



THE BEST PRACTICES OF TRCS

Curriculum Brief

This document is a synopsis of the curriculum taught here at Three Rivers Charter School. It is a collection of the best and brightest practices developed over the last 17 years. With a combined educational experience of 82 years (the writers of this document), this document serves to keep us all on the same page. It helps to guide us to be able to always turn and remind ourselves of our highest belief about “how” to educate students in this ever-changing world.

It is our belief that the curriculum begins with the standards, and the teacher is then expected to design curriculum that meets and exceeds those standards. When designing curriculum, mindful decisions are made about how best to meet the needs of the students, both as a class and as individuals. Differentiation is necessary to make this effective. Students also need curriculum that is integrated as much as possible and as current as possible, laced with appropriate technology. Curriculum should explore the way all learning ties together and should lead to real-world application and deeper understanding of the world and how to problem-solve within it.

Beyond this brief introduction, there are backup documents (much more detailed) that we have compiled for further discussion and use.

This Curriculum Brief serves as the mere “tip of the iceberg,” but its deep and solid roots serve to guide our school community to reach higher in our mission to serve our students well.

Language Arts: Reading

Mission: To provide rich reading materials that develop readers who question their world, using literature, non-fiction, digital, and printed text.

Goal: To meet each student’s needs with tailored instruction and to develop strategic, thoughtful readers – no matter what text they use.

Our Reading Curriculum Will:

- ✓ Promote avid-reader status among teachers and students
- ✓ Model cognitive processes for reading
- ✓ Explicitly teach comprehension strategies
- ✓ Tap students’ curiosity and motivation
- ✓ Create a climate of collaboration and mutual trust
- ✓ Invite students to make connections between texts and their own experiences, events in the world around them, and previously read texts
- ✓ Teach that meaning does not reside solely within a text, but is created in a transaction between a reader and the author’s words
- ✓ Prepare excitement for sharing texts among peers
- ✓ Individualize and/or scaffold instruction for developing readers
- ✓ Promote close reading of texts
- ✓ Preview important material for students before reading and help them make predictions
- ✓ Invite rich student-to-student talk about books in peer groups of all sizes
- ✓ Encourage students to become skillful self-assessors (should match teacher evaluation of student level and abilities)

Grade Level Commonalities:

- Literature studies
- Close reading of complex text, both as a group and as individual readers
- Teachers using “talk aloud” strategies concerning their own reading
- Fiction and non-fiction reading, as well as a variety of genres and types of text, such as mystery, classics, realistic fiction, biography, plays, newspapers, magazines, websites, etc.
- 4th/5th 40% non-fiction; 60% fiction
- 6th/7th/8th 50% non-fiction; 50% fiction
- Analysis of the text for comprehension, literary elements, themes, and story development, as well as literary devices, such as similes, metaphors, analogies, foreshadowing, etc.
- Vocabulary development
- Poetry integration
- Proper use of assistive tools – dictionary, atlas, websites, etc.

Language Arts: Writing

Mission: Students’ writing will demonstrate a wide range of real audiences, students’ own authentic purpose of writing, and the need for students to learn a wide range of writing strategies.

Goal: For our students to be able to write narratives, write arguments, and write to explain. Students need to record information and ideas, as well as synthesize, analyze, compare and contrast that information and all their ideas both written and spoken.

Our Writing Curriculum Will:

- ✓ Instruct students on planning, revising, and editing compositions
- ✓ Engage students in prewriting activities
- ✓ Conduct inquiry activities that lead to writing
- ✓ Have students write collaboratively
- ✓ Have students read models for writing (mentor texts)
- ✓ Use writing for learning content
- ✓ Write daily for an extended time
- ✓ Have teachers as the “master role models” for conferring and moving young writers to the next level
- ✓ Be individualized in writing goals and assessments
- ✓ Reserve “mini lessons” as a technique to teach multiple writing strategies to students who are ready for them
- ✓ Teach the writing rubric using the “common language” to draw students to have a target to improve their personal writing
- ✓ Present a program that can be blended across grade level expectations where students can receive the instruction that they need inside of their writing
- ✓ Celebrate writing
- ✓ Incorporate writing in all classes, at all times, in all ways

Grade Level Commonalities:

