

**Graduation Guidelines
Work Group Report and Recommendations
GIFTED STUDENTS**

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INTRODUCTION:

This guidance document highlights effective evidence-based practices that address the specific needs of gifted learners during their high school years as they prepare to graduate and enter into post-secondary options and/or a career. It recommends practices for districts and schools to consider when facilitating the components of a student’s Advanced Learning Plan and Individual Career and Academic Plan. These recommendations are grounded in guiding beliefs that address the needs of all students:

- *To be meaningful, a high school diploma should guarantee that students are:*
 - 1) *prepared to enter credit-bearing courses in postsecondary education institutions;*
 - 2) *prepared academically to enter military career training; and*
 - 3) *prepared to be productive entry-level employees in the workforce.*
- *Expectations should remain high for all students, regardless of their post high school plans.*

Colorado High School Graduation Guidelines, May 2013

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SUMMARY RECOMMENDATIONS:

As gifted students at the high school level work toward or are offered opportunities to complete high school coursework early, five effective, consistent recommendations are found in the research:

1. Maintain a school culture that continues to value the recognition and development of exceptional talent throughout the middle and high school years.
2. Implement pathways for reaching post-secondary outcomes that are flexible and meets the needs of individual gifted students.
3. Support broad-based understanding and implementation of evidence-based practices that impact instruction and performance for secondary gifted students.
4. Ensure that guidance and career counseling programs incorporate awareness and individual attention to the most common research-based affective needs of gifted students.
5. Capitalize on the potential of a strong support system of staff, family, and community members who assist and mentor gifted students as they reflect on personal and career goals and make adjustments to their post-secondary outcomes.

FOUNDATION: COLORADO HIGH SCHOOL GRADUATION GUIDELINES

The Colorado High School Graduation Guidelines are designed to ensure a minimum level of academic competency for all graduating students. Components embedded within the assurances stated in the Graduation Guidelines address the needs of any learner who may desire to prove proficiency or accelerate his/her learning to best meet individual needs at any time during his/her high school years. The assurances also require that students have multiple, rigorous, and valued ways to demonstrate competencies that align with their Individual Career and Academic Plan (ICAP) targets for post-secondary education and career success.

The Graduation Guidelines also delineate responsibilities for local school boards that allow for and encourage districts to determine requirements for demonstrations of competency in order to accommodate students with exceptionalities and permit a longer or shorter time for students to earn their diploma:

Local districts have the authority to adapt the determinations of competencies to accommodate students with exceptionalities (i.e., students with disabilities and students who are gifted and talented).

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Although the High School Graduation Guidelines also include a section that outlines the Post-Secondary Workforce Readiness Endorsed Diploma, this pathway may not be appropriate for gifted students.

According to [A Nation Deceived: How Schools Hold Back America's Brightest Students](#) (2004, p. 29):

American high schools are becoming hiding places for a lot of untapped academic talent. Despite all those popular movies that show one lonely scholar in a huge gray suburban high school, researchers are finding surprisingly large numbers of students who can steamroll through high school in record time.... They want to be challenged—academically. They love learning and they love many subjects. And they require a very different curriculum, a curriculum planned for the motivated and highly able student. These gifted students come in with a different attitude, and that attitude must be honored with a challenging curriculum. If that different curriculum is not provided, teenage ambition can easily turn into boredom and a lifetime of missed opportunities.

It is important to know where each student is heading (career pathway and/or institution) as well as to be aware of appropriate experiences or educational requirements, aligned with a student's career or college plan, that may not be offered within the high school's coursework options. A student's ICAP, aligned with his/her ALP, can be personalized to include additional advanced coursework and experiences as well as post-secondary opportunities. The ALP and ICAP may be merged if conditions of the ALP are satisfied.

DEFINITION**ECEA Legislation**

The Exceptional Children's Education Act (ECEA) mandates state requirements that address the needs of gifted learners (Rule 12.02):

- Match strengths and interests of gifted students
- Alignment of assessment data to programming options
- Structures by which gifted students are served (in or out of school)
- Support in differentiation – acceleration,
- Affective and guidance support systems
- Diverse content options in areas of strength
- Methods for articulation
- Pre-collegiate or pre-advanced placement
- ALP development and annual review
- Post-secondary options for secondary students

The opportunity to provide secondary school students with challenging, appropriately- aligned options beyond those available at a building level can only enhance their preparation for the world beyond high school.

The Impact of Middle School Programming

While the purpose of this document is to identify and communicate procedures, practices, tools, and resources that support gifted high school students as they have met (or are meeting) the requirements for graduation, the achievement levels as well as other dynamics at the middle school level must also be kept in mind:

Every year, 200,000 seventh-grade and eighth grade students take the SAT or ACT college entrance exams. The majority score as well as high school seniors, who are usually four or five years older. But the academically stronger members of that pool of 200,000 young test-takers (middle-school students)—those who score at or above the average score for high school seniors—are especially gifted. Those students can absorb a whole year's worth of high school in three weeks, researchers say. In fact, a few of the very highest scorers on the SAT as middle-school students, can actually absorb a year's worth of high school in just a week and a half.

A Nation Deceived, p. 22

Therefore, one must also consider effective practices that lead to and to address components at the middle school level that facilitate the transition for gifted students to high school in a positive, productive manner:

"The transition into high schools can be a key determinate into students' post high-school successes. The results show that policy makers need to make a commitment to middle school curriculum and achievement in order to ensure long-term student success"

The Middle School Connection

This document presents research-based recommendations and strategies that address gifted student needs at the middle and high school levels and provides specific suggestions for all stakeholders in the process:

Positive outcomes ensue when students are keenly motivated to achieve, show persistence, and are passionate about learning in at least one subject area. The potential accelerant should be directly and continuously involved in the planning of his or her educational program".

A Nation Deceived, p 93

RECOMMENDATIONS

1. Maintain a school culture that continues to value the recognition and development of exceptional talent throughout the middle and high school years.

