideas.
- By viewing his or her learning as a personal process and in a holistic manner, the student is empowered because he or she assumes greater responsibility for his or her own learning.

Benefits for the Educator:
- When a teacher orchestrates his or her curriculum around a specific theme, he or she is propelled to more clearly identify and understand the connections between curricular concepts.
- Building around themes will very often encourage a teacher to "shake up" and question his or her standard curriculum and is a creative way to institute change.
- Teachers who view their curricular goals as integral parts of a whole rather than as individual, unrelated components, guide their students to a more profound sense of their personal educational purposes and processes.

For more information, Sandra Kaplan has written extensively on the subject. Many of her books are available through the National Association for Gifted Children (NAGC).

What are Complex Level Thinking Skills?

Complex level thinking skills require basic thinking with multiple possible solutions to situations, judgment on the part of the thinker, and the imposition of meaning on the situation. Types of complex thinking include **critical thinking, creative thinking, and problem solving.** These thinking skills are incorporated into the gifted curriculum and should be addressed as part of the Educational Plan (EP).

Critical Thinking is characterized by the careful analysis of arguments, use of objective criteria, and evaluation of data. It requires inductive thinking skills, deductive thinking skills, and evaluative thinking skills.

Inductive thinking skills

➢ Determining cause and effect
➢ Analyzing open-ended problems
➢ Reasoning by analogy
➢ Making inferences
➢ Determining relevant information

Deductive thinking skills

➢ Using logic
➢ Spotting contradictory statements
➢ Analyzing syllogisms
➢ Solving spatial problems

Evaluative thinking skills

➢ Distinguishing between fact and opinion
➢ Judging credibility of a source
➢ Observing and judging observation reports
➢ Identifying central issues and problems
➢ Recognizing underlying assumptions
➢ Detecting bias, stereotypes, cliches
➢ Recognizing loaded language
➢ Evaluating hypotheses
➢ Classifying data
➢ Predicting consequences
➢ Demonstrating sequential synthesis of information
➢ Planning alternative strategies
➢ Recognizing inconsistencies in information
➢ Identifying stated and unstated reasons
➢ Comparing similarities and differences

Creative Thinking produces new and original ideas. For more information on developing these skills, see the *Developing Creativity* section of this handbook.

Listing attributes of objects/situations	Generating unique ideas (originality)
Generating multiple ideas (fluency)	Generating detailed ideas (elaboration)
Generating different ideas (flexibility)	Synthesizing information

Problem Solving uses a number of sequential skills to solve a problem.

Identifying general problem	Formulating alternative solutions
Clarifying problem	Choosing the best solution
Formulating hypothesis	Applying the solution
Formulating appropriate questions	Monitoring acceptance of the solution
Generating related ideas	Drawing conclusions

Teaching Bloom's Taxonomy of Thinking Skills can be an easy way to help students understand complex-level thinking behaviors.   The Taxonomy includes the lower-level thinking skills that regular classroom experiences spend much time using—knowledge, comprehension, and application. Those that should be developed to a much greater degree, especially in a Gifted classroom, are analysis, synthesis, and evaluation.   The three following pages highlight definitions, actions, and products associated with each of the levels of thinking. The three pieces may be used as a pattern for building a three-dimensional pyramid to which students can refer to guide their choice of activities and products.

Another component of Complex Thinking is Metacognition. **Metacognition** is the consciousness of one's own thinking processes before, during, or following a complex-level thinking session.

Knowledge and control of oneself

Attitudes: This component includes such characteristics as learning from failure and belief in one's abilities.

Attention: This component includes the knowledge that different tasks require different attention levels, the ability to control our attention, and the use of selective attention skills.

Commitment: This component includes the ability to stay with a task even when it is difficult.

Planning: This component involves the deliberate selection of a strategy or plan of actions prior to the activity.

Applying: This component involves the application of the selected strategy.

Regulating and Monitoring: This component involves checking progress toward your intended goal. It also includes the ability to change or adapt a strategy as necessary.

Evaluation: This component involves determining the success or failure of a strategy and also assessing a current knowledge state.

The information about complex thinking skills and metacognition was collected from Creating the Thoughtful Classroom: Strategies to Promote Student Thinking by Anne J. Udall and Joan E. Daniels.

"It is a pity that things weren't arranged so that an empty head, like an empty stomach, would not let us rest until we put something in it."

Red Gray

What are Multiple Intelligences?

THEORY OF MULTIPLE INTELLIGENCES

Developed by Dr. Howard Gardner from Harvard University, MI Theory proposes that there is more than one type of intelligence and that schools should look for and nurture these multiple intelligences in all children:

Verbal/Linguistic: Language skills include a sensitivity to the subtle shades of the meanings of words.

Logical/Mathematical: Both critics and supporters acknowledge that IQ tests measure this area well.

Musical: Like language, music is an expressive medium and this talent flourishes in prodigies.

Visual/Spatial: Sculptors and painters are able to accurately perceive, manipulate and re-create forms.

Bodily/Kinesthetic: At the core of this kind of intelligence are body control and skilled handling of objects.

Intrapersonal: The key is understanding one's own feelings and using that insight to guide behavior.

Interpersonal: The ability to understand and interact effectively with others.
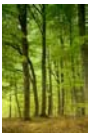
Naturalist: The ability to interact and learn from nature.

Howard Gardner
Frames of Mind

The Changing View of Intelligence

**Intelligence is not fixed
Intelligence can be defined in many ways
What is valued as intelligence will differ radically across human cultures
The definition of intelligence must highlight problem-solving and product-making
as essential elements
What may be more important in intelligence is the decision-making process
preceding an action**

Gardner's Entry Points

"My research has suggested that any rich, nourishing topic--any concept worth teaching--can be approached in at least five different ways that, roughly speaking, map onto the multiple intelligences. We might think of the topic as a room with at least five doors or entry points into it... Awareness of these entry points can help the teacher introduce new materials in ways in which they can be easily grasped by a range of students; then, as students explore other entry points, they have the chance to develop those multiple perspectives that are the best antidote to stereotypical thinking."

-Howard Gardner

Narrational Entry Point

may involve either fictional or non-fictional presentations of the concepts being studied and can result in either written or verbal products.

Logical/Quantitative Entry Point

involves numbers, data, reasoning and the use of processes to solve problems.

Esthetic Entry Point

involves an artistic view of the world and may include artistic, musical, or physical ways of interacting with the topic

Experiential Entry Point

involves students directly with hands-on approaches with materials that embody or express the concept

Foundational Entry Point

focuses on the big "why" and "what if" questions that relate to the topic. Students may write out ideas or share these verbally. This is a very abstract level and may only interest a few students.

Examples of Entry Point Activities

Narrational Entry Point
       write a story, poem, interview, magazine or newspaper article
       recall an event
       explain a process
       teach others

Logical/Quantitative Entry Point
       gather/analyze data (charts/graphs/tables)
       complete an experiment
       make a time line
       display survey results

Esthetic Entry Point
       create a mural or collage
       design costumes
       perform a dance
       create a sculpture

Experiential Entry Point
       participate in a simulation
       market an idea or product
       build a prototype
       act out an event

Foundational Entry Point
       participate in a debate
       write a political platform
       project an issue into the past or future

What are some Futures Studies Tools?

Future Wheels
Future wheels make us more aware of cause and effect. The focus issue is in the center and the spokes show primary and secondary consequences of the initial issue.

Cross-Impact Matrices
A cross-impact matrix helps determine various repercussions resulting from an event. The effects of interconnected variables and events are analyzed by using the grid to record their impacts on each other.

Delphi Technique
The Delphi Technique is used to survey experts to obtain an opinion based on consensus.

Trend Analysis
Trend analysis explores patterns over time. The trend is studied to determine:
    -Direction
    -Rate or intensity
    -General balance
    -Predicted lifetime

Simulations
Simulations are used to explore problems or ideas by creating situations that closely mirror reality (past, present, or future). Students assume roles and create events based on knowledge of the issue being investigated.

Futures Topics

1. The Aging Baby Boom: Their future impact on American society
2. Bio - technology: The six million dollar person
3. Where is the family unit today? Where will it be tomorrow?
4. Genetic innovation (cloning, artificial wombs, embryo transplants)
5. Current social trends which will shape the future
6. Technological growth: good or bad?
7. Religion in the 21st century
8. Forecasting tomorrow: how is it done?
9. Transportation: yesterday, today, and tomorrow
10. ESP, body/mind bio-feedback, and the potential of the human mind
11. Futurists: who are they and what do they do?
12. The world of sports: 2100
13. Alternative energy sources
14. The intelligence pill
15. Ocean farming and resource extraction
16. Wildlife preservation and general maintenance of spaceship earth
17. Nuclear waste: what can we do with it?
18. A doomsday future
19. A utopian future
20. Cybernetics: make way for the thinking machines
21. Our changing values: today and tomorrow
22. Schools of the future
23. Solid waste: trash or treasure?
24. Farming in the future
25. The future of art
26. Social roles in the future
27. Weather modification: good or bad?
28. Dignity in death and euthanasia
29. The nature, and impact of, CHANGE
30. Global equity: the have and the have-not nations
31. Floating cities and other macro-engineering projects of the future
32. Space colonization and industrialization
34. UFOs: what if it's true?
35. Recycling cities for people
36. Planetary and extra-planetary resources for the future
37. Robotics and the future
38. Appropriate technology and voluntary simplicity
39. Endangered animal and plant species: "Once they're gone..."
40. Water: do we have a right to clean water and will there be enough?
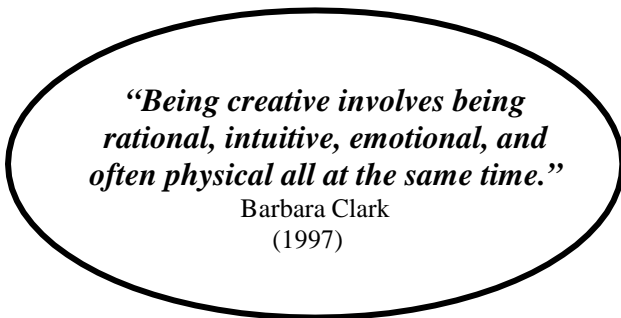
How can creativity be developed?