- Writing for purpose and audience
- Different genres of writing – narrative, persuasive/argumentative, expository, imaginative, poetry, plays, newspapers, notes, reports, etc.
- Use of tools to assist writing, such as a writer’s notebook/journal, dictionary, thesaurus, six-trait rubrics, graphic organizers, outlines, etc.
- Teach the writing rubric and use it to create common understandings about writing
- Use samples of fine literature and writing samples to teach techniques
- Vocabulary development
- Analysis of and practice using different writers’ techniques/literary*devices
- Handwriting, as well as word processing

Mathematics

Mission: To develop mathematical problem solvers, ones who can go beyond the computational algorithms to “get the numbers,” and instead know their usefulness. A mathematical problem solver is capable of knowing where and when to apply the computational skills to real-life situations.

Goal: Math is meant to help students develop the skills to “do math,” but more importantly, to know when and how to apply those skills to real-life situations. Through a problem-solving-based curriculum, we endeavor to bring our students into that scenario of being confident real-life problem solvers.

Our Math Curriculum Will:

- ✓ Assist students in the expectation of computational mastery
- ✓ Utilize problem solving on a daily basis
- ✓ Use pictures, words, symbols, talk, and more to express mathematical relationships
- ✓ Encourage students to make and test educated and informed guesses
- ✓ Give multiple examples leading to target concepts and algorithms
- ✓ Ask students to explain and justify reasoning at all times
- ✓ Give a clear focus on the goal and underlying concepts
- ✓ Require students to speak and write ideas clearly with math vocabulary

Grade Level Concepts:

4th grade - Computation focus mastering basic math fact operations in all 4 operations, addition and subtraction to billions, multiplication and division with 2-digit factors/divisors, geometry/measurement (especially area and perimeter of rectangles), basic fraction operations and the relationship to decimals

5th grade – Review/master calculations with large whole numbers, learn prime factorization, averaging, rate, and data analysis, addition and subtraction of fractions, introduction to decimals, percentages, and beginning ratios, geometry and area/perimeter of the most common geometric shapes

6th grade - Fraction, decimal, and percent operations, pre-algebra, similarity, scale factors, ratios, rates and proportions, statistics, and negative numbers, including the operations with such

7th grade - 2- and 3-dimensional relationships and measurements (surface area vs. volume), linear relationships, probability and statistics with special focus on mastery of histograms and box-and-whisker plots, Pythagorean Theorem, and comparing linear relationships to other functions, such as inverse relationships

8th grade - Exponential and quadratic relationships compared to linear relationships, algebra with a focus on equivalent expressions and linear systems of equations and inequalities with supplements using radicals, and geometry focused on symmetry and transformations

Geometry – Euclidean plane figures, congruence through proofs and constructions, similarity, trigonometry, relationships within circles and conic sections, and 2- and 3-dimensional relationships, all with the use of models and real-life problem-solving connections

Science

Mission: To promote and cultivate through exposure and discovery the natural curiosity about science that all students have that they might be able to use critical thinking and inquiry-based problem solving to better understand and function productively in a scientific and technological world.

Goal: By providing students with basic background knowledge about all sciences, we hope students see the similarities and differences between those sciences, learn to collect reliable data when scientific inquiry or the application of basic science principles to an engineering task is needed, and learn to solve real-life problems with creativity, ingenuity, and intelligence. We hope to have our students feel confident in their abilities to “be the scientist” when they are called upon to be, whether it be in researching a topic, experimenting, designing, or even trying to explain phenomena.

Our Science Curriculum Will:

- ✓ Focus on the application, analysis, interpretation, comparison, and modeling of facts, rather than the facts themselves
- ✓ Be multi-layered with a performance expectation and the three additional “dimensions” of science and engineering practices, disciplinary core ideas, and crosscutting concepts in an attempt to integrate the science fields
- ✓ Include engineering and design to apply the science knowledge about how things work
- ✓ Link up with Common Core math and language arts standards to integrate different subject matter
- ✓ Help students learn science in the best way they can - through experiences
- ✓ Focus attention on identifying and solving real problems within our world
- ✓ Apply specific grade-level science and math concepts
- ✓ Use an engineering-design process to guide student thinking and problem solving to create and test prototypes as solutions
- ✓ Set norms for productive teamwork and self-assessment within the teams
- ✓ Promote “out-of-the-box,” creative thinking to solve a problem
- ✓ Encourage several different possible solutions for the same problem
- ✓ Increase curiosity, and hopefully, the desire to understand the world in a deeper fashion