Discovering potential, becoming aware of specific behaviors and characteristics of gifted students, and providing strength-based programming for gifted learners is a critical first step to meeting the needs of gifted students. According to the “2014 National Survey of Gifted Programs” (Executive Summary), the majority of identification efforts regarding gifted students occur at the elementary level. As students move from elementary to middle school and then from middle to high school level, students who have already been identified are more likely to receive programming services than those who have no formal identification. There appears to be no concerted effort or attention being paid to ongoing talent discovery of talent at the middle and high school levels. Additionally, the report concludes that:

“...between 75-99% of the identified (GT) students were served by one primary model at the middle and high school levels. These results indicated that identified gifted students are still considered and identified as a homogenous group of students with all students being served in the same way.”

An effective teacher can help a gifted student in several key ways. First, recognize the student as being advanced in his/her field. Next, point that student to new challenges and make sure school remains a positive experience. Finally, make sure that child is evaluated accurately for readiness to be accelerated.

A variety of resources, tools, and practices exist that are intended to help teachers, counselors, and specialists recognize and support gifted behaviors and characteristics:

- Talent Search Programs: The Talent Search as an Identification Model (http://www.davidsongifted.org/db/Articles_id_10087.aspx)
- Interest and strength-based inventories “Motivation and Learning” <http://www.nagc.org/resources-publications/resources-parents/motivation-and-learning>
- Cognitive Abilities Test: <http://accelerationinstitute.org/Resources/IAS.aspx>
- Non-verbal Abilities Tests< NNAT <http://www.fcps.edu/is/aap/parents/documents/NaglieriNATFCPShandout.pdf>
- Peer and self-referrals
NAGC White paper: National Association for Gifted Children : Identifying and Serving Culturally and Linguistically Diverse Gifted Students <http://www.nagc.org/sites/default/files/Position%20Statement/Identifying%20and%20Serving%20Culturally%20and%20Linguistically.pdf>
- Teachers or mentor/outside mentor referrals <http://www.hoagiesgifted.org/mentors.htm>
- College in Colorado (CIC) <https://secure.collegeincolorado.org/>
- Iowa Acceleration Scale: <http://accelerationinstitute.org/Resources/IAS.aspx>
- ICAP development (exploration of career pathways) http://www.coloradostateplan.com/Counseling/ICAP_Brief2.pdf
- Alignment with ALP goals and priorities
- Autonomous Learner Profile (ALM) “Profiles of the Gifted and Talented” http://www.davidsongifted.org/db/Articles_id_10114.aspx

2. Implement pathways for reaching post-secondary outcomes that are flexible and meets the needs of individual gifted students

There are many research-based possibilities to contemplate when considering programming for gifted high school students. Some districts may offer opportunities for gifted students to demonstrate proficiency toward completion of graduation requirements prior to the typical four-year high school program. These students may then choose an “early enrollment” option that would allow them to attend institutions of higher education or trade school in order to continue their education. Other students who are able to demonstrate mastery of high school requirements may choose to remain in high school, accessing extended learning opportunities beyond those required for high school graduation. Such options may be incorporated in a building with proper support and personnel while other alternatives may involve reaching beyond what a high school is able to offer within a building. A student’s ALP and ICAP is critical for determining the timeline for graduation and appropriate coursework that may include a blend of concurrent enrollment and/or early exit as well as career-related internships or opportunities.

An explanation of possible options follows with links for further information:

1. Performance-based High School Diploma (may also be referred to as **Proficiency-based Diploma**) In most high schools, students are expected to attend class for a certain amount of time every day and graduate in four years. The time students spend in school is consistent, but what they learn is often extremely inconsistent. In a proficiency-based system, learning expectations remain constant while time is variable.

We must find options for students who are able to blaze through a standard high school curriculum, and we must publicize these options. - A Nation Deceived, p. 29

One student may graduate in three years, while another graduates in five—but every student graduates prepared for future success. http://webiva-downton.s3.amazonaws.com/342/45/4/607/1/nessc_i_want_to_know_more_no5.pdf

Example: The “**Move On When Ready**” option (Grand Canyon Diploma, AZ) provides a pathway for students to receive a high school diploma when they prove college and career readiness on academic exams, rather than just accumulating “seat time” and high school credits:

Students demonstrate proficiency on internationally benchmarked exams and must meet qualification scores that have been set based on extensive research on the level of readiness required to be successful in initial credit-bearing courses at open-enrollment colleges, with special attention to ensuring that students have the mathematical and English literacy needed to be successful in all courses. In addition to ensuring foundational college and career readiness for students, qualifying for a Grand Canyon High School Diploma increases flexibility for the remainder of the high school experience. Because the Grand Canyon High School Diploma provides students the opportunity to achieve foundational college and career readiness after two or three years of high school, it frees students to make decisions about their continuing high school program of study based on their interests and their goals for future college study or career training. Once they qualify for their diploma, students may choose from many options, such as staying in high school and participating in an advanced diploma program of study, enrolling in full-time career and technical education, or enrolling in community college.

<https://www.dysart.org/Sites/Default.aspx?pgID=1766>

2. Credit by Examination (CBE) or Credit by Assessment: Some school districts offer examinations whereby students can skip one or more courses by performing well on a test of the material that is covered in those courses. Credit by examination/assessment is an opportunity for students to bypass a required course because they have already mastered the material. This is similar to placement tests employed by many colleges to determine enrollment eligibility for particular courses. Students may have acquired that knowledge through extracurricular activities, activities outside of school, previous learning, or community and work experiences. If students successfully pass the assessment, they can select a more academically appropriate course option. It is important to know that this opportunity was not created as a vehicle for advancement by independent study, but rather as a process to grant credit for expertise through other means of learning. Therefore:

- The student is awarded advanced standing credit (e.g., in high school or college) by successfully completing some form of mastery test or activity.
- Gifted students who are repeatedly allowed to test out in areas where they have already mastered the knowledge and skills are often able to complete the K-12 curriculum in considerably fewer years than the typical 13. This form of grade-based acceleration, then, will end up shortening the number of years in school in the same way as a grade-skip does.