Recognizing the creativity of the student who is gifted as a very precious resource to our world is one of the special challenges of the educator of the gifted. Allowing students to grow confident in the innate abilities they may have otherwise never discovered can be a student's catalyst for the generation of solutions to future environmentally and technologically complex problems—perhaps a cure for cancer or improvement in an ocean's water quality.

Everyone is capable of creative expression to varying degrees. Creativity has the best opportunity to flourish in the proper environment. One cannot promise that every student exposed to a creative learning environment will become a creative thinker. However, if the student is to have the best possible opportunity to foster creative thinking, the environment should provide:

- A safe, non-threatening open arena for ideas and suggestions
- Access to a knowledge base on a given topic so time is not lost "reinventing the wheel"
- Freedom to try new ways of performing tasks and to exploring the universe
- Flexibility in the schedule to think, rethink, construct and reconstruct
- Time to accomplish the task
- Questions allowed and encouraged
- Respect for the child's privacy, the need to work with a partner or small group
- Reduced anxiety, especially that created by the teacher
- Encouraging attitude to continue in spite of mistakes or errors
- Learning through mistakes
- Avoidance of sex role stereotyping
- Exposure to and excitement for new topics of interest
- Encouragement in self expression
- Emphasis on "*quality*" in productions and performances
- An atmosphere with good books, music, pictures as a natural part of the child's world
- A safe facility that has specific capabilities and space for the assimilation of parts, storage of materials, storage of tools, storage of products, and an area for presentation
- Tolerance for complexity and disorder
- Encouragement of cooperation and sharing
- An accepting attitude that assists students in dealing with failure
- Assistance with teaching construction techniques when appropriate

The following conditions inhibit creative thinking:

- Anxiety
- Competition
- Perfectionism
- Reward systems
- Authoritarianism
- Sex role stereotyping
- Conformity
- Need for success
- Rigid time schedules
- Low self-concept
- Need for security, closure, and acceptance
- Differentiation between work and play
- Discouragement of exploration, using imagination, and inquiry

"Being creative involves being rational, intuitive, emotional, and often physical all at the same time."
Barbara Clark
(1997)

Indicators of Creativity in Young People

➤ Curious about many things; constantly asking questions about everything and anything. High energy level.

➤ Has a large number of ideas and solutions to problems; often offers unusual, unique, clever responses.

➤ Is uninhibited in expressions or opinions; is sometimes radical; is tenacious.

➤ Is a high risk-taker, adventurous, speculative.

➤ Displays intellectual playfulness, fantasizes; imagines, concerned with adapting, improving, and modifying.

➤ Shows emotional sensitivity. Is sensitive to beauty.

➤ Has a keen sense of humor and sees humor in situations others do not.

➤ Criticizes constructively, is unwilling to accept authoritarian pronouncements without critical examination.

➤ May appear very grown up at times and at other times by very childlike.

➤ Has a strong self-image; is nonconforming; accepts a disorder, is not interested in details; is individualistic; does not fear being different.

Processes of Creative Thinking*

Cognitive Processes	Affective Processes

Cognitive Processes

Fluency
The ability to produce a quantity of ideas, possibilities, consequences, or objects

❖ The students would list, improve, brainstorm, and create an unlimited list.

Flexibility

The ability to provide for shifts in categories of thought, to consider and express differing points of view and/or alternate plans

❖ The students would rename, group, combine, categorize, redesign, or rearrange.

Originality

The ability to produce unusual and unanticipated responses, ideas, and/or products that are novel and unique

❖ The students would create, invent, or think of original ideas.

Elaboration

The ability to refine, embellish, develop, or enrich an idea, plan, or product and to make a simple idea elegant by adding detail

❖ The students would improve, expand, predict, pretend, describe, or project.

*adapted from *Scamper On* by Bob Eberle

Affective Processes

Curiosity

The strong desire to know about something, to wonder about, to be inquisitive, and to have the capacity to be puzzled

Risk-Taking

The feeling of freedom to take a guess, use speculation, prediction, and foresight, not being fearful of the unknown

Complexity

The desire to work with details, bring order out of chaos, and to willingly accept a challenge

Intuition

The ability to perceive ideas or information independent of the reasoning processes, playing hunches, and having a quick and keen insight

Conditions for Creative Teaching

Physical Conditions

The teacher should provide for alterations in:

1. room arrangement
2. availability of materials
3. organization of class

Psychological Conditions

Essentials for the development of creativity are:

1. physically and mentally hygienic classroom
2. permissive atmosphere based on certain underlying securities
3. proper motivation and tensions to agitate creative thinking and creative production
4. proper attitude in the teacher and the school administrator toward creativity

Intellectual Conditions

The teachers should provide for:

1. convergent thinking processes
2. divergent thinking processes
3. open-ended learning situations
4. content and situation from all areas of the curriculum
5. specific intellectual skills

Social-Emotional Conditions

The teacher should:

1. reward varied kinds of talents and creative achievements
2. help children recognize the value of their creative achievements
3. be sensitive to needs of children, stressing and praising differences, uniqueness, and originality
4. accept "silly" ideas as a sign of creative thinking
5. help all children to accept the creative child
6. develop a permissive atmosphere with certain limitations clearly defined
7. develop an appreciation for creativity in the classroom
8. avoid the equation of difference with mental illness and delinquency
9. modify the misplaced emphasis on sex roles
10. help highly creative children become less objectionable
11. help to reduce the isolation of highly creative children
12. help highly creative children cope with fears and anxieties

Stages in the Creative Process

1. Preparation
A time for gathering all the raw material which may be used to solve the problem. The student is active and busy, gathering information, observing, planning, analyzing and trying out different solutions.

2. Incubation
A time for the mind to process the information. The individual is passive and quiet, daydreaming and relaxed. The problem, idea, or product is set aside, not worked on consciously.

3. Inspiration
A stage that is not under conscious control, sometimes called the "Aha" stage. The individual is excited, insightful, illuminated, and in a state of realization.

4. Elaboration
A time for testing, confirming, clarifying, and completing the results of the previous stages. The student is active and neat.

A commonly-used tool in creative thinking is the "Scamper Technique:"

SUBSTITUTE

COMBINE

ADAPT

MODIFY, MINIFY, MAGNIFY

PUT TO OTHER USES

ELIMINATE

REVERSE, REARRANGE

"If we wanted no risk we would have sat on the fence and watched the birds fly by."

Wilbur Wright

THE CREATIVE CLASSROOM: TIPS FOR TEACHERS

"It is a fallacy to think of creativity as a 'rare' or 'magical' process.
It is not a characteristic of a chosen few, but a process that is within all of us."

- Strive to have a balanced classroom environment that is neither completely free nor authoritarian.

- Allow pupils to experience mistakes.

- Encourage students to ask and seek answers to important questions.

- Provide a non-threatening atmosphere, using praise and encouragement when appropriate.

- Use criticism carefully and in small doses; use encouragement and help to reduce concern over failure.

- Let your own ideas flow as freely as they will. Model creative thinking and/or introduce other individuals who are able to illustrate the creative thinking process to the students.

- Provide stimuli for as many of the senses as possible to help enhance the creative atmosphere in the classroom.

- Be a participant in the actions—be an active creator and problem solver.

- Share creative products of others with your pupils—art prints, recordings, literature, sculpture. Provide audiences for your students to share their products.

- Protect creativity of students from harsh evaluation and ridicule of other pupils. Set a tone of respect for one another's expressions and work.

- Allow for student selection of materials, activities, and groupings and for recognition of talent among the group.

- Use community resources—libraries, colleges, speakers—with your classes.

- Provide an appropriate amount of time for student thinking and for the accomplishment of tasks. Remember innovation does not always occur immediately.

- Respect the individual's needs to work alone, with a partner, or with a small group on various tasks; encourage self-initiated projects.

- Tolerate complexity and disorder, at least for a period of time; even the best planning and organizing requires some degree of flexibility.

- Be aware that creativity has many dimensions. . .not just "arts and crafts!"

- Encourage divergent thinking, provide space, time, and resources, and use questioning to provoke thinking beyond the "recognition and recall" level; don't try to control every element of the task.   Provide individuals with opportunities to explore, invent, or design the tasks.

- Hold high, but attainable, standards and expectations that call for engagement in thinking and learning.

How can Service Learning Projects be used in the gifted classroom?