Grade Level Benchmarks – Curriculum is developed first with the State Benchmarks in mind. One term each of life science, physical science, and earth/space science is taught each year with scientific inquiry and engineering design incorporated into the curriculum. Health topics are incorporated within these sciences as well, sometimes within science and sometimes within other classes, such as PE, social studies, integration, or study skills/foundations.

Life Science

4th and 5th grade focus: Structures and processes of living organisms, organization for matter and energy flow within organisms and ecosystems, and interactions within ecosystems and the effects on the whole ecosystem

6th, 7th, and 8th grade focus: Structures and processes within cells, organisms, and environments, inheritance and variation of traits, matter and energy flow within organisms, especially in photosynthesis and respiration, as well as across ecosystems and their effect on populations

Earth-Space Science

4th and 5th grade focus: Earth's place in the universe, studying other planets, stars, and heavenly bodies, as well as Earth's unique features/patterns, Earth's history, including its many "spheres," energy and fuel formations and uses, as well as their impacts on the Earth

6th, 7th, and 8th grade focus: Earth's systems and the cycles within each, human impact on Earth's systems, Earth's place in the universe, with emphasis on relationships, such as Earth-sun-moon (lunar phases, seasons, night-day), gravity within the solar system, scale properties, and major events in Earth's 4.6-billion-year-old history

Physical Sciences

4th and 5th grade focus: Energy transfer through a system, structure and properties of matter, including sub particles of matter, physical and chemical properties and the conservation of matter, and forces and interactions, especially gravitational force

6th, 7th, and 8th grade focus: Application of the scientific principles of thermal energy transfer, atomic composition and the properties of substances, Newton's Laws of Motion, electrical, magnetic, and gravitational forces, and wave energies/properties

Engineering Design

4th and 5th grade: Define and design a solution to a problem, generate and compare multiple solutions, and plan and carry out fair tests, with focus on variables and potential improvements

6th, 7th, and 8th grade: Define the criteria and constraints of a design problem, evaluating competing solutions, analyzing data from testing, and generating data and moving toward modifications of a design form optimization

Health

4th and 5th grade: drug prevention, disease prevention and control, environmental health, healthy eating, good mental, social and emotional health, physical activity, and sexual health

6th, 7th, and 8th grade: same basic topic areas as for 4/5, but more age appropriate and more in depth

Social Studies

Mission: To provide students with diverse materials in which to explore historical time periods and to teach students to question bias and understand varying points of view.

Goal: The Social Studies includes history, geography, economics, political science, and sociology. Ideally, these fields are easily integrated. However, it is easy to compartmentalize them as well. The main avenue for teaching Social Studies is through history, though the other fields weave in through the units, so that in one year, especially at the 6/7/8 level, a student has received instruction in each of the five social studies. Perhaps most crucial to the success of the Social Studies is the integration of the outside world. We believe that history can help us influence the future. Studying the Social Studies through the lens of a historian will teach students to question their sources, consider bias, ask relevant questions, and defend their beliefs.

Our Social Studies Curriculum Will:

- ✓ Build networks of knowledge, beliefs, and attitudes that are structured around enduring understandings, essential questions, and important ideas
- ✓ Integrate the disciplines within the Social Studies (history, economics, geography, political science, sociology, anthropology, archaeology, and psychology), as each are critical to the background of thoughtful citizens
- ✓ Be value-based so that students are engaged in discourse and debate in a structured and productive way
- ✓ Model intellectual standards expected of students. These include, but are not limited to: clarity, precision, completeness, depth, relevance, and fairness
- ✓ Be active, when possible, so that students are not just learning, but rather are also reasoning one's way toward conclusions
- ✓ Include primary documents and secondary sources from various time periods
- ✓ Ask students to take a stand on controversial issues and support their claims with sources
- ✓ Help students understand that the world is increasingly interconnected

Grade Level Benchmarks – Curriculum is developed first with the State Benchmarks in mind. Rather than focusing on the State of Oregon's recommended path (ex. 4th graders study Oregon history and 5th graders study U.S. History), we combine the 4th/5th topics into a two-year cycle. Likewise, we combine the topics for 6th/7th/8th into a three-year cycle so that all students are learning the same topics at once, regardless of their year. Sometimes the social studies topics will be aligned with Language Arts, science, study skills, or another class.

