



Curriculum Guide

(Revised 2021)

LANGUAGE ARTS

At the heart of The Liberty School Language Arts program is our Orton-Gillingham (O.G.) language tutoring. The O.G. approach stresses **multisensory** (auditory, visual, kinesthetic) instruction to compensate for visual and auditory memory deficit problems in language learning. Phonics is taught in a logical, **sequential**, carefully organized manner, beginning with simple, one-letter, one-sound symbols, and progressing through diphthongs, digraphs, six-syllable types, roots, and affixes. Each new concept builds cumulatively on previously learned material. The approach is **cognitive**, as students are taught to reason through language problems when reading and spelling. While the English language can be tricky due to its incorporation of words from many different languages, it can be about 85% predictable when one knows the rules that govern its use. This takes the guesswork out of reading and spelling, and helps dyslexic students gain mastery over language learning. The O.G. approach teaches reading, spelling, speaking, and writing together as integrated, interdependent parts of the same process. By shifting from reading to writing several times during each lesson, linking visual, auditory, and kinesthetic sensory pathways together simultaneously, memory acquisition is assured. New concepts and skills are practiced until they become automatic responses. Teaching is **individualized**, skills are **taught to mastery**, and the learning pace is “as fast as one can, but as slow as one must.” Finally, the approach takes into account the social and emotional needs of students, as many have been demoralized in their prior learning environments. This requires instructors to be sensitive, intuitive, and flexible in their approach.

After considering baseline testing data and tutor-student compatibility in terms of style, approach, and personality, each student is assigned a language tutor for the year. Students attend one-on-one tutoring sessions 60 minutes/day, Tuesday through Friday where they practice the skills necessary to become competent, successful readers and writers. After each session, students are assigned a variety of practice exercises that are selected to reinforce skills that were taught in tutoring. Students complete these assignments during an Active Reinforcement Period (A.R.P.), which is also 60 minutes per day, four days a week. In addition to providing a regular opportunity for practicing language skills, ARPs help students learn to work diligently and

independently. Liberty A.R.P. proctors are also O.G. trained and able to provide assistance whenever necessary. These proctors provide daily, written feedback to tutors about the appropriateness of each tutee's assignments and workload, and to verify the completion of assigned tasks.

Oral Reading Fluency

Students with dyslexia have to dedicate significant amounts of attention and energy to decoding each word as they read. Because of these demands on the brain, reading *comprehension* can suffer. To address this problem, Liberty students spend 15 minutes per day dedicated to improving oral reading fluency. Reading aloud from books that are *at*, or slightly *below*, their decoding ability (5 errors per page or less), students are held to 100% accuracy. In this way, with repeated practice, more and more words can be read with automaticity, without having to slowly decode. This repeated fluency practice develops the myelin sheath around nerve axons in the brain, speeding the transmission of nerve impulses. As fluency increases, cognitive resources that were once needed for decoding can be allocated toward *comprehension*, which is the purpose for reading in the first place. Fluency reading occurs during each tutoring session.

Materials to support instruction: Alpha Chips, sound decks, morphology cards, slap decks, wide variety of leveled readers, *Let's Read* series, *Mega Words*, *6-Minute Reading Solutions*, *Equipped for Reading Success*

Assessments:

IOTA Word List, Woodcock Johnson, DSPT Spelling and Word Recognition, GORT Fluency Comprehension, WIST Spelling and Decoding, Quick Phonics Screener

LITERATURE

To help illustrate the joy and richness that can be discovered in books, Liberty's junior high-aged (and/or gifted) students take literature class. Whether through classics like *Hamlet* and *Great Expectations*, modern books like *The Hobbit* and *Fish in a Tree*, or poetry, students are exposed to a variety of genres and styles. Students may use audiobooks to accompany their reading, and discussion plays an important role in literature class. Students learn about literary devices, figurative language, plot, character development, setting, theme, conflict, main ideas, cause/effect, and inference. Annotation is often taught in order for students to better understand and recall what they've read. Through literature, students develop new vocabulary and learn to look at stories through different lenses and perspectives. Students also explore

the history and life experiences of authors to better understand their material. Throughout the year, projects may include essays, oral presentations, posters, or slideshows. Public speaking is practiced with support from parts of the *Toastmasters* curriculum. Aside from the goal of better understanding written expression and enjoying literature, we aim to prepare students for the kind of writing projects that they will be tasked with in high school.