Examples: Galveston Independent School District, SAGE Program

<http://www.gisd.org/education/dept/deptinfo.php?sectiondetailid=19677&>

Credit by Assessment, Hopkins Schools

<http://www.hopkinsschools.org/servicesdepartments/teaching-learning-assessment/support-programs/challenge/credit-assessment>

3. Performance-based assessment academic programming with vocational studies or placement: Career Pathways Programs: A Career Pathway is a sequence of courses designed to help students explore and prepare for a specific career area. A career and academic sequence is recommended for all students regardless of post-secondary intentions and includes progressive exposure to the world of work. Students can earn college credit by taking a Career & Technical Education (CTE) Program of Study and entering the post-secondary institution and majoring in the articulated program.

Example: Forest High School: Career Pathways

<http://www.foresthigh.org/cte/articulation/careerpathways.html>

4. Capstone Projects: *Please visit the CAPSTONE PROJECT section of graduation guidelines, [here](#).*

Example: Virginia's College and Career Ready Initiative, Grade 12 English Capstone. Course Content and Performance Expectations,

http://www.doe.virginia.gov/instruction/english/capstone_course/english_capstone_course_content.pdf

5. Major Area of Interest (MAI, Florida) : Four (4) credits selected by the student in an area of interest, can be in a career and technical program, fine and performing arts, or an academic content area. The purpose is to investigate post high school career pathways: <http://www.fldoe.org/eias/databaseworkshop/pdf/mairptng.pdf>

6. Competency based Pathway: At any time during a student’s high school career when he/she has demonstrated proficiency on the standards required for graduation, there is a need to develop a plan that will enable that student to continue to learn and build on his/her strengths, skills and interests for rest of his/her high school career. A competency-based pathway (CBP) is a pathway to consider on a needs-basis, determining which student/s may benefit from a CBP that leads to graduation. According to CompetencyWorks.org, “over two-thirds of our states have adopted policies that enable credits to be awarded based on proficiency in a subject rather than one-size-fits-all seat-time in a classroom.”

In 2011, 100 innovators in competency education came together for the first time. At that meeting, participants fine-tuned a working definition of high quality competency education:

- Students advance upon demonstrated mastery.
- Competencies include explicit, measurable, transferable learning objectives that empower students.
- Assessment is meaningful and a positive learning experience for students.
- Students receive timely, differentiated support based on their individual learning needs.
- Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.

<http://www.competencyworks.org/about/competency-education/>

Frequently, competency education is described as simply flexibility in awarding credit. It has also been defined as an alternative to the Carnegie unit. However, a competency-based pathway is a transformation in the educational system from a time-based system to a learning-based system. It is a promising practice for districts to consider as they explore new ways to expand and enrich their support for students. Competency-based approaches are being used at all ages, from elementary school to graduate school level, focusing the attention of teachers, students, parents, and the broader community on students mastering measurable learning topics.

According to studies conducted on this topic, CompetencyBased.org has identified five essential components for success of implementation of a competency-based system:

1. Build a culture rooted in a growth mindset that supports risk taking and help seeking.
2. Utilize assessments that are transparent, ongoing, and provide meaningful feedback to support student learning and agency.
3. Develop embedded, tiered, and timely interventions for just-in-time support that leads to successfully meeting or exceeding the learning targets.
4. Develop extended opportunities to learn within and beyond traditional school times and settings, including internships, online learning, project-based learning, summer classes, and more.
5. Know the whole student and seek to understand their life and learning.

Further information on this topic can be found through the following links:

- http://www.competencyworks.org/wp-content/uploads/2012/12/iNACOL_CW_IssueBrief_LearningEdge_full.pdf
- <http://all4ed.org/reports-factsheets/strengthening-high-school-teaching-and-learning-in-new-hampshires-competency-based-system/>

7. Early College Entrance: There is substantial research to document students successfully leaving high school after tenth or eleventh grade to enter college at that time, often without any formal graduation from high school. This option, once funded by the Ford Foundation as a way to actively recruit bright students to enter college early, was particularly popular during two periods of our nation's recent history: 1940-42, and again in 1949. There was a belief that bright students would be the best military leaders; hence the need to get their preparatory training over more quickly. At present, early entrance to college is used by gifted students who believe that high school has little more to offer them. Students who have been admitted early to college typically participate in the regular university curriculum and work with others who are older than they. No additional curriculum enrichment takes place — at least not systematically — except for possible enrollment in honors classes at the college level.

Early admission offers students the opportunity to enroll full-time in a post secondary school. This option is likely to be the better fit for gifted students who have either completed high school early as the result of acceleration, who have been adequately homeschooled or who, through proper assessment, have been identified as intellectually and emotionally advanced enough to move into full-time college without completing high school.

Sometimes the best place for an advanced high school student is a university. Although it might sound like a radical solution, it's been going on in this country since the early days of our nation.

- A Nation Deceived, p. 34

Some colleges and universities have programs designed especially for this population, which help ease the transition for young students who are entering the college environment by offering social and academic support among peers of similar ages. A survey of the empirical research shows that in general, early entrants earn higher grade point averages than regular students, are more likely to graduate, are likely to make the dean's list or earn other academic honors, and pursue graduate level studies. (Olszewski-Kubilius, 1995). Early college entrants typically finished college in less than four years and went on to graduate school. Many are pursuing doctorates and preparing for academic research careers. Some students studied abroad, accepted fellowships or pursued other educational opportunities. Most used the extra time they garnered by entering college early in very productive ways. (Brody & Stanley, 1991; Stanley, 1985; Stanley & McGill, 1986)

Early entrance to college is generally highly successful whether it's with a peer group or on your own. However, entering early with a group has tremendous advantages. It's comforting to be with other bright young people who are going through the same experiences at the same time.

Dr. Nicholas Colangelo, The University of Iowa

8. Multiple pathways: Dual credit/Concurrent enrollment: As more acceleration opportunities become available to gifted students of all ages (eg; summer programs, distance education, advanced classes), early entrance to college is likely to become the natural progression for an increasing number of students who exhaust high schools course offerings earlier than their age-peers. At the same time, the availability of these options may also allow other students to remain in high school and be adequately challenged (A Nation Deceived, p. 97).