An essential component of the gifted program is the student service learning project required in all gifted classes. This essential requirement enables the teacher to integrate classroom curriculum and skills into real world experiences. The parameters can be structured in such a way that the students is able to focus on his/her own learning styles, intelligences, and strengths. In addition to enhancing self-esteem, students acquire skills in leadership, communication, and organization and in using appropriate and effective personal qualities, all areas addressed in the standards in *Blueprint 2000* gifted outcomes. Outreach to the community provides additional public relations/awareness of the gifted program.
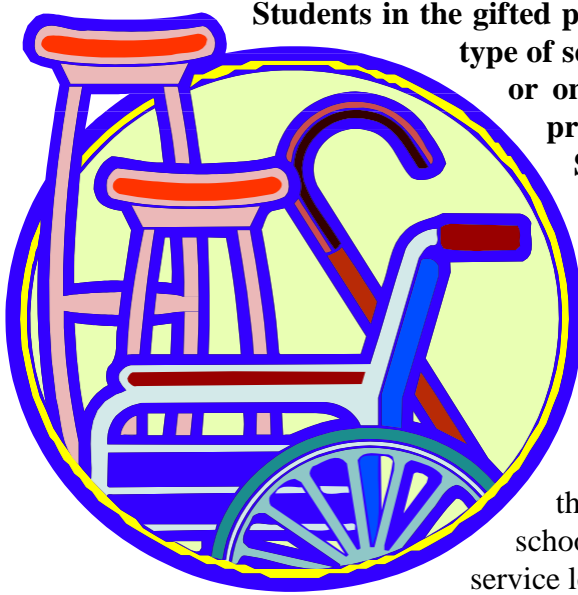
Students in the gifted program are expected to be involved in some type of service project, whether on a short-term basis or on a larger scale. The time frame for each project will vary depending on its scope. Students should spend a minimum of ten (10) hours per semester on some aspect of service learning. Service learning projects can be considered one of the student products required in the gifted program.

Students may choose their service learning projects as a vehicle for participation in the Community Problem Solving division of the Future Problem Solving program. High school students who are gifted may incorporate their service learning requirement into the Florida Academic Scholars Certificate Program. Additional information on this program is available in all high schools.

Students at all levels may need help in developing and implementing a service learning project. Service learning projects should NOT be "assigned" by the teacher with no input from the student. All students should participate in activities that address the following areas:

- identification of a need, problem, or concern
- determination of a plan of action or solution
- implementation of this plan or solution
- reflection upon and evaluation of the entire process

Younger students may need more assistance in the planning process and may benefit from participation in a class project. Small group and class service learning opportunities should be offered to students as they become more experienced in designing and implementing service learning projects. Sample forms to assist with the process follow.

The intrapersonal evaluation process is crucial in maximizing cognitive, social and emotional growth in the service learning experience. Students may keep journals and complete self-evaluation activities each time they volunteer. Students might answer questions such as:

- What did I learn about myself?
- How did I learn about someone?
- Was there something I might change or do differently?

Another viable method of intrapersonal evaluation is to have students share answers to the following questions in a class discussion.

- What were my goals or objectives in choosing this project?
- What was the most frustrating part of the experience?
- Of what am I most proud?
- What skills did I learn or practice that will be helpful in other places?

Students may also choose to create a final product that reflects their service learning experience. A photo collage, videotape, short story, or a poem is an excellent way for students to communicate the truly important lessons that can be learned through service in the community,

One other method of self-assessment is the rubric. This instrument allows students to evaluate their performance by marking "quality" or "not yet." Although this form has some merit, it does limit the student for forcing a "yes" or "no" type of answer. Caution should be used because the rubric may not involve true assessment but rather create a pass or fail mentality. Students need the chance to rectify a "not yet."

Students should be encouraged to determine projects that will meet their own unique needs. **Teachers should NOT assign specific service learning projects to students.** Students need to feel personally committed to the project. Below are examples of various types of service learning projects.

- Identify and solve a school or community problem
- Create and distribute a brochure about pet owner responsibilities
- Plant a butterfly garden beside the school
- Volunteer with younger students in the school
- Develop and implement a "Hurricane/Tornado Awareness" program for the community
- Volunteer in a peer tutoring program

- Create a school orientation video or handbook for new students
- Participate in a letter writing campaign to lawmakers concerning a relevant issue
- Develop and present holiday programs for hospitals or day care centers
- Volunteer at local libraries or public service agencies
- Volunteer to work with disabled children in programs such as Special Olympics or Very Special Arts
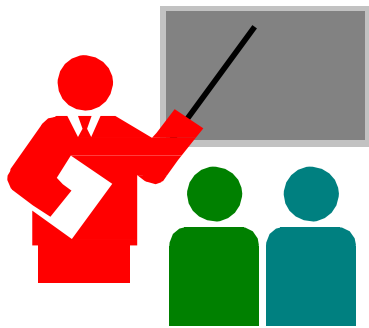
Service Learning Projects

Key Points to Remember

- Service learning projects are a requirement for students in the gifted program.

- Service learning projects **MUST be selected, planned, implemented and evaluated by the students.** Teacher guidance and monitoring is recommended.

- Service learning projects may be completed on an **individual** basis, in **pairs, small groups, or as whole class projects.**

- Gifted service learning projects may be joined with other, pre-existing school or community service projects.

- Service learning projects may be considered as student products required by the gifted program.

- Some type of **evaluation** or product of the service learning project experience is required. Methods for reporting will vary.

- Students may prefer to do a variety of projects that add up to a total of ten or more hours.

How can students be engaged in original product development?

When presented with a new topic or theme, most students who are gifted are bombarded with a vast amount of original ideas. Students who are gifted may therefore initially approach a topic with great enthusiasm. However, if they are only provided with a task that limits them to repetition of preexisting ideas, they may lose enthusiasm or drop the task altogether. It is vital, therefore, that they are allowed and required to utilize their own ideas toward the development of original products that demonstrate their personal and gained knowledge of the topic. For further information, see Florida's Frameworks for K-12 Gifted Learners, especially Goal 7.

Examples of original products:

Remembering:

- Brainstorm prior knowledge on the life of Thurgood Marshall

Understanding:

- Diagram the known effects of pollution in Orlando's lakes

- Make a mobile of the animals found in Brazil

Applying:

- Create a scrapbook of items that Anne Frank might have had before or during her years of hiding

- Design a city of the future

- Rewrite the Bill of Rights as you believe it should apply to your own household

Analyzing:

- Create a survey to distribute to middle school, high school and college students and then chart the results

- Mind map multiple solutions to a problem

Evaluating:

- Write an editorial concerning the effects of a new transportation system being built in your city

- Hold a debate on a current issue

- Role-play a court case and determine a verdict

Creating:

- Invent something

- Create an informational video on the usefulness of recycling

- Hold a dramatic presentation of a student-written play

- Create a multi-media presentation on the art of the 19th century

"The most critical aspect of achieving a goal is not whether we achieved it, but rather the knowledge we gained during the process of achieving."

- Glover and Midura

How are students who are gifted assessed?

If students who are gifted are engaged in the development of original products that vary as much as the individual students themselves do, then students should be provided not only with the expectations and goals of the task, but also with a form of assessment that is applicable to that particular task. In addition, if the student is being asked to produce a quality product, then, in return, they should be provided with clear, effective and valuable feedback. This feedback or assessment can be achieved through a variety of means.

A) Rubrics

A prescribed set of instructions, criteria, or rules that emphasize critical elements and/or direct conduct expected when completing a task. A rubric can be used as a checklist of requirements for a task, a tool for assessing the quality of a product throughout its development, or as a source for scorable assessment (graded).

B) Self-Assessment

The act of thinking, meditating, or pondering upon one's work and/or learning in a cognitive, verbal or written manner (scored or unscored) in order to evaluate one's own accomplishments.

Self-Assessment allows for the acknowledgement of one's strengths and weaknesses in order to foster growth and improvement in future tasks.

C) Peer Assessment

The act of students evaluating one another in a verbal or written manner (scored or unscored) in order to gain understanding of the effectiveness of their accomplishments. Peer Assessment provides a student with multiple perspectives on their work.

D) Portfolio Assessment

The act of using an album or scrapbook, which includes a collection of a student's work, in order to demonstrate and evaluate change, growth and accomplishments over time.

E) Student-Led Conferencing

A method whereby students take responsibility in reporting and sharing work with others with the purpose of communicating strengths, achievements, and future goals. Refer to **Communication** section of this handbook for details on this process.

Assessment as it Relates to Creativity

When teaching students who are gifted, often it will be necessary to assign grades. The idea of assigning grades for creativity-based assignments seems to be in direct conflict with the underlying principles of creativity. However, we remain bound by a system that requires some type of grading process.

The teacher should consider the following in assessing and grading in the creative classroom:

- Assessment should not depend on the artistic quality or "subjective worth" of the creativity exhibited by students. When students realize that the quality of the product itself is not being judged, creativity and the creative environment in the classroom will not be reduced or inhibited.

- Assessment should be based on such measurable domains as participation, fulfillment of assignment requirements, and the implementation of creative techniques presented in class.

Reporting Student Progress

Elementary:

K-5 students who are gifted can be evaluated on the progress report generated through the Portal to Exceptional Education Resources (PEER) Educational Plan.

Secondary:

6-12 students who are gifted who participate in either a resource or content classroom are assessed on the traditional report card, which is completed each grading period or on the progress report generated through the Portal to Exceptional Education Resources (PEER) Educational Plan. In addition, periodic conferences, including student-led conferences, are suggested.