Materials to support instruction:

Study.com, Toastmasters curriculum, variety of audiobooks, Google Slides, Haiku Deck, Quizlet, *Depth and Complexity* curriculum, *Thinking Like a Lawyer* curriculum (to teach critical thinking)

MATHEMATICS

The overarching goal of The Liberty School's math program is for our students to become inspired, capable citizens in a largely digital 21st century society where an ever-increasing value is being placed on science, technology, engineering and mathematics. In order to achieve this goal, a solid, fundamental understanding of math concepts and operations must first be developed, accompanied by a curriculum which highlights mathematical applications, connections, critical thinking, and creativity.

In accordance with our mission, The Liberty School aims to provide an individualized, dynamic education that meets each student's needs. To accomplish this, students are grouped for math classes according to their assessed mathematical skills and ability, **regardless of their age or grade level.**

New concepts are introduced first through **concrete** use of manipulatives, which helps students to physically make sense of mathematical ideas and processes. While the use of manipulatives aids directly in the cognitive process, it also helps students stay engaged and interested. Next, **representational** connections are made by showing students how to model mathematical operations through pictures or diagrams. Math concepts and skills are finally modeled at the **abstract** level using only numbers and mathematical signs. This progression helps students to more thoroughly understand mathematics than working solely with abstract algorithms.

As classes progress through new material, teachers work to address the gaps in understanding that have been identified through assessment. This is accomplished

through individualized homework, as well as through one-on-one or small group instruction in class.

In the same way reading fluency allows readers to devote cognitive resources to comprehension, mathematical fluency helps students to engage with more challenging, complex problem solving. As such, memorization of math facts is emphasized in math classes through iPad apps, multisensory drills and songs, and through homework assignments. For those students who struggle with memory issues, appropriate accommodations are provided, such as fact charts, reference cards, or calculators.

As students learn new skills, math projects provide an engaging opportunity for their application. Science, technology, engineering, and mathematics (S.T.E.M.) projects have included toothpick bridge construction, robotics, Lego Education activities, stock market and personal finance simulations

Materials used to support instruction:

Hands-On Equations, Montessori math materials, Base-Ten Blocks and other concrete math aids, *Challenge Math* and *Real World Algebra* by Edward Zaccaro, Patty Paper Geometry by Michael Serra, Learn Math Fast System, Mathwise Workbook Program, Real World Math, numerous iPad applications, math games such as SET, Chess, Backgammon, Blokus, Math Bingo (multiplication, fractions, time, geometry vocabulary). Digital resources include *ALEKS*, *Prodigy*, *Splash Learn*, *Kahoots*

Assessments: GMADE, WIAT II (Math Reasoning and Numerical Operations), Math Resource Studio 6 (professional), ALEKS knowledge checks, informal assessments, formative/summative assessments, *Kahoot!*, homework assignments

WRITING

The central aim of The Liberty School's writing curriculum is to develop clear, fundamentally sound writers. In support of this aim, we also seek to cultivate imagination and creativity through writing.

Because at the heart of writing is a desire to express one's ideas, students must first be encouraged to simply *write*, pencil to paper (or speech-to-text), without worrying about spelling, grammar, organization, or any other elements that hinder developing writers. Once students understand that their writing won't be judged based on a myriad of technical issues, their willingness to write will improve, as well as their enjoyment of the process. As their confidence grows, instruction in the many areas of writing skills can begin in earnest.

Instructional focus begins with simple sentences that contain a subject and a predicate, progressing to compound and complex sentences. Once these sentence types are mastered, five-sentence, structured paragraphs are introduced through the use of color-coding. For students to understand the *structure* of a paragraph, topic sentences and conclusions are written in green, while supporting details are written in red. As students master this fundamental structure, expanded paragraphs are taught using orange sentences to further expand on their ideas. This skill is then used to create five-paragraph essays.

Assistive technology, such as speech-to-text software, is used to support writing skills and to increase productivity. Additionally, keyboarding skills are taught on a regular basis once handwriting is proficient.

To nurture creativity in student writing, a large degree of choice is a central element of writing classes because when students choose a topic of personal interest or passion, their motivation to produce quality writing increases significantly. Creativity is also supported through engaging assignments such as script writing to support film projects, speech and debate, poetry, and through a fantasy role-playing program called, *Druidawn*.