Many students who need accelerated coursework may not be ready for full-time enrollment in college. An alternative is to access college-level courses on a part-time basis while remaining in high school. Keeping a foot in the door of the high school allows students to participate in high school activities and competitions and to apply to college as freshmen, with or without advanced standing, greatly enhancing their chances of being admitted to selective universities. High school students can access college-level work either by leaving the school to attend nearby colleges part-time or by taking college-level courses within the high school. (A Nation Deceived, p.109) . Olszewski-Kubilius (1995) suggests that students considering early entry should:

...study college or university subjects part time to gain experience of the demanding nature of tertiary study before committing to full time enrollment.

According to the U.S. Department of Education, college credits earned prior to high school graduation reduce the average time-to-degree and increase the likelihood of graduation. And although scheduling can be a challenge, dual enrollment can be an excellent arrangement for some students and schools.

Examples:

- College in the Schools (**CIS**): Hopkins High School, MN: 7 College in the Schools (CIS) courses in languages and science that are offered in conjunction with the University of Minnesota, all of which earn college credit. <http://www.hopkinsschools.org/schools/hopkins-high-school/academics/exceptional-learning-challenge/advanced-course-offerings-ap-cis-and-more>
- Early College Scholars—This VA Department of Education: Initiative allows high school students to earn up to 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma. Students must meet specific requirements in order to participate in the Early College Scholars program. http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/va_plan_dual_enrollment.pdf

9. Advanced Placement (AP)/International Baccalaureate (IB): IB and AP programs exist in 126 countries and serve approximately 600,000 students from many countries. This program focuses on students as individuals, with individual needs, and allows student choice within a range of courses.

AP: <https://apstudent.collegeboard.org/apcourse>

IB: <http://www.ibo.org/>

10. Career-related Internships or Opportunities: One of the best ways to learn about careers and gain new skills is through hands-on experience. An internship is a system of on-the-job training that allows learners to gauge their interest in a chosen professional area. It is a carefully monitored work or service experience in which a student has intentional learning goals and reflects actively on what she or he is learning throughout the experience. Internships provide real world experience for those looking to explore or gain the relevant knowledge and skills required to enter into a particular career field. Internships can be part of a learning plan that someone develops individually; internships may be part of an educational program and carefully monitored and evaluated for academic credit. For internships for credit, usually a faculty sponsor will work along with the site supervisor to ensure that the necessary learning is taking place. Internships can provide real-world experiences instead of second-hand experiences. Characteristics of an internship include:

- Duration of anywhere from a month to two years, but a typical experience usually lasts from three to six months.
- Generally a one-time experience.
- May be part-time or full-time.
- May be paid or non-paid

An important element that distinguishes an internship from a short-term job or volunteer work is that an intentional “learning agenda” is structured into the experience. Learning activities common to most internships include learning objectives, observation, reflection, evaluation, and assessment. An effort is made to establish a reasonable balance between the intern’s learning goals and the specific work an organization needs to complete. Internships provide academic, career, and/or personal development. (adapted from National Society for Experiential Education, NSEE)

Example: Starting and Maintaining a Quality Internship Program

<https://www-rohan.sdsu.edu/~gsph/fieldpractice/sites/starting-maintaining-quality-internship-program.pdf>

Students can also learn more about themselves, specific careers, and additional career options by participating in one or more of the following opportunities:

-Job shadowing: provides an up-close look at a career, employer, or even an industry of interest. Students can “shadow” a working professional as s/he goes through a normal day on the job. Job shadowing may last a couple of hours, a half-day, or an entire day. Opportunities can be found informally through networking or more formally through informational interviews.

-Career Exploration: some schools/districts are connected with local companies and businesses and may provide a short, half-day introduction to a host company. The company registers a date and agenda, usually through guidance offices or career centers.

-Volunteering: provides a student with real work experience. Expectations are that volunteers pitch in and work with staff members. Volunteering may involve a longer commitment, such as 2 or 10 hours per week throughout a semester or even an academic year.

-Internships: The primary objective of an internship is to provide students with a professional, entry-level work experience that will enhance academic curriculum. A focus may be to apply knowledge and skills learned in the classroom. Students have an opportunity to gain professional competencies on the job, and high school or university credit may be offered for the internship.

-Part-time, career-related jobs: similar to internships in that they allow students to gain hands-on experience but they differ in that they continue for longer than a semester or academic year. As with internships, students will expand knowledge and achieve higher skill levels.

11. Working with an expert: *When a young person, even a gifted one, grows up without proximate living examples of what she may aspire to become – whether lawyer, scientist, artist or leader in any realm – her goal remains abstract. Such models as appear in books or on the news, are ultimately too remote to be real, let alone influential. But a role model in the flesh provides more than an inspiration; his or her very existence is confirmation of possibilities one may have every reason to doubt, saying “Yes, someone like me can do this.”* Sotomayor (2013, p. 227)

The role of the expert is to offer expertise and knowledge in a certain field of study. An expert is both a teacher and a role model who guides students to (1) develop a skill set and (2) shape one’s character and confidence. Such experts can be immensely important and influential in building a foundation of knowledge and a student’s the belief in oneself, necessary for success in afield of study. Working with an expert can occur over a school-quarter, semester or full year. Terms, requirements, and expectations for the mentorship (for both parties) must be clearly defined and communicated.