What are some possible models for serving students who are gifted?

Gifted Education in the State of Florida has been undergoing many changes in the last decade, and the rate of change will no doubt accelerate in the years to come. The ESE funding matrix has altered the way gifted programs are funded, allowing an increased allocation for 25 hours per week for each student who is gifted, rather than for only the hours the student spends in the gifted classroom. In the future, it is expected that students will be identified for gifted programs in a different way, using multiple criteria. These two changes alone will have long-term effects on the numbers, distribution, characteristics, and needs of the students in the gifted population in Orange County Public Schools and allow for more variety in the way gifted services are delivered.

Individual schools within Orange County are choosing to provide gifted educational services in different ways. School decision-making teams should gather information about their particular gifted population to address student needs in the most appropriate way. On the following pages, a few of the more commonly-used service models are outlined, with characteristics and impacts of each.

Some important guidelines to consider in initiating or changing a school service model include:

Since the matrix provides funding for students all week in any setting, non- gifted students can be included in the service model where appropriate. In these cases, the school must develop and report criteria for including other students in gifted classes, keeping in mind that the non-gifted students do not receive weighted funding to support the services.

Service must be provided by a teacher or teachers endorsed in gifted by the State of Florida.

The local school is responsible for notifying parents of students who are gifted of any changes in the gifted service model. Including parents in the decision-making role is recommended.

Cluster grouping students who are gifted at each grade level is greatly encouraged, regardless of the service model chosen.

Adequate space and resources must be provided by the school for any school- based program and must be in place before the program is initiated.

Any changes to a school's gifted program should be in place long enough to allow for adjustment and assessment. A minimum three-year trial period is recommended for any selected model.

District-Approved Gifted Program Service Models
Elementary School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
A. **FULL-TIME MODEL**	Students remain in the gifted program for all core curriculum areas. Students who are gifted remain grouped together throughout the school day.	Curriculum includes competencies of the basic skills curriculum with an interdisciplinary approach. Depth and complexity differentiated to meet gifted state Curriculum Frameworks and student EP goals. Includes acceleration in student strength areas. Documentation of mastery of grade-level skills can allow for pace more suited to students who are gifted.	Differentiated materials and technology required. Teachers will need gifted endorsement and Elementary certification. Acceleration requires more textbooks and above-grade-level materials.	Significant Effect Size (ES=0.49) in grades K-6 (full-time grouping) ES=0.57 (content-based acceleration) Instruction tailored to needs of gifted students	Addresses student needs for affiliation with gifted peers. Teachers and other faculty members trained in current strategies for dealing with unique affective needs of students who are gifted Possible underexposure to total school population.	Challenge of communication is minimized because general and gifted curriculum delivered by the same teacher or team. Parent-teacher communication resembles that for other classrooms.	Usually best for high-achieving students who are gifted. Can accommodate large numbers of students who are gifted as well as smaller numbers with careful consideration. Addresses mandate to provide gifted services in area of student strength.	Minimizes scheduling conflicts, reduces class size in regular education. Shortage of endorsed teachers can cause staffing difficulties. Scheduling flexibility required for students with special needs (ESE, ESOL, differing profiles). If any non-gifted students are included, lesson planning must document differentiation for the students who are gifted.
B. **GIFTED CLUSTERS**	Students who are gifted are grouped together in one or more classrooms per grade level. Other students in the class can be randomly assigned. If this is the only service, cluster teacher must be endorsed in gifted. Classroom teacher differentiates for the gifted cluster in areas of strength and need.	Curriculum includes competencies of the basic skills curriculum with an interdisciplinary approach. Depth and complexity differentiated to meet gifted state Curriculum Frameworks and student EP goals. Includes acceleration in student strength areas.	Differentiated materials and technology. Teachers will need gifted endorsement and Elementary certification. Acceleration requires more textbooks and above-grade-level materials.	Significant Effect Size (ES=0.62) If combined with other services, such as pullout classes, effect sizes are increased.	Allows opportunities for students to feel part of a team and have affiliation with both age and intellectual peers. Challenging for teachers to meet affective needs of a wider range of students. Endorsed gifted teachers are trained in current strategies for dealing with unique affective needs of students who are gifted	Communication between teachers, students, and parents is easily facilitated. If pullout services are included, requires good communication between resource teacher and cluster teacher.	Can be used with a smaller gifted population. If numbers of students who are gifted at a grade level are too small, requires additional planning to allow students who are gifted to have peer interactions with other students who are gifted.	Requires flexibility on the part of cluster teachers and skill at differentiating for advanced learners. Can be used to help meet needs of advanced learners who may not meet eligibility for gifted services. Lesson planning must document differentiation for the students who are gifted.

District-Approved Gifted Program Service Models
Elementary School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
C. HOME-SCHOOL BASED RESOURCE ROOM	Students attend gifted class one or more days or portions of days per week. Remainder of time spent in regular classroom. Flexible groupings, including multiage, are an option.	Curriculum centered on student interests and abilities with wide range of content and designed around an approved gifted curriculum model. Outcomes based on gifted Curriculum Frameworks and student EP goals.	Differentiated materials and technology. Teachers will need gifted endorsement and Elementary certification.	ES= 0.65 (direct extension of regular curriculum) ES=0.44 (focus on thinking skills) ES=0.32 (focus on creative skills) ES=0.57 (independent work with mentors)	Affective needs and thinking skills of students who are gifted are easier to address. Especially effective with students who have strengths in areas not normally covered in the subject-area curriculum and/or when provided in addition to cluster or ability grouping.	Communication between teachers can be more challenging than full-time or cluster models.	Can be especially effective in schools with small gifted populations and with students with wide-ranging needs and interests.	Easy to implement, as one teacher can serve more students than cluster or full-time models. If numbers permit, resource teacher can provide additional enrichment for non-identified students during times other than with students who are gifted.
D. CENTER-SCHOOL BASED RESOURCE ROOM	Students attend gifted class day per week. Remainder of time spent in regular classroom. Students from multiple schools can participate.	Curriculum centered on student interests and abilities with wide range of content and designed around an approved gifted curriculum model. Outcomes based on gifted Curriculum Frameworks and student EP goals.	Differentiated materials and technology. Teachers will need gifted endorsement and Elementary certification. Transportation for feeder schools is required.	ES= 0.65 (direct extension of regular curriculum) ES=0.44 (focus on thinking skills) ES=0.32 (focus on creative skills) ES=0.57 (independent work with mentors) Results can be affected by instructional time loss due to transition between campuses.	Affective needs and thinking skills of students who are gifted are easier to address. Especially effective with students who have strengths in areas not normally covered in the subject-area curriculum and/or when provided in addition to cluster or ability grouping.	Most challenging model for teacher-to-teacher communication. Requires teacher skills in this area. Communication with parents requires careful planning.	Can be especially effective in schools with small gifted populations and with students with wide-ranging needs and interests. Helps meet student affiliation needs for students who may not have many gifted peers in home school.	One teacher can serve more students than cluster or full-time models. Requires additional teacher planning time for meetings and provision of supports at feeder schools.

District-Approved Gifted Program Service Models
Elementary School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
E. SUBJECT-AREA ACADEMIC CLASSROOM	Students attend gifted class for a subject area for a portion of each day. Remainder of time spent in regular classroom.	Curriculum includes competencies of the grade-level curriculum in the academic area. Depth and complexity differentiated to meet gifted state Curriculum Frameworks and student EP goals. Documentation of master of grade-level skills can allow for pace more suited to students who are gifted in the academic area.	Differentiated materials and technology required. Teachers will need gifted endorsement and Elementary certification. Acceleration requires more textbooks and above-grade-level materials.	Significant Effect Size ES=0.57 (content-based acceleration) Instruction tailored to needs of students who are gifted.	Provides some opportunity to address needs of students who are gifted in content area and daily interaction with other students who are gifted. Most effective when combined with cluster or ability grouping in other subject areas.	Some challenges in teacher-to-teacher communication as two teachers are providing grades. Combining this model with cluster grouping can minimize these challenges.	Usually best for high-achieving students. Best when academic area chosen matches strength area of students.	Scheduling challenges can arise as classroom teacher and gifted teacher should be teaching same academic area at the same time. Skills in incorporating Frameworks and EP goals while focusing on academic content are required.

District-Approved Gifted Program Service Models
Middle School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
A. GIFTED ACADEMIC CLASSES	Gifted sections of academic classes taught by gifted-endorsed teachers. Teachers focus on subject area objectives, student EP goals and *Florida's Frameworks for K-12 Gifted Learners.*	Must cover all the competencies of the basic skills curriculum Depth and complexity. differentiated to meet gifted state Curriculum Frameworks and student EP goals. Includes acceleration in student strength areas. Interdisciplinary curriculum can be an effective practice.	Differentiated materials and technology required. Teachers will need gifted endorsement and content certification. Acceleration requires more textbooks and above-grade-level materials.	Significant Effect Size (ES=0.33) in grades 7-12 (full-time grouping) ES=0.57 (content-based acceleration) . If combined with other services, such as pullout classes, effect sizes are increased.	Addresses student needs for affiliation with gifted peers. Teachers and other faculty members trained in current strategies for dealing with unique affective needs of students who are gifted. Social-emotional, creative and leadership-related needs and EP Goals of students who are gifted are easier to address when all students in the class are identified as gifted.	Challenge of communication is minimized because general and gifted curriculum delivered by the same teacher or team.	Only students who are gifted are scheduled. Best when academic content is matched to student strength area. Usually best for high-achieving students who are gifted.	Minimizes scheduling conflicts, reduces class size in regular education. Shortage of endorsed teachers can cause staffing difficulties. Scheduling flexibility required for students with special needs (ESE, ESOL, differing profiles). Best if multiple content areas are available. Class-size challenges can occur if numbers are too low or too high at a grade level.