Grade Level Expectations:

4th and 5th grade social studies focuses on: city, region, state, country and what the differences are in other parts of the world, fact vs. opinion, bias, different perspectives, and map skills

6th and 7th grade social studies extends to include: the larger world, controversy, effectiveness of sources, and larger community participation

8th grade social studies furthers this to: understand/question their role in the larger world and analyze events for relevance and connectedness

General Topics Covered in the Two- and Three-Year Rotations:

4th and 5th grade: Two-year rotation covering Oregon and U.S. History, including the Constitution and Bill of Rights, geography and landforms, Native American tribes (especially in the Pacific Northwest), early American colonies, American Revolution, early American explorers, the Oregon Trail, and Lewis and Clark

6th, 7th, and 8th grade: Three-year rotation covering World History and Geography (Western and Eastern Hemisphere), including ancient civilizations, Greece and Rome, the Middle Ages, the Renaissance, the Age of Exploration, and U.S. History from 1765 to Reconstruction, including civics.

Art

Mission: Students will be able to confidently observe and apply knowledge of their understanding of art movements and meanings through fundamental elements/principles of design.

Goal: Students need to “do” art (theater, music, dance, visual, critique with an opinion and evidence to prove), not just view it, but also hear it. This means providing tools, materials, equipment, models, examples, coaching, and plenty of time to experiment and express. The goal of art is to help students apply the knowledge gained in other subjects, and vice versa, to have a more thorough understanding of the interconnectedness between all facets of life.

Our Art Curriculum Will:

- ✓ Assist students in being able to understand, identify, and analyze important movements in art
- ✓ Apply the elements and principals of design (line, value, color, texture, shape, size, contrast, balance, etc.)
- ✓ Allow students to do a variety of types of art – not just view it or hear it
- ✓ Provide tools, equipment, models, etc., and time to experiment and express with these tools
- ✓ Provide direct art instruction
- ✓ Incorporate art into non-art classes
- ✓ Allow students genuine choice, control, and responsibility in their art
- ✓ Give students opportunities to share/display their work
- ✓ Help students view professional art events whenever possible at off-site locations

A Note about Integrating Topics

Whenever possible, the teachers at Three Rivers Charter School strive to connect our core classes (Language Arts, Math, Science, Social Studies, and Art) with a common theme or topic. These connections happen most naturally between the afternoon classes of Science, Social Studies, and Art where, for example, the common thread might be “resources.” In Science, the students study the land and the resources found there, and in Social Studies, the students may explore an event, such as the Gold Rush of 1849 and Westward Expansion, in the race for these resources. At the same time in Art, the students may study the great painters of American landscape, such as Albert Bierstadt. Similar connections exist between all of the core classes and often into classes such as P.E. These connections are rarely rote and are more organic within the planning phase of each term. In short, making connections across subject areas not only provides an avenue for exploring one topic across several disciplines, but it also helps prepare the students for their Independent Projects during spring term.

Technology

Mission: To bring to TRCS, in this age of digital wonder, the “aha” moments that happen when a student is faced with a technology challenge and can solve it independently. Guidance to the path to take will assist each student to risk themselves to solve extended challenges. Computers are merely tools that get the job of learning done in a different modality. This is not to ever replace the interaction between the student and the teacher, which is always the best method of learning.

Goal: Using instruction to bring students to a “need to know” reason to explore different ways to use technology and to keep learning fresh and relevant for students.