Perhaps no other intervention in the lives of young people makes as much intuitive sense as the concept of mentoring by caring and competent adults. Fortunately, in the case of high school mentoring, these intuitive good feelings are well supported by research. Students who take part in carefully planned, long-term mentoring programs have higher grade-point averages, are more likely to attend college or post-secondary training programs and report improved social and family relationships. Additionally, these students are less likely to drop out of school, carry weapons, use drugs or engage in other high-risk behaviors. <http://educationnorthwest.org/sites/default/files/abcs.pdf>

Examples:

- The Anchorage (AK) School District has implemented a Mentorship study programs intended for high-ability, high-achieving students who often have completed all advanced coursework available at the high school level or who are currently enrolled in coursework that applies to their area of interest. This program gives motivated, mature high school students an idea of what it is like to work in a field of their interest by being teamed with a professional who acts as their mentor during a 45- to 60-hour program. The mentor, the student, and the coordinator design a curriculum of activities and projects that expose the student to real-life work situations as well as the latest information and technology in the field. The mentorship is usually completed in ninety days. Meeting times are arranged when it works best for the mentor and the student: usually after school and on in-service days. Students receive an elective credit for the mentorship when they successfully complete a range of requirements. <http://www.asdk12.org/giftedprogram/highschool/giftedmentorships/>
- **MN: ProPEL (Professionals Providing Experiences for Life):** ProPEL is a Hopkins High School program that gives students who have exhausted the course offerings at the school the chance to work side-by-side with a professional in an area of interest, while earning elective credits at the same time. The program is designed for juniors or seniors with advanced knowledge in a particular field of study. The ProPEL program services a broad spectrum of career fields, and attempts to match the interests of the student with the best professionals available in trade, service, academic, medical, legal, executive, or creative career areas. This course includes a rigorous collection of curricular requirements, including projects, speaker engagements, interviewing professionals in the field, required on-site mentor contact time, group objectives, field trips, and hands on opportunities beyond the classroom. The mission of the ProPEL program is to provide students with experiences that will enhance and encourage their curiosities as lifelong learners through exploration in a career field of interest and the skill set needed to succeed as professionals. <http://www.hopkinsschools.org/schools/hopkins-high-school/academics/propel-professionals-providing-experience-life>.

12. Other Extended Learning Opportunities:

- **Partnerships with Businesses:**
 - CAPS program, BVSD, Overland Park, KS: <http://www.bvcaps.org/s/1403/start.aspx>
- **Community service:** is performed by someone or a group of people for the benefit of the public or its institutions. Although an option for students, Community Service is sometimes mandated as part of a citizenship requirement, for criminal justice sanctions, or for a course or class such as service-learning.
- **Independent Study** Independent Study courses are self-paced, project-based courses designed to enhance curriculum development and encourage individual growth. They provide a framework for exploring a topic or strategy, but allow students to choose their own foci and resources

- **Passion Projects:** is a study on a topic or area in which a student has a passion; it is simply a project that a student is excited about (notably one that is likely outside the bounds of the normal school curriculum). Passion Projects can be considered to be different from "independent studies", in that independent studies may be a topic a student is interested in, but the topic is not something that the student is necessarily defined by. <http://sonyaterborg.wix.com/the passion project>
- **Off-campus programs (Dual-enrollment):** Types include: Concurrent enrollment, co-enrollment, dual credit. This option allows for a smoother continuum of learning for the advanced high school student, shortening the time necessary for an undergraduate degree, and generally expanding academic options (Fincher-Ford, 1997). Many are inexpensive, cost-efficient, and create a more realistic timeline of learning for some students.
<http://geri.education.purdue.edu/PDF%20Files/NAGC.08.Lumina.Peter.pdf>
- **Governor's Schools:** Governor's Schools give gifted students academic and visual and performing arts opportunities beyond those normally available in the students' home schools. Students are able to focus on a specific area of intellectual or artistic strength and interest and to study in a way that best suits the gifted learner's needs. Each program stresses non-traditional teaching and learning techniques. For example, small-group instruction, hands-on-experiences, research, field studies, or realistic or artistic productions are major elements in the instructional design at all schools. Students become scientists, writers, artists, and performers as they work with professional mentors and instructors. Every effort is made to tailor learning to needs of the community of learners that compose the program.

Examples:

- Virginia Governor's School Program: designed to meet the needs of a small population of students whose learning levels are remarkably different from their age-level peers. The foundation of the Virginia Governor's School Program centers on best practices in the field of gifted education and the presentation of advanced content to able learners.
http://www.doe.virginia.gov/instruction/governors_school_programs/
- The Governor's School of North Carolina: five-week summer residential program for intellectually gifted high school students, integrating academic disciplines, the arts, and unique courses on each of two campuses. The curriculum focuses on the exploration of the most recent ideas and concepts in each discipline, and does not involve credit, tests, or grades. <http://www.ncgovschool.org/overview/>
- Design-Thinking Process: Problem-based Learning Projects:
<http://vida-vistausd-ca.schoolloop.com/dt>
- **Academic Competitions.** In addition to the obvious benefits of exposing students to increased rigor and challenge in a subject area, there are affective benefits to students such as motivation, promotion of a healthy self-concept, coping with subjectivity, dealing with competition, and interacting with supportive role models.
http://www.davidsongifted.org/db/browse_resources_293.aspx
- **Virginia, Secondary GT Challenge Handbook:** "Educational Opportunities for Gifted Students at the High School Level":
http://www.doe.virginia.gov/instruction/gifted_ed/opportunities_for_gifted_at_high_school.pdf

3. Support broad-based understanding and implementation of evidence-based practices that impact instruction and performance for secondary gifted students

There are several options to consider when thinking about changes to content-delivery and access to curriculum. An essential element to the decision-making process is that of pre-assessment. Find out first at what level the student is performing, then consider the following options:

Acceleration:

Acceleration means moving through the traditional curriculum at rates faster than typical. The 18 forms of acceleration include grade-skipping, early-entrance to school, and Advanced Placement (AP) courses. It is appropriate educational planning. It means matching the level and complexity of the curriculum with the readiness and motivation of the student. Students who are moved ahead tend to be more ambitious, and they earn graduate degrees at higher rates than other students. Interviewed years later, an overwhelming majority of accelerated students say that acceleration was an excellent experience for them. Accelerated students feel academically challenged and socially accepted, and they do not fall prey to the boredom that plagues many highly capable students who are forced to follow the curriculum for their age-peers.

A Nation Deceived, p. 53

There are many forms of acceleration, some which are explained in detail in subsequent sections below. One must use the ALP/ICAP goals in order to determine if acceleration is the appropriate pathway for the individual student:

Acceleration is not necessarily the appropriate answer for any one child. Acceleration works best in subjects that are linear-sequential, building on previous skills and knowledge. Mathematics, some sciences, language structure and the acquisition of foreign language may be appropriate subjects for radical acceleration in the hands of skilled teachers. However, there are some disciplines requiring experience for understanding, such as literature and some of the social sciences.. Whatever one's IQ, experience is best bought through years of living.