District-Approved Gifted Program Service Models
Middle School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
B. GIFTED CLUSTERS FOR ACADEMIC CLASSES	Students who are gifted grouped in sections for academic content with gifted-endorsed teachers. Differentiation to include EP goals and objectives of students who are gifted. Can be used in conjunction with MYP/Pre-AP.	Must cover all the competencies of the basic skills curriculum. Depth and complexity differentiated to meet gifted state Curriculum Frameworks and student EP goals in class with Gifted Specialist. Includes acceleration in student strength areas. Interdisciplinary curriculum can be an effective practice.	Teachers will need gifted endorsement and content certification. Acceleration requires more textbooks and above-grade-level materials.	Significant Effect Size (ES=0.62) If combined with other services, such as pullout classes, effect sizes are increased.	Allows opportunities for students to feel part of a team and have affiliation with both age and intellectual peers. Challenging for teachers to meet affective needs of a wider range of students. Endorsed gifted teachers are trained in current strategies for dealing with unique affective needs of students who are gifted	Challenge of communication is minimized because general and gifted curriculum delivered by the same teacher.	Can be used with a smaller gifted population or as an interim model while additional teachers are being endorsed. Documentation of differentiation for students who are gifted is required in order to be considered as gifted service.	Should not be used alone, but in conjunction with ability grouped classes, advisory services, subject-area acceleration (including high-school courses). Classes should be kept under required class size so that later identified or transferring students who are gifted can be included.
C. GIFTED ELECTIVE CLASSES	Students scheduled for either: Advanced Academics 6-8 (Course Code 7855040) or Advanced Academics 6-8 and Career Planning (Course Code 7855042)	Curriculum driven by student strengths and needs, Curriculum Frameworks, EP goals and FLDOE Course Performance Objectives.	Differentiated materials and technology. Teachers will need gifted endorsement and content certification.	ES= 0.65 (direct extension of regular curriculum) ES=0.44 (focus on thinking skills) ES=0.32 (focus on creative skills) ES=0.57 (independent work with mentors)	Affective needs of students who are gifted are easier to address with Advanced Academics course description. Especially effective with students who have strengths in areas not normally covered in the subject-area curriculum. If Independent work with mentors included: ES=0.47 - ES=0.57	Communication between teachers can be more challenging.	Can be especially effective in schools with small gifted populations and with students with wide-ranging needs and interests. Multi-grade grouping is a possibility.	Should not be used alone, but in conjunction with ability grouped classes, advisory services, subject-area acceleration (including high-school courses). Advanced Academics with Career Planning Course Performance Objectives can be used to fulfill State requirement for career content.

District-Approved Gifted Program Service Models
High School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
A. GIFTED ACADEMIC CLASSES	Gifted sections of academic classes taught by gifted-endorsed teachers. Teachers focus on subject area objectives, student EP goals and *Florida's Frameworks for K-12 Gifted Learners.*	Must cover all the competencies of the basic skills curriculum Depth and complexity. differentiated to meet gifted state Curriculum Frameworks and student EP goals. Includes acceleration in student strength areas. Interdisciplinary curriculum can be an effective practice. Content outside the core subjects can also be considered.	Differentiated materials and technology required. Teachers will need gifted endorsement and content certification. Acceleration requires more textbooks and above-grade-level materials.	Significant Effect Size (ES=0.33) in grades 7-12 (full-time grouping) ES=0.57 (content-based acceleration) . If combined with other services, such as elective classes, effect sizes are increased. Honors or higher weighted course codes.	Addresses student needs for affiliation with gifted peers. Teachers and other faculty members trained in current strategies for dealing with unique affective needs of students who are gifted. Social-emotional, creative and leadership-related needs and EP Goals of students who are gifted are easier to address when all students in the class are identified as gifted.	Challenge of communication is minimized because general and gifted curriculum delivered by the same teacher or team.	Only students who are gifted are scheduled. Best when academic content is matched to student strength area. Usually best for high-achieving students who are gifted. Often scheduled in conjunction with magnet and/or other advanced classes.	Minimizes scheduling conflicts, reduces class size in regular education. Shortage of endorsed teachers can cause staffing difficulties. Scheduling flexibility required for students with special needs (ESE, ESOL, differing profiles). Best if multiple content areas are available. Class-size challenges can occur if numbers are too low or too high at a grade level.

District-Approved Gifted Program Service Models
High School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
B. GIFTED CLUSTERS FOR ACADEMIC CLASSES	Students who are gifted are grouped in sections for academic content with gifted-endorsed teachers. Differentiation to include EP goals and objectives of students who are gifted. Can be used in conjunction with magnet and/or other advanced programs.	Must address objectives of core curriculum. Depth and complexity differentiated to meet gifted state Curriculum Frameworks and student EP goals in class with Gifted Specialist. Includes acceleration in student strength areas. Interdisciplinary curriculum can be an effective practice.	Teachers will need gifted endorsement and content certification. Acceleration requires more textbooks and above-grade-level materials. Easy to implement through matching scheduling to teacher endorsement.	Significant Effect Size (ES=0.62) If combined with other services, such as elective classes, effect sizes are increased. Honors or higher weighted codes.	Allows opportunities for students to feel part of a team and have affiliation with both age and intellectual peers. Challenging for teachers to meet affective needs of a wider range of students. Endorsed gifted teachers are trained in current strategies for dealing with unique affective needs of students who are gifted	Challenge of communication is minimized because general and gifted curriculum delivered by the same teacher.	Can be used with a smaller gifted population or as an interim model while additional teachers are being endorsed or when students are not able to schedule additional elective classes. Documentation of differentiation for students who are gifted is required in order to be considered as gifted service.	Should not be used alone, but in conjunction with ability grouped classes, advisory services, subject-area acceleration. Classes should be kept under required class size so that later identified or transferring student who is gifted can be included.
C. GIFTED ELECTIVE CLASSES	Students scheduled for: Studies for Students who are Gifted (Course Code 7965040) or Research Methodology for Students who are Gifted (Course Code 7965010) or Externship for Students who are Gifted (Course Code 7965030)	Curriculum driven by student strengths and needs, Curriculum Frameworks, EP goals and FLDOE Course Performance Objectives.	Differentiated materials and technology. Teachers will need gifted endorsement and content certification. The Externship Course requires scheduling support and recruitment of potential placement sites. :	ES= 0.65 (direct extension of regular curriculum) ES=0.44 (focus on thinking skills) ES=0.32 (focus on creative skills) ES=0.57 (independent work with mentors)	Social/Emotional, leadership and creative needs easier to address than in core content courses. Especially effective with students who have strengths in areas not normally covered in the subject-area curriculum. If Independent work with mentors included: ES=0.47 - ES=0.57	Communication between teachers can be more challenging. Good intra-school communication is necessary for success of Externship course.	Only students who are gifted are scheduled. Can be especially effective in schools with small gifted populations, with students with wide- ranging needs and interests or in schools with a limited number of gifted endorsed teacher. Multi-grade grouping is a possibility.	Should not be used alone, but in conjunction with ability grouped classes, advisory services, subject-area acceleration Can be used in as part of student's Major Area of Interest.

District-Approved Gifted Program Service Models
High School

MODEL	DESCRIPTION	CURRICULUM	ALLOCATION OF RESOURCES	ACADEMIC ACHIEVEMENT	SOCIAL/ EMOTIONAL DEVELOPMENT	COMMUNICATION	STUDENT POPULATION	ADMINISTRATIVE
D. CONSULTATIVE SERVICES	Monthly face-to face meetings between gifted endorsed teachers and regular education personnel to plan and review progress toward gifted standards and EP goals. Consultation logs must be kept and filed.	General education and advanced course curriculum delivered in general education classroom.	Requires adequate - time in teachers' schedules to collaboratively plan and review student progress. Materials should be provided for the support and provision of information for parents, teachers and students who are gifted.	Academic achievement varies dependent on other general education opportunities provided by the school. Consultative service includes monitoring student academic achievement and targeted interventions when needed.	Lack of interaction with gifted peers. Provides for little attention to student EP goals. Requires understanding of needs and special abilities of students who are gifted by school personnel.	Successful collaboration dependent on school culture.	Can be used with a larger population if there is a lot of access to high-level classes and students are highly-motivated. Underachieving students who are gifted, special populations of students who are gifted and those with additional social-emotional needs can struggle in this model without special supports.	Easy to implement and schedule. More effective in combination when other services and activities such as seminars for students who are gifted, academic competitions, leadership opportunities and counseling services are included.

Possible Services for High-Ability Students

Students who are gifted benefit from a variety of services that are offered at schools and in the community. While not all of the services listed below are acceptable by the State of Florida for weighted funding, the following menu defines some of the options which may help to meet the needs of students who are gifted. Decisions about which services are appropriate for which students should be made on an individual basis by Educational Planning Teams.