Materials used to support instruction:

Study.com, Nearpod.com, Kahoot.com, Kids Discover Magazine online, Junior Scholastic magazine online, Super Science Scholastic magazine online, Haikudeck.com, Storyjumper.com, Poetry Foundation.org, PBS.org, CuriosityStream.com, NationalGeographic.com, Folger.edu, Giggly Guide to Grammar by Cathy Campbell, Writing Adventures by Cargill and Padgett, Writing Matters by William VanCleave, REWARDS Writing by Anita Archer, Colored Paragraph and Essay Writing by Ann Webb, Coggle and MindMup mind mapping apps

DRUIDAWN

Even though many Liberty students have vivid imaginations and are highly creative, writing is one of our population's most challenging tasks. In order to “breathe fire” into our reluctant writers, our writing classes use a fantasy, role-playing adventure game called *Druidawn*. Essentially, students create highly unique fantasy characters set amongst the world and lore of *Druidawn*. Purchasing items, spells, and abilities for their characters is achieved through writing; the more a student writes, the more “currency” they will have available to develop their character. Periodically, writing classes will take their characters on adventurous quests, having to overcome a variety of obstacles such as storms, hostile creatures, or conversational challenges. During each player's turn, expressive oral language is used to describe the student's actions, and a 20-sided dice roll is used to determine the outcome. *Druidawn* adventures also provide a rich variety of potential writing assignments, including journaling, mythology, poetry, character and setting descriptions, and short stories. This approach has had profound impacts on many of our students, turning once-reluctant writers into motivated, enthusiastic, and *productive* authors.

CURSIVE HANDWRITING

Despite being phased out of many schools across the nation, cursive handwriting is used school-wide at Liberty for a number of carefully considered reasons. When writing in cursive, the words are formed as whole units, rather than a series of separate strokes, and correct spelling is more likely to be retained. Also, letter reversals are minimized relative to traditional print. Writing in cursive also engages more cognitive resources of the brain than keyboarding. When a skill such as spelling is taught in a multisensory fashion, by simultaneously seeing and hearing words while using gross motor skills to write large words in cursive, students are more likely to retain information in their long-term memory.

Materials to support instruction: Diana King writing materials, *Druidawn*, iReadWrite and Notability software, numerous iPad applications, Lego Education activities, Diana King keyboarding program,

Assessment: School-developed rubrics and teacher checklists, writing samples

SOCIAL STUDIES

The central aim of social studies at The Liberty School is for students to understand how the world around us was shaped by the past, and to develop a respect for, and understanding of, the many peoples and cultures that share our planet.

Because many of our students struggle to read and understand written texts, our curriculum must be delivered in alternative ways. Teachers utilize video resources, role-playing activities, games and simulations in place of textbooks. To understand the concept of culture, for example, students create their own culture, including where they live, what they eat, their rituals and celebrations, their currency, their clothing, and their games.

Because student enrollment varies significantly year-to-year, teachers must be flexible with their subject material so that students aren't forced to cover previously learned topics. As with other subjects, teachers consider student interests when designing each year's material. The Common Core curriculum must also be considered so that matriculating Liberty students will be prepared for social studies at their next school. Geography is taught as an element of social studies, beginning with local geography, progressing to knowledge of continents, states, and countries.

Elements of Depth and Complexity, including discussion of ethics, trends, and considering alternative perspectives, play an important role in social studies.

Middle School students are offered the choice of creating a history-themed presentation on the topic of their choice during our annual Science/History fair.

Materials to support instruction: History Channel, BBC, and other documentaries, online political/election simulations, board games including, *Diplomacy, 1775: The American Revolution*, "geography Twister," Study.com, Nearpod.com, Junior Scholastic Magazine online, All Work and No Play by Shelagh A. Gallagher, Kids Discover Magazine online, Various Problem Based Learning Units, Hands-On Kits from the Anasazi Heritage Center and the Durango Public Library

Assessment: Socrative iPad quizzes, informal in-class assessment, project rubrics, Kahoot!

SCIENCE

The central aim of The Liberty School's science curriculum is to excite our students, through hands-on experimentation and activities, to learn about physical, life, and Earth science in order to more thoroughly understand the world in which we live.

Because many of our students struggle to read and understand written texts, and because many of our students thrive through visual and tactile experience, hands-on experimentation and activities are the foundation for science instruction. Additionally, because student enrollment varies significantly year-to-year, teachers must be flexible with their subject material so that students aren't forced to cover previously learned topics. As with other subjects, teachers consider student interests when designing each

year's material. The Common Core curriculum must also be considered so that matriculating Liberty students will be prepared for science at their next school.

At The Liberty School, exploration and discovery are important elements of every science class. For example, while constructing Rube Goldberg designs, students learn about simple machines. While building and programming Lego EV3 robots, students learn about logic and the application of mathematics. Constructing and launching model rockets or spending time in airplane cockpits helps students to understand aerodynamics. Holding a competition to compare student's lung capacity reinforces lessons on anatomy and biology. These are the types of activities that inspire our students and help them to see the value in science.