Our Technology Program Will Promote:

- ✓ **Creativity and innovation.** Apply existing knowledge to generate new ideas, products, or processes.
- ✓ **Communication and Collaboration.** Interact, publish, and collaborate with peers. Communicate effectively with multiple audience members using a variety of media and formats. Develop cultural understanding and global awareness by engaging with other learners in other areas. Contribute to project “teams” working together to solve shared problems.
- ✓ **Research and seek information fluently.** Plan strategies to guide inquiry. Locate, organize, evaluate, analyze, synthesize, and ethically use information from a variety of sources and media. Evaluate and select information sources and digital tools based on the appropriateness to the specific task. Process data and report results.
- ✓ **Critical thinking, problem solving, and decision making.** Identify and define authentic problems and significant questions for investigation. Plan and manage activities to develop a solution or complete a project. Collect and analyze data to identify solutions and/or make informed decisions. Use multiple processes and diverse perspectives to explore alternative solutions.

Technology Expectations:

Whatever we are doing in school, students have already seen it and are using it themselves outside of school. The true power of teaching resides mainly in the interaction between the mind of a teacher and the minds of the learners. Sometimes a piece of technology can enhance this moment; other times – old tools work just fine! Sometimes no technology beyond the human voice is needed! The trick is to make sure that the interactions with students are evenly balanced between all three of these options.

With a small library, we rely heavily on the internet and web-based sources for student research. The platform that we utilize daily is Google Classroom. This allows teachers to reach their students in each of their classes in real time, whether in the classroom or via homework assignments, videos, and websites. This platform is a multi-user format and a collaboration tool. There have been many upsides to using it, and we have provided training for teachers in its use. But the best way for our staff to use it is to jump in and just try it. You often will see other teachers problem solving a technology issue – there is never a time that you can “know” everything about Google Classroom!

We continue to emphasize computer technology within all of our classes. Younger students are given time to learn the basics of the computer, as well as, keyboarding.

Physical Education

Goal: To have six separate units of study throughout the school year that introduce students to a healthy lifestyle.

Mission: To provide for our students a developmentally and instructionally appropriate physical education program to create a confidence within each student to remain physically active for a lifetime.

Our Technology Program Will:

- ✓ Teach students the fundamental and technical skills associated with a variety of sports including, but not limited to, soccer, basketball, volleyball, track and field, bowling, whiffle ball, and kickball
- ✓ Bring in experts for activities such as swimming and Tae Kwon Do
- ✓ Promote good sportsmanship and participation
- ✓ Honor students for athleticism, as well as attitude, perseverance, and commitment
- ✓ Promote collaboration through team sports
- ✓ Allow expertise from students who excel in certain athletics and use them as “instructors” when possible

Implementation: We do one unit per month for 1 week – 1-hour minimum per day. Appropriate instructional practices in physical education are those that recognize students’ development and changing movement abilities, as well as their individual differences. Students’ past motor skill, sport, cognitive and social experiences also are considered in lesson and program design and delivery.

Leadership and Community Service

Goal: Offer leadership to students in all grades who elect to do specific projects in developmentally-appropriate areas and to offer multiple opportunities and avenues for community service.

Mission: By providing leadership projects, students can reflect on their leadership challenges and be rewarded by service to their school and the surrounding community, all while witnessing the significant impact they can impart on their community.

Our Leadership and Community Service Work with Students Will:

- ✓ Promote kindness and cooperation between students, parents, community members, and the public-at-large
- ✓ Build positive relationships by working together for a larger purpose of serving others
- ✓ Seek opportunities in daily life to give back to the larger group
- ✓ Look ahead to leadership opportunities that will enhance others to give of themselves and inspire others to become “larger in life” than they thought possible
- ✓ Learn to observe how other leaders (older students/alumni/teachers) bring their members closer to a shared vision
- ✓ See that all in life is possible and plan and act to achieve your goals
- ✓ Understand how each student in a group of leaders affects the group process and find ways to promote conflict resolution and collaborative decision making
- ✓ Set goals that identify and implement goals for a larger vision
- ✓ Have students reflect and evaluate the leadership process and progress with others and self