Lewis, G (Spring 2002)

“Alternatives to acceleration for the Highly Gifted Child”

Roeper review, Vol 24, No 3 (pp 130-133)

Radical acceleration is acceleration that employs a range of procedures leading to school graduation 3 or more years earlier than usual. Research provides strong support for the use of thoughtfully planned and monitored radical acceleration as a process allowing educators to respond to the academic and affective needs of a significant subgroup of the gifted population. These students earn higher GPAs, and they are more likely to complete college on time or early, earn general and departmental honors, make the dean's list, enter graduate school, engage in research, and embark on prestigious careers. Research also documents positive outcomes for social and emotional development.

Example: Radical acceleration and early entry to college: A review of the research:

http://www.davidsongifted.org/db/Articles_id_10349.aspx

Telescoping: Grade telescoping, also called "rapid progress," involves allowing a student to complete the school's curriculum of *several* years in one year's less time. Grade telescoping requires the school to look carefully at its curriculum, to eliminate repetition, to limit practice of already mastered skills and concepts, and to step up considerably the pace of learning. Usually, the student is not allowed to skip *any* subject areas of curriculum but will move more rapidly through them.

Compacting: Compacting is a variation on the credit-by-examination approach. Students are pre-tested for knowledge and proficiency. Rather than testing out of an entire course, this option allows students to skip those units in which he or she can demonstrate mastery through pre-testing. Again, 80 percent proficiency or better should be adequate. With compacting, the student is then encouraged to develop an independent course of study to delve into the topic in greater depth or to move onto another unit.

Differentiation: According to the Changing the Odds for Student Success: What Matters Most (Bryan Goodwin), three major components are necessary to address the needs of gifted learners in any classroom or setting:

1. Setting high expectations and delivering challenging instruction. Teacher expectations for students have a powerful influence on student achievement. The best teachers see intelligence not something that is innate or fixed within students, but as something that can be nurtured and developed.
2. Fostering engaging learning environments and meaningful relationships with students. Effective teachers have qualities of warm demanders, pressing students to achieve at high levels while at the same time, developing strong nurturing relationships with them.
3. Intentionally matching instructional strategies to learning goals.

The best teachers are clear about what they are teaching. They consistently monitor student progress toward learning goals and use appropriate teaching strategies to close the gap between what students know and what they are expected to learn.

http://www.mcrel.org/~media/Files/McREL/Homepage/Products/01_99/prod83_CTOPub.ashx

In Progress - DRAFT

4. Ensure that guidance and career counseling programs incorporate awareness and individual attention to the most common research-based affective needs of gifted students.

Gifted students, like those in other unique student populations, may require flexibility or alternative pathways to address needs within their area/s of strength as well as benefit from attention to the development of intra and inter personal skills which can lead to an understanding of self. Common needs that are found in research about gifted students' social-emotional/affective needs include: multi-potentiality, perfectionism, stress and anxiety, early emergence (of talent), and hypersensitivity.

The following table identifies some common social-emotional needs of gifted students:

Common need	Exhibits as...	Possible impact on HS graduation/success	Recommended student outcome/s
Multi-potentiality*	<ul style="list-style-type: none"> • Difficulty focusing on one priority/field • Delay or vacillation about college entry • Overly-packed school schedules • Stress, exhaustion • Highly diverse participation in school activities 	<ul style="list-style-type: none"> • Late graduation, late entry into college, not attaining correct prerequisites for college major • Due to lack of focus, students may change majors often • Students may feel confused or frustrated at having "too many interests". • Parents may voice frustration at a lack of focus 	<ul style="list-style-type: none"> • Career exploration in variety of areas • Shadowing experiences • Paid internships with professionals • Provision of a solid curriculum of coursework in order to insure against inadequate preparation for a later career choice • Exposure to atypical career models.
Perfectionism	<ul style="list-style-type: none"> • Underachievement • Serious health problems (abdominal pain, alcoholism, anorexia, bulimia, chronic depression, and obsessive-compulsive personality disorders) • Emotional turmoil, feelings of worthlessness & depression • Students may not turn in assignments or be late, wanting assignments to be perfect. • Students may not do assignments at all, not wanting to take a chance at being incorrect. 	<ul style="list-style-type: none"> • Inability to qualify for post-secondary options due to poor or failing grades • Incomplete assignments, delay of graduation • Conflicting feelings regarding own expectations and talent 	<ul style="list-style-type: none"> • Focus on meaning and value of work • Growth mindset, (enjoy the journey) • Understanding of lives of eminent people • Development of persistence, "grit" (set goals and focus on improvement) • Realization by students: <ul style="list-style-type: none"> -Don't take it personally -Know when to quit: <p>*match time commitment to assignments & value</p>

Common need	• Exhibits as...	• Possible impact on HS graduation/success	• Recommended student outcome/s
Stress & anxiety**	<ul style="list-style-type: none"> • Underachievement • Depression • Sleep difficulties • Loss of appetite • Chronic fatigue • Infections, rashes, frequent colds/headaches • Feelings of unworthiness & failure • Loss of interest in appearance • Attention-seeking behaviors (fighting, yelling, truancy) • Refusal to do assigned work • Confusion, lack of connection or belonging • Nervous habits • Loss of compassion, meaning, purpose 	<ul style="list-style-type: none"> • Late/delayed college applications • Low gpa 	<ul style="list-style-type: none"> • Self-advocacy, metacognition, empowering sense of locus of control • Control over-involvement in activities • HALT • Identification of stresses, development of strategies to address • Self-reflection: discuss and/or write • Development of problem-solving through role-playing • Refinement of self-advocacy techniques
Early Emergence*	<ul style="list-style-type: none"> • Extremely-focused career interest/s • passion for an idea • early commitment to an a career area • Exclusion of other possibilities or courses and activities 	<ul style="list-style-type: none"> • Focused, driven, almost too decisive and so may ignore other options • May not avail him/herself of social or other activities unless connected to the passion of the student • narrow coursework that may not fulfill local graduation requirements • Lack of development in other areas 	<ul style="list-style-type: none"> • Delay commitment to career path • Open opportunities, internships, short mini-courses in other fields • Shadowing in other career areas Seek opportunities for internships and work experiences in the areas of interest. • Seek career guidance from a guidance counselor who is familiar with the talent area or from a professional in that field. • Make a detailed plan of training and education leading toward the chosen career goal, • Explore higher education or postsecondary training early. • Help the student establish a relationship with a mentor in the area of interest