Liberty School students also select or design their own experiment to perform and present for our annual science fair. Through the process, students apply the scientific method, prepare a visual presentation, and orally present their findings.

Materials used to support instruction: Delta Science Modules, numerous iPad applications, wide variety of teacher-created units on earth, physical, and life science.

K'nex, NSTA content and simulations, Nearpod, Gourmet Lab by Sarah Reeves Young, Dig In! by NSTA Press, Kahoot!, Super Science Scholastic magazine online, Kids Discover magazine online, PBS.org, Teacher created rock and shell collections, Carolina Biological for forensic science and shark dissection materials, Various Teachers Pay Teachers (TPT) materials

Gifted Program

The Need:

Intellectually gifted children each have a unique blend of reasoning abilities, creative thinking processes, learning differences, and social-emotional needs. However, only 18% of gifted children fit the common stereotype of a model student who excels academically, is well behaved, is a leader with excellent social skills, and always works up to his or her potential. The remaining students are often underachieving or are misdiagnosed with another exceptionality that has similar characteristics (e.g., ADHD, autism, or bipolar disorder). As a result, these students may be misunderstood and marginalized by peers, teachers, and administrators in traditional school settings.

The Liberty School assists these students by providing a curriculum with appropriate levels of challenge, pacing, individualization, and choice based on the students' intrinsic interests. Challenges and enrichment opportunities are provided, including projects and instruction in the areas of performing and fine arts, creative writing and film, literature and advanced language skills, science, technology, engineering, and math. Additionally, students benefit from gifted peer groups, social skills and executive function training, and staff who are trained in gifted instruction and are responsive to their social-emotional needs.

The Program:

The overarching goal of The Liberty School Gifted Program is to cultivate students with a passion for learning, to assist them in discovering their intrinsic interests, and to inspire them to be future change-makers. Aspects of several gifted program models, gifted instructional strategies, challenging curriculum designed for gifted learners, and methods for differentiating instruction for gifted learners in mixed-ability classrooms are utilized to address the unique needs of our gifted and twice-exceptional (2e) populations.

Autonomous Learner Model: The Liberty School Gifted Program follows the Autonomous Learner Model for the Gifted and Talented, a model developed by George T. Betts & Jolene K. Kercher. This model is designed to optimize ability and to specifically meet diversified intellectual, emotional, social, and physical needs of learners, with the development of passion-learning as the ultimate goal. In this model, students first learn how to meet their own needs, then turn their focus toward meeting the needs of society.

Differentiation: Differentiating the curriculum for our students between and within mixed-ability classrooms is accomplished in several ways. First, gifted students are grouped by ability in language and math, regardless of their ages. This allows for acceleration through the curriculum and enables teachers to provide individual and group challenge and enrichment activities geared towards the gifted learner and his or her individual interests. In mixed-ability classes such as science and social studies, curriculum compacting allows students who already know the material to quickly move past the core curriculum or to take an alternative route through it to enhance their existing knowledge. Independent projects extending the curriculum and Socratic questioning strategies (thoughtful questions to examine ideas logically) also allow gifted students to think and work with increased depth and complexity.

Creativity, Imagination, and Role Play: Creativity, imagination, and role play are encouraged in many areas of the gifted program. In writing, students are given the opportunity to play Druidawn, a role-playing game encouraging both gifted and reluctant writers to put their ideas down on paper. Younger students participate in Club Discovery, where they create their own civilization and enact roles within the culture they have formed. Students may participate in film class writing scripts, acting, filming, and editing. In literature, math, and social studies, students are often encouraged to role play scenes from a book or play, act out a part while problem solving, or reenact significant historical events. After school, all students are encouraged to participate in drama class.

Additional Enrichment: Gifted students are provided many other opportunities for gifted enrichment throughout the day and after school, as well. Courses and programs include Spanish, photography, inventing and engineering, leadership through speech and debate, exercise science, music, and art. Many of these classes are also offered to other gifted students in the community to ensure that Liberty students have ample opportunity to interact with a wide variety of gifted peers who share their interests.

In sum, The Liberty School Gifted Program is designed to ignite or reinvigorate a passion for learning. Because gifted, dyslexic, and twice-exceptional students often think, learn, and create in similar ways, they are able to be educated together in many subjects. Therefore, it is our goal to give all our students access to gifted curriculum, customized to their individual needs, when possible and appropriate.

EXECUTIVE FUNCTION

A major need for many Liberty students is in the support of executive function, a broad term referring to a wide variety of cognitive processes.