Special Schools
(schools designed to meet the unique needs of students who are gifted)

Full-Time Programs
(students receive full-time gifted Instruction)

Magnet Programs
(ambitious course of study centered around a theme or particular area of instruction)

Pull-Out Programs or Resource Room
(students are sent to a resource teacher for approximately 4—12 hours of gifted instruction per week)

Provisions within the Regular Classroom
(accommodations are made within the regular classroom to meet the needs of Students who are gifted)

Consultative Model
(teacher of the gifted consults with the regular classroom teacher to meet the unique needs of gifted students)

Team Teaching
(gifted program teacher and regular education teacher collaboratively teach a class of students)

Special Gifted Courses (specialized course developed to meet the unique needs of students who are gifted)

Advanced Placement
(courses for college-bound students to earn college credits while still in high school)

Independent Study
(students work at their own pace)

Honors Classes
(classes for high-achieving students in preparation for post secondary services)

Dual Enrollment
(college level courses offer to high school students who have completed all of the courses they need for graduation)

Governor's Summer Programs
(specialized programs usually run by universities for students who are gifted)

Special Competitions and Academic Teams
(activities such as Odyssey of the Mind, Math Olympiads. and Quiz Bowl for high-ability students)

Internship Programs
(students work with professionals in fields they are Interested in pursuing)

International Baccalaureate Programs
(program for highly motivated college-bound students who achieve a liberal arts Diploma)

Mentorships
(pairing a member from the community with a student who shares a similar interest or talent)

Community Service-Learning Projects

(program that requires students to identify a social problem, develop a plan to improve the problem, and work on resolving the problem)

How can the social and emotional needs of the gifted be addressed?

A major goal of the gifted program is to foster the intellectual, social and personal development of students. Teachers of gifted students often serve as advocates, consultants, diagnosticians, listeners, instructors, advisors, and facilitators. Teachers may find themselves dealing with confusion about giftedness, heightened sensitivities, feelings of inadequacy, lack of understanding, concerns with morality and justice, and unrealistic expectations from and of others. Teachers should develop the following skills in themselves to meet the social/emotional needs of their students:

- be sensitive to students' emotional and intellectual differences

- help students to learn and understand their exceptionality

- focus on students' cognitive and affective needs

- act as advocates

- be able to connect students with human, intellectual, and cultural resources outside the school setting

- be able to aid students in planning and decision-making skills

- encourage, reward, and value self-initiated learning

- help students assess strengths and weaknesses and form action plans to enhance or circumvent them

- encourage students to read books about their particular problems

- be sensitive to the conflicts that arise from students in special populations

- act as communicators with other staff members, parents, and community members about the problems of students who are gifted

- serve as initiators in identifying and including these students

- prescribe and design activities that provide positive psychosocial development

- provide a curriculum that focuses on the affective needs of students

- provide bibliographies that focus on students who are gifted and their qualities

- use literature and art to provide a continuum of cognitive and affective experiences

- use various counseling techniques to assist underachievers

Although the cognitive requirements of students who are gifted are usually well defined and addressed, some often overlooked affective traits are unusual excitability, perceptiveness, sensitivity, entelechy (goal orientedness),   and the ability to think divergently.

Some students who are gifted have a high energy level, and may be emotional and intense. They become highly reactive to situations, and self-control may become a problem. Although many strategies that are used with Attention Deficit Disorder (ADD) children may be effective, balancing structure and reward with flexibility and challenge becomes a task that may seem insurmountable without knowledge and understanding.

Highly passionate and/or compassionate children may have a well-attuned sensitivity to other humans, animals, or the natural world. They may work to avoid confrontation, possessing a false sense of responsibility.   Helping the student to "distance" him/herself from the feelings of others may allow him/her to deal with the situation more rationally. Divergent thinkers may "hide" or suppress creativity because they perceive the rest of the world as not valuing it when in fact others may feel threatened by it.

Although research has indicated that gifted/talented children are generally well-adjusted, have favorable personality characteristics, and exhibit emotional stability, a great difference between a child's abilities and the abilities of others in their immediate social group may cause social/emotional problems. The development of autonomous, self-directed, intrinsically motivated, accepting, and well-adjusted young people is a primary goal of education programs for the gifted. Classes for these able learners should contain a strong and ongoing focus on social and emotional growth.

In the area of social and emotional development students must be provided with opportunities:

- to experience positive growth in an atmosphere of mutual trust and respect
- to develop a better understanding of self
- to improve self image
- to acquire an awareness and understanding of individual feelings and those of others
- to identify and clarify personal choices and decisions
- to accept responsibility for one's own actions
- to be assured that other students have problems similar to their own
- to take risks and accept failure as a learning experience

How can the teacher of the gifted have regular, effective communication with students, families, and faculty?

Family members and school personnel must work as a team to address social and emotional needs of students who are gifted in addition to communicating academic concerns. Teachers and counselors may encourage family involvement in their gifted student's education in the following ways:

◆ Conferencing with parents to discuss topics of concern. These may include the student's school, social, church, community, and leisure activities; career/vocational preferences, academic projects and satisfaction

◆ Initiating support groups for families of students who are gifted

◆ Providing information about parent groups

◆ Meeting with families to facilitate family communication

◆ Providing enrichment materials and resources to use with their gifted children

◆ Distributing parent newsletters

◆ Encouraging families to share cultural and ethnic traditions and heritage with students

"Children are the living messages we send to a time we will not see."

Author unknown

Communication Checklist

Student Communication:

✓ Do you hold teacher-student conferences on a regular basis?

✓ Do you allow for student-led conferencing (additional information follows)?[1]

✓ Do you invite the student to his or her EP meeting when appropriate?

✓ Do you allow for student input when planning your curriculum?

Family Communication:

✓ Do you make yourself accessible to parents for consultation?

✓ Do you send a newsletter (original or reproduced) home on a regular basis?

✓ Do you make every effort to have parents attend EP meetings?

✓ Do you hold workshops or provide information regarding workshops for parents? (Workshop sources: Parents of Able Learner Students, Florida Association for the Gifted, National Association for Gifted Children. Addresses and contacts for organizations are available in the **Resources** section of this handbook.)

✓ Do you provide parents with gifted resources or organizations to contact to obtain resources? (Resource Contacts: Gifted Program Specialist, FDLRS, FLAG, NAGC, FL Department of Education, SENG)

Faculty Communication:

✓ Have you informed regular education teachers as to who the students who are gifted are in their classrooms?

✓ Do you consult regularly with regular education teachers regarding students who are gifted in their classrooms?

✓ Do you make yourself accessible to other faculty members for consultation?

✓ Have you provided the faculty with information regarding the identification of students who are gifted (characteristic checklist, gifted vs. able learner list, etc.)?

✓ Have you held a staff development session on students who are gifted or services?

✓ Do you invite regular education teachers, counselors or administrators to EP meetings?

✓ Are you involved in other activities in the school community?

How is paperwork completed for the Gifted program?

As in any exceptional education program, certain paperwork is required to assure compliance with State and District procedures in gifted education. While many of the procedures have been simplified in recent years, it is necessary for the teacher of the gifted to maintain records and become aware of changes in policies and regulations that affect record-keeping and service delivery for students who are gifted.

The Teacher of the Gifted responsibilities for paperwork include the following:

- Attendance and involvement in the placement staffing for new students

- Initiation or updating of student EPs

- Scheduling with LEA Representative for EP Development Conferences

- Providing Progress Reports as designated on EPs

- Participating with other ESE Teachers in the development of IEPs for Students Who Are Gifted in other ESE Programs and completion of the FEFP Funding Matrix when appropriate

- Providing scheduling information for FTE reporting

- Maintaining EPs and IEPs in the Gifted classroom

- Documenting Outcomes and Services provided (including consultation)

Educational Plan (EP) forms are generated from the Portal to Exceptional Education Resources (PEER) website. Access to the website is gained by completing the PEER EP Training, provided at the Orientation for New Gifted Teacher Training and at other times throughout the school year.   Other forms, including the Consultation Log and Procedural Safeguards for Exceptional Students Who Are Gifted are available on the OCPS Gifted Program Intranet site at
https://www.ocps.net/intranet/cs/ese/curriculum/Pages/Gifted.aspx.   For assistance with procedures or situations that are not addressed, contact the school staffing coordinator or placement specialist or the assigned staffing specialist.

Helpful Hints for Teachers of the Gifted

- Set the tone and climate on the first day the class meets. Establish a strong sense of teamwork, a trusting and respectful atmosphere and a pleasant space for all to come together.

- Provide some specified, weekly time for Supported Independent Reading. Refer to the book *Joyful Reading* by Sally M. Reis for details.

- Involve the students in self-evaluations. These should NOT be the entire basis for their grade (which you will ultimately assign), but should be used when making final grade determinations.

- Bring community resources into your classroom as much as possible. Make use of guest speakers and outside media of the HIGHEST quality to enhance the learning experience. Develop a listing of successful speakers, etc., and share with other teachers.

- Assist the students in taking control of and assuming responsibility for their own learning and for their own lives. Avoid excess "rescuing".

- Never try to "bluff" students. It is perfectly all right to admit that you are not an expert on every topic. The students do not expect you to know everything, but they will recognize it if you are attempting "con" them.

- Typically, students who are gifted have a deep sense of fairness; genuine and mutual respect is often possible and quite imperative in the gifted class.