Common need	• Exhibits as...	• Possible impact on HS graduation/success	• Recommended student outcome/s
Hypersensitivity -Emotional -Imaginational -Intellectual -Sensual -Psychomotor	<ul style="list-style-type: none"> • Over-reaction to situations and conflicts • Extreme reactions in any of the areas • Strong reactions to the emotional state of others • Social adjustment problems, depression, eating disorders, school phobia, etc 	<ul style="list-style-type: none"> • Lack of focus, feelings of powerlessness 	<ul style="list-style-type: none"> • Acknowledge and support feelings • Assist in students acknowledging when they have power to change things (or not) • Help student identify and understand this trait: child needs to be aware of this trait to accept it • Create an emotional response scale: http://giftedkids.about.com/od/social/emotionalissues/qt/emotion_coping.htm •

- *Career Planning for Gifted and Talented Youth: http://www.davidsongifted.org/db/Articles_id_10354.aspx
- **Stress and Anxiety, Helping Gifted Kids Cope: http://www.sengifted.org/wp-content/webinars/webinar_file_uploads/kane04262011/kane04262011.pdf

Proactively addressing the following competencies can enhance gifted students' high school experiences and ease transitions from high school to post-secondary and/or other career pathways. These competencies, stated in the NAGC Standards are also part of the Colorado Department of Education, Gifted, ALP model template. The categories include:

A. Personal competence

- self-efficacy
- confidence
- motivation
- resilience
- self-awareness
- independence
- curiosity
- openness to risk-taking
- self-advocacy
- dealing with perfectionism (growth mindset, grit, persistence)
- stress management
- connection of effort to success
- reversing underachievement

B. Social Competence

- positive social interactions with age peers
- appropriate peer relationships with intellectual/ artistic/ creative peers regardless of age
- positive social skills with adults
- effective ways of requesting solitude
- effective ways of working in groups

C. Leadership Dispositions and Skills

- self-confidence
- flexibility
- listening skills
- presentation/speaking skills
- empathy
- sense of commitment
- self-efficacy
- goal-setting
- group communication skills
- helping bring out the best in others
- social responsibility
- moral responsibility
- decision making

D. Cultural Competence Decisions and Skills

- positive regard for own language and heritage
- appreciation and sensitivity toward diverse backgrounds and languages of others
- collaborative skills in diverse groups
- effective communication with diverse peers
- positive social skills to address stereotyping
- positive social skills for confronting discriminatory behavior by others

E. Communication

- with faculty (self-advocacy)
- with peers
- formal and informal
- Involvement of all stakeholders in the process of communicating ALP goals is a requirement as stated in Colorado Statute 12.02 (1) (d) (viii). Direct involvement and monitoring of student goals is enhanced when:

Students, parents and educators... plan continuously for each individual the proper fit of acceleration options for producing the cumulative educational advantage that intellectually talented students need. (A Nation Deceived, p. 106)

5. Capitalize on the potential of a strong support system of staff, family, and community members who assist and mentor gifted students as they reflect on personal and career goals and make adjustments to their post-secondary outcomes.

Often, students who are different from their classmates in one or more ways can feel isolated. It is critical that they know they are entitled to be who they are, and that being true to themselves will help them realize their potential. Students may also encounter issues with systems that do not recognize the student's gifted designation. They may feel frustrated, lost, not valued, and may need a support system they can go to; they need to know where to turn for help or a listening ear. Other students/peers, parents, teachers, counselors, psychologists, and administrators who know and understand what it is to be gifted can be an invaluable resource.

HIGH SCHOOL	Recommendations
Family/Parents:	<ul style="list-style-type: none"> • Meet with other parents of GT students, book study • Become involved with your child's ALP/ICAP development and monitoring • Open options for discovery of other talents (multi-potentiality), encourage exploration • Assist to set up community member partnership time, mentors • Understand that your child may not have been challenged in the curriculum until entering high school and support him/her through challenges • Instill and support a positive mindset about learning from challenges
Teachers	<ul style="list-style-type: none"> • Use ICAP/ALP goals to adjust curriculum and materials in content area/s. • Implement compacting and/or telescoping • Use pre-tests to assess prior knowledge • Provide opportunities for extension-investigations in content and career areas • Facilitate off-campus career exploration, courses, intern and mentorships • Offer off- and above-level assessment and access to appropriate coursework • Utilize technology (Skype, online, Adobe Connect) for mentorships & distance-learning ("Virtual Mentor" bank) • Provide connections to content in vocational courses • Implement cluster and flexible groupings
Counselors	<ul style="list-style-type: none"> • Merge ICAP/ALP to align strength-needs and college/career planning • Provide opportunities for gifted students to be together • Offer specific mini-courses for academic and social concerns, talent exploration • Facilitate off-campus career exploration, courses, intern and mentorships • Offer above level assessment; access to appropriate coursework • Provide opportunities for students to pursue rigorous, content-based, vocational courses
Psychologists	<ul style="list-style-type: none"> • Support affective needs
Administrators	<ul style="list-style-type: none"> • Assist with scheduling to facilitate communication between teachers, GT coordinators, counselors • Explore/support test-out options, Fast Track graduation and above-level assessment with access to appropriate coursework