Executive function skills include:

- Emotional Control - the ability to recognize and regulate emotions in order to achieve goals, complete tasks, and direct behavior
- Flexibility - the ability to revise a plan in the face of obstacles, setbacks, new information, or mistakes; involves adaptability to changing conditions
- Goal Directed Persistence - the capacity to persevere and follow a task through to completion
- Metacognition - the ability to self-monitor and self-evaluate by asking "How am I doing?" or "How did I do?"

- Planning and Organization - the ability to create a roadmap, make decisions, and prioritize for task completion; the ability to design and maintain systems for tracking information and materials
- Response Inhibition - the capacity to stop, evaluate, and think before you act
- Shifting and Time Management - the ability to move appropriately from one situation to another; the capacity to estimate and to use time effectively
- Sustained Attention - the capacity to attend to a situation or task, in spite of distractibility, fatigue, or lack of interest
- Task Initiation - the ability to begin a task in a timely fashion
- Working Memory - the ability to hold information and past experience/learning in mind while performing complex tasks

In congruence with the way we approach instruction in academic subject areas, we believe executive function skills must also be *explicitly* taught. To support this effort, The Liberty School implements an approach developed by educators Mara Berzins and Nicola Daykin, called *EFs 2 The Rescue*. This approach contains materials that assign a character for each skill, such as “Stopitron” for emotional control, and “Gracie Goal Getter” for goal-directed persistence. Each character, and their associated skill, is introduced and explained during a morning meeting. Once all the characters/skills have been introduced, and students and staff can share a common vernacular about executive function, each Liberty student performs a self-assessment to identify their own areas of strength and weakness. From that assessment, teachers help each individual to formulate a plan to address areas of need.

A key element to our approach with executive function support is that students must be “the captain of their own ship.” While teachers can help provide potential solutions to problems, students must be the ones to design and choose their own executive function plan. In this way, they have more ownership in the process, as well as in their successes and failures. Once a student’s executive function profile is created, it is shared with all Liberty staff. The teachers’ primary roles in this process are to help set attainable goals, track their success, and allow time for reflection and readjustment when necessary. Only when reliable, consistent success is achieved on an individual’s goal is the bar raised. While this approach requires time and effort, we feel strongly that the development of executive function skills in our students is well worth it.

OUTDOOR PURSUITS

For middle school students, Outdoor Pursuits is a program in which we take full advantage of the myriad of outdoor recreational activities available in Durango. These activities allow Liberty students to experience success in a non-academic

setting, and to potentially discover new, life-long passions. Outdoor Pursuits also provides an opportunity to teach students to challenge themselves and safely take risks. Wilderness ethics; leadership; and the promotion of a healthy, active lifestyle are important elements of this class.

Activities have included the following:

- Ice skating
- Rock climbing (indoors and out)
- Rappelling
- Swimming
- Hiking
- Mountain biking
- Snowshoeing
- Training in avalanche awareness and skills (Terrain analysis, beacon searches, probe use)
- Snow shelter construction
- Disc golf
- Fly fishing
- Skateboarding, biking, and scootering at the skatepark
- Paddle boarding

FILM PRODUCTION

Film Production class provides middle school students with the chance to develop and showcase their creativity, technical skills, humor, storytelling, and acting ability. After beginning with an introduction on basic cinema techniques and genres, the main thrust of Film Production shifts towards the creation of 15- to 20-minute films. These films are highlighted at an annual Liberty School Film Festival. In order to achieve the completion of a film, students learn first to outline a coherent story with a beginning, middle, and end; they also learn to incorporate a clear conflict and resolution. With a completed outline in place, students then focus on one single scene at a time. For each scene, student film teams write a script, create a storyboard, film, and edit using iMovie editing software. Green screens and associated lighting are available to students who wish to use this technology for special effects. In this way, scene-by-scene, students see their films through to completion. Liberty films have included zombie satire, stop-action Lego science fiction, wilderness survival, and James Bond parodies. Students also create movie posters to accompany their films.

ELECTIVES

Because our students spend so much energy on the areas that are the most challenging and frustrating for them, it is essential that school balances this with courses that are dynamic, creative, and engaging. We also offer an eclectic variety of electives because we feel it's important to offer opportunities for students to discover new areas of interest, and to provide times at school where their strengths can shine! Teachers model their own love of learning and lead courses in which they have a personal passion. We design our electives to be run in 6-8 week cycles, and students vote on the courses they'd like to attend. Elective offerings change often, but some of the courses we've offered have included rocketry, skateboard design, board-game design, drama, paper quilling, comic book creation, origami, model building, cooking, disc golf, photography and photo editing, *Dungeons & Dragons*, chess, crochet, macrame, yoga, and others.