- Enthusiasm, organization, and flexibility are three of the most important qualities you need to possess and exhibit regularly. Your students who are gifted value and respect these qualities.

- A good sense of humor is necessary. Be able to laugh at your mistakes and the uniqueness of your students.

- Develop a cooperative, friendly, working relationship with all the school personnel. The guidance staff, front office secretary, custodians, and media staff are all the key to making your school day run more smoothly; constantly be aware of the "image" you project to others.

- Be prepared for the students who will attempt to pull you off target (on a regular/ disruptive level) and of those who will try to shock you. Remain calm, privately discuss their motivation and discuss concepts of what constitutes poor taste.

- Be sure the students understand the purpose/ reason for each class assignment. (They will not tolerate "busy work".) Just as important as laying the groundwork is the CLOSURE at the end of each lesson / assignment.

- Be aware of the content of your class. There will be many people interested in your classes and things taken out of context could easily be misconstrued. Be able to justify what you are teaching.

- The Education Plan (EP) paperwork is not as tedious or frightening as you may have heard. If you keep up with this aspect of the job as you progress through the school year, the task should not become a major burden. One suggestion: have students assist you with the completion of their own EP during the class period. They need to be involved in the programming and will learn something about the gifted program in the process.
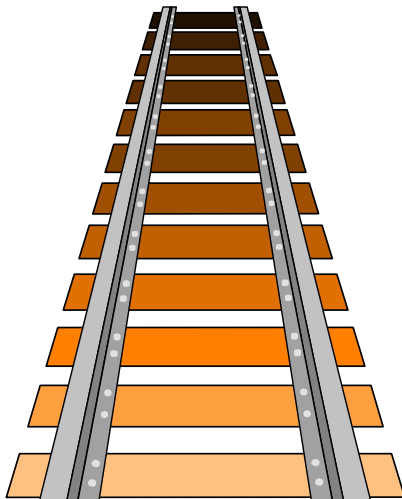
"Even if you're on the right track, you'll get run over if you just sit there."

Author unknown

What supplies are suggested for a gifted classroom?

In addition to ordinary basic classroom supplies, the following resources are suggested for the gifted classroom:

Student Resources:

> Multiple Computers with Internet Access and/or tablets such as iPads
> Printer(s)
> Movable student table for flexible groupings
> Project Storage area
> Above grade-level texts
> Software may include word processing, keyboarding, data base, spreadsheet, multi-media presentation, problem solving, critical and creative thinking
> Puzzles/Trivia games
> Games (some suggestions include Global Pursuit, Master Mind, Tiered Tic-Tac-Toe, Izzy, chess, checkers, Othello, Mancala, Math Pentathlon)
> Classroom library with higher level titles/ Classic literature
> Advanced level dictionaries, thesauruses, atlases
> Newspapers and periodicals

Teacher Books and Resources: Specific titles should be added and/or replaced as the district changes its endorsement preparations in order to keep teachers current in the field.

Growing Up Gifted by Barbara Clark (for nature and needs preparation)

Problem-Based Learning and Other Curriculum Models for the Multiple Intelligences Classroom , by Robin Fogarty (for curriculum preparation)

Managing the Social and Emotional Needs of the Gifted, by Connie C. Schmitz and Judy Galbraith (for counseling preparation)

Creativity is Forever by Gary A. Davis

The Parallel Curriculum by Tomlinson, Kaplan, Renzulli, Purcell, Leppien, and Burns

Some of My Best Friends Are Books: Guiding Gifted Readers from Preschool to High School (3rd ed.) by Judith Wynn Halstead.

Teaching Gifted Kids in Today's Classroom by Susan Winebrenner.

Assessing Differentiated Student Products: A Protocol for Development and Evaluation by Julia L. Roberts and Tracy F. Inman

Looking for Data in All the Right Places by Alane J. Starko and Gina D. Schack
(elementary)

*Research Comes Alive: Guidebook for Conducting Original Research with
Middle and High School Students* by Gina D. Schack and Alane J. Starko
(secondary)

Published materials for the diverse populations preparation

Catalogs with materials for students who are gifted-Good Apple, Bright Ideas, Zephyr
Press, Free Spirit, Prufrock Press, Mindware, Tin Man Press

Florida Department of Education: *Florida's Frameworks for K-12 Gifted Learners*

CHARACTERISTICS OF AN INTELLECTUAL CLASSROOM

MUSEUM
Where kids can see something beautiful and be in awe! Display like a museum

HOW-TO BOOKS
Books that instruct on a variety of topics

CHALLENGE CENTER
Crossword puzzles, vocabulary games, puzzles that challenge

LANGUAGE
This is where the children learn how to challenge politely without offending
Quotes are displayed inspiring intellectual debate

DEBATE PLACE
Pro/Con Corner -Topics are taken from curriculum, current events, etc.

REAL THINGS
Screw drivers, kitchen utensils, hammers, anything from real life

MY PLACE
A place where the student can relax and reflect

SCHOLAR'S LIST
Quotes, Books, Articles brought in by students to stimulate and encourage learning

NEWS NEST
Room News, Current Events that may have an effect on the classroom, real life

THE THINKER THINKS ABOUT . . .
Things to ponder. . .

DEEPER CORNER
A place where the student can pursue a passion -- specialization wrapped in a subject

DISPOSITION OF A SCHOLAR
Develop a scholarly demeanor
1. *Goals*
2. *Always hungry to learn*
3. *Tools -- Good thinkers carry knowledge with them*
4. *A willingness to go through an intellectual struggle and hang in there!*
5. *Multiple points of view -- I respect your point of view*
6. *Do Mental Calisthenics*
7. *Check for Accuracy, areas of emphasis, disparity*
8. *Save ideas—a system*

Who publishes curriculum materials for the gifted?

A. W. Peller and Associates, Inc.
Bright Ideas for the Gifted and Talented
294 Goffle Road
Hawthorne, NJ   07507

Creative Publications
P.O. Box 10328
Palo Alto, CA   94303
800-395-0709
800-395-0703 (Fax)
www.creativepublications.com

The Critical Thinking Co.
P.O. Box 448
Pacific Grove, CA   93950
800-458-4849
831-393-3277 (Fax)
www.criticalthinking.com

Curriculum Associates
1211 Connecticut Ave. NW, Suite 414
Washington, DC   20036

Dale Seymour Publications
P.O. Box 10888
Palo Alto, CA   94303

DOK Publishers, Inc.
P.O. Box 357
East Aurora, NY   14052

Educational Impressions
Resource Materials for the G/T
249 Goggle Road
Hawthorne, NJ   07507

Good Apple
P.O. Box 299
Carthage, IL   62321-0299

National Association of the Gifted
1155 15th St. NW, #1002
Washington, DC   20005

Prufrock Press
P.O. Box 8813
Waco, TX   76714-8813
800-998-2208
800-240-0333 (Fax)
www.prufrock.com

IRI/Skylight Training and Pub.
2525 S. Clearbrook Drive
Arlington Heights, IL   60005-5310
800-348-4474
847-290-6609 (Fax)
www.iriskylight.com

Sunburst Technology
400 Columbus Avenue Suite 160E
Valahalla, New York 10595-1349
914-747-3310
914-747-4109 (Fax)
www.sunburst.com

Engine-uity, Ltd.
P.O. Box 9610
Phoenix, AZ   85068-9610
800-877-8718
602-997-0974
www.engine-uity.com

Free Spirit Publishing, Inc.
First Ave., Suite 616
Minneapolis, MN   55401-1724
800-735-7323
612-337-5050 (Fax)
www.freespirit.com

The Keystone Consortium
P.O. Box 2367
West Lafayette, IN   47906

Synergetics
P.O. Box 84
East Windsor Hill, CT   06028

Trillium Press
P.O. Box 921
New York, NY   10159

VenturesThinking Works P.O. Box
P.O. Box 468
St. Augustine, FL   32805-0468
800-633-3742
904-824-8505 (Fax)
e-mail: thnkgwks@aug.com

Zephyr Press
The Zephyr Catalog
814 N. Franklin ST
Chicago, IL   60610-3109
800-232-2187
312-337-5985 (Fax)
www.zephyrpress.com

Sage Publications/Corwin Press
2455 Teller RD
Thousand Oaks, CA 91320
www.sagepub.com

What are some helpful professional resources for gifted educators?

Brain-Based Learning

Barrett, Susan L., *It's All in Your Head: A guide to Understanding Your Brain and Boosting Your Brain Power.*
Comprehensive guide to the brain. Easy to read. Student text with teacher guide.

Caine, Renate and Gaine, Geoffrey, *Making Connections: Teaching and the Human Brain.*
Explains teaching methods compatible with current brain research. Exploration of how the brain functions during learning.

Creativity

Davis Gary A. *Creativity Is Forever.*
Everything you ever wanted to know about creativity in an easy-to-read workbook format.

Eberle, Bob. *Scamper On.*
Activities to use with the SCAMPER technique.

Keller-Mathers and Puccio, Kristin. *Big Tools for Young Thinkers.*

Renzulli, Joseph S. *New Directions in Creativity: Mark 1*

Stanish, Bob. *The Ambidextrous Mind.*
Great resource for creativity exercises.

Starko, Alane Jordan. *Creativity in the Classroom:*

Curriculum

Fogarty, Robin. *Problem-Based Learning and Other Curriculum Models.*
Practical explanations of curriculum models with examples.