MIDDLE SCHOOL	Recommendations
Family/Parents	<ul style="list-style-type: none"> • Participate in your child's ALP planning and monitoring • Understand that your child may not have be challenged in the current curriculum; provide outside experiences to extend and enrich his/her learning • Meet with other parents of GT students, participate in book studies
Teachers	<ul style="list-style-type: none"> • Use ICAP/ALP goals to adjust curriculum and materials in content area/s; compacting; telescoping; pre-tests to assess content knowledge; extension-investigations in content and career areas • Provide opportunities for choice and decision-making • Cluster and flexible groups
Counselors	<ul style="list-style-type: none"> • Provide support for early career planning, decision making, and identity exploration • Provide opportunities for gifted students to be together
Administrators	<ul style="list-style-type: none"> • Assist with scheduling to facilitate communication between teachers, GT coordinators, counselors • Facilitate scheduling to accommodate learner needs, including acceleration options as well as teacher-planning and collaborative work-time

TOOLS/RESOURCES

Books:

- Assouline, S. G., Colangelo, N., Lupkowski-Shoplik, A., Lipscomb, J., Forstadt, L. (2012). *A guide for Whole-Grade Acceleration K-8, 3rd Edition*. Tuscon, AZ: Great Potential Press
- Berger, S. L. (2006). *College Planning for Gifted Students*. Waco, TX: Prufrock Press.
- Cash, R (2011). *Advancing Differentiation: Thinking and Learning for the 21st Century*. Minneapolis, MN; Free spirit Publishing. ISBN 13-978-1-57542-357-9
- Delisle, J (2006). *Parenting Gifted Kids*. Waco, TX; Prufrock Press. ISBN 1-59363-179-0
- Delisle, J & Galbraith, J (2002). *When Gifted Kids Don't Have All the Answers*. Minneapolis, MN; Free Spirit Publishing. ISBN 1-57542-107-0
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- Dixon, Felicia A., & Moon, Sidney M. (2006). *The Handbook of Secondary Gifted Education*. Waco, TX: Prufrock Press.
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- Freire, P. and H. Girous & P. McLaren (1988). *Teachers as intellectuals: towards a critical pedagogy of learning*.
- Galbraith, J & Delisle, J (2011). *The Gifted Teen Survival Guide*. Minneapolis, MN; Free Spirit Publishing. ISBN 978-1-57542-381-4
- Heacox, D & Cash, R (2014). *Differentiation for Gifted Learners: Going Beyond the Basics*. Minneapolis, MN; Free Spirit Publishing. ISBN 978-1-57542-440-8
- Hewitt, D., Hewitt, R. (2010). *Free College Resource Book*. Waco, TX: Prufrock Press.
- Hipp, Earl (2008) *Fighting Invisible Tigers*. Free Spirit Publishing.
- Kingore, Bertie (2013) *Rigor and Engagement for Growing Minds*. PA Publishing.
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- Lewis, Barbara A. (2005) *What Do You Stand For? For Teens, A Guide to Building Character*. Minneapolis, MN: Free Spirit Publishing
- Murratori, M. (2007). *Early entrance to college: a guide to success*. Waco, TX: Prufrock Press.
- Roberts, Julia Link & Boggess, Julia Roberts (2011). *Teacher's Survival Guide Gifted Education*. Waco, TX: Prufrock Press.
- Peterson, J (2011). *Talk With Teens About What Matters to Them*. Minneapolis, MN; Free Spirit Publishing. ISBN 978-1-57542-384-5
- Pope, L. & Oswald (ed) (2012). *Colleges That Change Lives*. New York, NY: Penguin Books.
- Strip, C (2000). *Helping Gifted Children Soar*. Scottsdale, AZ; Great Potential Press. ISBN 0-910707-41-3
- Webb, Gore, Amend & DeVries (2007). *A Parent's Guide to Gifted Children*. Scottsdale, AZ; Great Potential Press. ISBN 0-910707-52-9
- Webb, J. T. (2005). *Misdiagnosis and dual diagnoses of gifted children and adults: ADHD, bipolar, OCD, Asperger's, depression, and other disorders*. Scottsdale, Ariz.: Great Potential Press.

Articles:

- Assouline, Colangelo, Heo & Dockery (3/1/13). "High-Ability Students' Participation in Specilaized Instructional Delivery Models: Variations by Aptitude, Grade, Gender, and Content Area." *Gifted Child Quarterly* 2013 57:135
- Callahan, Moon & Oh (2014). *National Surveys of Gifted Programs: Executive Summary.* National Research Center n the Gifted and Talented, University of Virginia.
- Gentry, Peters & Mann (Spring 2007). "General versus Gifted Perceptions of CTE v High School Perceptions". Volume 18, No 3
- Gomez-Arizaga & Conejeros-Solar (2013). "Am I That Talented? The experiences of gifted individuals from diverse educational backgrounds at the postsecondary level." *High Ability Studies*, 2013, Vol 24, No 2, 1350151.
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Web Resources:

- Academic Acceleration:: <http://tip.duke.edu/node/1515>
- Breaking Ranks in the Middle: <http://www.nassp.org/Portals/0/Content/53495.pdf>
- College in Colorado: www.collegeincolorado.org
- Early Decision and Early Action: <http://tip.duke.edu/node/674>
- Grade Skipping: Less School Can Mean More Learning: <http://tip.duke.edu/node/1591>
- High School Reform and Gifted Students: <http://tip.duke.edu/node/898>
- John Hopkins Center for Talented Youth: http://cty.jhu.edu/imagine/resources/college_entrance.html
- Lost in Space, the Information Gap: <http://tip.duke.edu/node/862>
- "Major Area of Interest" (MAI): <http://www.fldoe.org/eias/databaseworkshop/pdf/mairptng.pdf>
- The Middle School to College Connection: <https://tip.duke.edu/node/863>
- Northwestern Center for Talent Development: <http://www.ctd.northwestern.edu/ctd/>
- Multipotentiality: Issues and Considerations for Career Planning: <http://tip.duke.edu/node/784>
- Smooth Transitions: <http://tip.duke.edu/node/759>
- Talent on the Sidelines: http://webdev.education.uconn.edu/static/sites/cepa/AG/excellence2013/Excellence-Gap-10-18-13_JP_LK.pdf
- A Voice From the Middle:: <http://www.nassp.org/portals/0/content/56195.pdf>
- What About Students Who Drop Out?: <http://tip.duke.edu/node/872>