Johnsen, Susan K., and Sheffield, Linda J. *Using the Common Core State Standards*

Johnson, Nancy. *The BEST Teacher "Stuff."*

Reis, Sally M., Deborah E. Burns, and Joseph Renzulli. *Curriculum Compacting: A Guide for Teachers.*

Reis, Sally M. *Joyful Reading: Differentiation and Enrichment for Successful Literacy Learning*

Smutny, Joan Franklin, Sally Yahnke Walker and Elizabeth A. Meckstroth. *Teaching Young Gifted Children in the Regular Classroom.*

Tomlinson, Kaplan, Renzulli, Purcell, Leppien, and Burns. *The Parallel Curriculum*: *A Design to Develop High Potential and Challenge High-Ability Learners.*

VanTassel-Baska, Joyce. *Using the Common Core State Standards for English Language Arts With Gifted and Advanced Learners.*

Winebrenner, Susan. *Teaching Gifted Kids in Today's Classroom.*
    Describes methods for differentiating curriculum for every teaching style. Has an excellent bibliography.

Future Studies

McCumsey, Janet. *Exploring the Future: Basic Skills and Activities for the Futuristic Thinker.*
    Examples, explanations, blank forms for futures tools.

Whaley, Charles E. *Enhancing Thinking and Creativity with Future Studies.*
    Detailed explanations of the futures tools along with activity suggestions.

General Resource

Clark, Barbara. *Growing Up Gifted* (7th Edition, 2008).
    Comprehensive guide to teaching students who are gifted. An excellent reference book.

Florida Department of Education. *Florida's Frameworks for K-12 Gifted Learners.*

Guidance and Counseling

Delisle, James and J. Galbraith. *Gifted Kids Survival Guide II.*

Galbraith, Judy. *Gifted Kids Survival Guide.*

Schmitz, Connie. *Managing the Social and Emotional Needs of the Gifted.*

Siegle, Del. *The Underachieving Gifted Child.*

Metacognition/Thinking Skills

deBono, Edward. *deBono's Thinking Course.*

Fogarty, Robin. *How to Teach for Metacognitive Reflection.*
    Includes many activities for incorporating metacognition in the classroom.

Udall, Anne J. *Creating the Thoughtful Classroom.*

Multiple Intelligence

Ballanca, James, et al. *Multiple Assessments for Multiple Intelligences.*
    Includes many assessment tools that cover all of the intelligences.

Campbell, Bruce. *The Multiple Intelligences Handbook.*

Chapman, Carolyn and Lynn Freeman. *Multiple Intelligences Centers and Projects.*

Lazear, David. *Multiple Intelligence Approach to Assessment.*

The New City School. *Celebrating Multiple Intelligences: Teaching for Success.*
    Lesson plans and activities incorporating the intelligences.

Periodicals

Creative Kids
    Publishes stories, artwork, puzzles, games, logic, etc., created by and for children. Kids from all
    over the world read and contribute to *Creative Kids.*

Gifted Child Quarterly
    Official publication of the NAGC. The latest research in gifted education.

Gifted Child Today

Directed at both teachers and parents. Practical advice, research, ideas, and more.

Journal for the Education of the Gifted
Official publication of The Association for the Gifted and is aimed at the experienced reader of research literature.

The Journal of Secondary Gifted Education
Focuses on building an effective education program for gifted adolescents and young adults. Addresses the unique needs of gifted middle and high schoolers.

Parenting for High Potential
A new magazine designed to help parents of gifted and talented children.

Roeper Review
Focuses on the "philosophical, moral, and academic issues which relate to the lives and experiences of the gifted and talented."

Questioning Techniques

Johnson, Nancy L. *Active Questioning; Questioning Makes the Difference; Thinking Is the Key.*
Strategies and activities for using questioning techniques to access higher-level thinking.

Service Learning

Draze, Dianne. *Creative Problem Solving for Kids.*
A practical resource for using CPS to implement service learning in the classroom.

Lewis, Barbara A. *Kids Guide to Social Action.*

Special Populations

Baum, Susan M., Steve V. Owen, and John Dixon. *To Be Gifted and Learning Disabled.*

Cline, Staff and Diane Schwartz. *Diverse Populations of Gifted Children.*

Slocumb, Paul D. and Ruby Payne. *Removing the Mask: Giftedness in Poverty.*

Torrance, E. Paul, Kathy Goff, and Neil B. Satterfield. *Multicultural Mentoring of the Gifted and Talented.*

What are some other programs of interest for the gifted high ability student?

One of our curriculum goals is *"to facilitate opportunities for learning outside the classroom that enhance the talents of students who are gifted."* To meet this goal, Orange County Public Schools' gifted program reaches beyond classroom walls by supporting extracurricular activities that give students who are gifted an arena for applying the thinking and research skills they have learned in the gifted program.

Future Problem Solving (www.FPSP.org) is a creative problem-solving program in which teams attack a future social or technological problem using a six-step process. Through this activity, students employ research skills, problem-solving skills, creative and critical thinking skills, communication skills and group dynamics skills. Other FPS activities include scenario writing and community problem solving. Elementary, middle, and high school students may participate in the competitions that move from the local to the international levels.

Odyssey of the Mind is an international non-profit creative problem-solving program for students in kindergarten through college. OM is available to any student wishing to participate, and is often particularly appealing to gifted and able learners. OM fosters the development of creative thinking and creative problem-solving skills among young people. Participants compete in a variety of areas from building mechanical devices to giving their own interpretations of famous literary works. For further information contact the Magic Center Regional Director, Anna Long, at the International Odyssey Office at ahlong1006@gmail.com. The Florida Odyssey website can be found at http://www.floridaodysseyofthemind.org.

Additionally **Speech** and **Civic Essay Contests**, (Modern Woodman of America, Fraternal Department Youth Division, 1701 1st Avenue, Rock Island, IL, 61201), the **Florida Stock Market Simulation** (1-800-707-4247; www.fcee.org) and **Project CREATE (**Contact Nick Benedico with the Central Florida Chapter of the Florida Engineering Society at nbenedico@wilbursmith.com) are activities that many teachers of the gifted choose for student participation. Students are intellectually challenged in either a concrete or creative fashion to stimulate higher level thinking.

Each summer, Stetson University's **High Achieving Talented Students (HATS)** has a summer program for gifted and highly-able students. Enrichment classes are designed around high-interest topics for students in grades 4-9. See the Gifted Education website for other extracurricular opportunities for students who are gifted. Additional information is available at www.stetson.edu/hats. Summer opportunities are also available for secondary students through the Florida Department of Education's

Governor's Summer Program for Gifted and High-Achieving Students. Florida universities and community colleges host day and residential programs that allow gifted and high-achieving Florida students to use the academic strengths and instructional resources of the sponsoring institution to provide participating students with learning experiences not available in their secondary education programs. Information is available at http://www.fldoe.org/BII/Gifted_Ed/. See the Gifted Education website for other extracurricular opportunities for students who are gifted.

Many gifted students benefit from participation in OCPS magnet programs. Magnet programs provide students with challenging experiences that engage them in learning. Magnet programs of study are aimed at increasing student achievement and permit a student to focus on interests, talents or career goals. For more information visit School Choice Services at www.ocps.net (under Departments on the OCPS website).

"Successful problem solvers begin with the end in mind."

Edwards Deming

What are the professional organizations of interest to those involved with the gifted?

The following are professional organizations that specifically address education of gifted children and advocate for service for able learners. All teachers of students who are gifted should join one or more of these organizations for information concerning students who are gifted, programs, and services.

> Florida Association for the Gifted (FLAG)
> 19711 N.W. 7th Street
> Pembroke Pines, FL 33029
> http://www.flagifted.org
>
> National Association for Gifted Children (N.A.G.C.)
> 1707 L Street NW, Suite 550
> Washington, D. C.   20036
> (202) 785-4268
> http://www.nagc.org
>
> National Research Center on the Gifted and Talented
> http://www.gifted.uconn.edu/nrcgt.html
>
> Council on Exceptional Children/
> ERIC Clearinghouse on Disabilities and Gifted Education
> http://www.ericec.org
> Council on Exceptional Children/ERIC Clearinghouse on Gifted Education
> http://cec.sped.org/ericec/gifted/gt-menu.html
>
> Supporting Emotional Needs of the Gifted (SENG)
> P. O. Box 488
> Poughquag, NY 12570
> http://www.sengifted.org/

Many information clearinghouses with branches that specialize in gifted education have been established in recent years. These organizations offer booklets, publish newsletters, sponsor scholarships for students who are gifted, and respond to specific inquiries for information from educators and parents.

American Creativity Association
c/o ACC CCBNO
5930 Middle Fiskeville Rd
Austin, TX 78752
http://www.amcreativityassoc.org

American Young Mensa
c/o American Mensa, Ltd.
1229 Corporate Drive West
Arlington, TX 76006-6103
www.us.mensa.org

Center for Creative Learning
4921 Ringwood Meadow
Sarasota, FL   34235
941-342-9928
www.creativelearning.com

Creative Education Foundation
289 Bay Road
Hadley, MA 01035
413-559-6614
800-447-2774
413-559-6615 (Fax)
www.creativeeducationfoundation.org

National/State Leadership Training Institute (L.T.I)
Institute on the Gifted and the Talented
316 West Second Street, Suite PHC
Los Angeles, CA 90012