Implementation: Our 8th grade students make up a large share of what goes on in leadership on a daily basis. They usually work in partnership with another 8th grade leader to be “family” leaders of a multi-grade group that changes each term. The goal is to help the oldest students in the school take on responsibility for shepherding the younger students in select activities and/or field trips, as well as modeling behavior expectations. They also take on the responsibility for doing some basic cleaning of the building at the end of each day with 10 families rotating the duty, two families for a week at a time. With this shared “ownership” of the building, our students as a whole are more invested in the care of our facility. The 8th grade leadership also gives our younger students a role model and connection to older students who might be a mentor to them in other situations, such as someone to talk to in problem solving situations on the playground or needing help to learn math facts. Other than those specific duties in leadership, all students have the opportunity to be involved in shorter term leadership projects of their choosing, though it is usually taken on mostly by the 6th-8th graders. Students have led a multitude of leadership projects including the student library, creating brochures for I.P. night, attendance collection (nuts and bolts operations); dances, socials, drama club, Lego team (social and extracurricular); Store-to-Door, Blanchet House, and the Clackamas Bookshelf (community-based). This is a small sample of what has been achieved through leadership at TRCS.

Core Attributes of Leadership Studies:

Throughout our work with students of leadership, there have emerged these seven attributes, fundamental to positive and successful leadership.

Respect: Treating yourself and others with respect. Always being straightforward and honest with yourself and others.

Passion: Passionate people get things done! Passionate people energize others and build enthusiasm.

Vision: One of the key qualities that a successful person needs is a willingness to stretch yourself, to go after goals that others think are *too visionary*, *too hard*, or *too ambitious* to accomplish.

Ethos and Pathos; Actions need to go beyond the letter of the “law” to a spirit of trust and integrity, a willingness to lead on issues where the needs are greatest.

Curiosity: Leaders are learners, saying to themselves, “I am curious and interested in just about everything. I am always learning and working on learning.”

Integrity: It is critical to do the “right thing,” to commit to conducting yourself with the highest standards of ethics and integrity. It inspires others’ confidence and trust in you.

Pragmatism: An important part of being a good leader is knowing that you don’t know it all and never will.

We all want success! We all need teachers to help us discover who we are. At TRCS, we do just that— with these attributes in mind!

Study Skills (4/5) & Foundational Skills (6/7/8)

Goal: A class that helps students learn the traits of a successful academic citizen and one that can be truly individualized to challenge accelerated students and to hone the essential skills of struggling learners.

Mission: Provide an instructional period of the day where 4th/5th graders can learn successful study skills and can also participate in more “elementary” types of activities. In 6th/7th/8th, it is time during the school day to master student foundational skills, as well as learn the successful way to proceed forward into high school and beyond with student traits for success.

Our Study Skills and Foundational Skills Classes Will:

- ✓ Explore positive and productive student traits in school
 - What traits help to achieve “successful student status”?
 - How do you study for tests?
 - How do you do homework?
 - Why do schools ask you to do work and practice skills?
 - What are your goals in life and how do you break goals down into manageable and measureable pieces?
- ✓ Develop ways to navigate “school” types of issues
- ✓ Provide a time that our youngest students can have an elementary experience (show and tell, etc.)
- ✓ Determine with which foundational skills our 6th/7th/8th students struggle and help them achieve mastery (math facts, spelling, grammar, handwriting, geography, reading fluency, writing fluency)
- ✓ Provide a time for keyboarding, cursive handwriting, technology, and foreign language in a sustained and predictable manner

Implementation: Both of these classes are 30 minutes in length daily. We hope to bridge the “learning” experiences that are asked in all of our classes with a class that can teach our students the ins and outs of how to successfully achieve their best. We often use this time for learning about technology in an isolated format, foreign language as an option, and time to work on and finish leadership projects. Study Skills is planned and implemented in a much more structured approach to meet the needs of our youngest students. Foundational skills is much less “programmed.” Once they have experienced these two classes, we are sure that they know how to be successful in their school work, talk to teachers about their assignments, and find out how to set goals for their future student success.



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How do we do all of this? How do we instill within every student we have contact that everything is possible? How do we ignite passion and perseverance and develop integrity? How do we develop conceptual knowledge that lasts beyond the “Friday test”? How do we keep each student in the zone between the known and the unknown – between “easy peasy” and just too darn hard? How do we shape growth, give feedback, offer encouragement, and provide challenge, sometimes all at the same time?

The real work of education ends in the classroom with one adult and the students in that classroom. Once we start a lesson, everything depends on the knowledge, planning, artistry, and heart of that very special adult. When TRCS teachers bring our best practices to life, kids find that curiosity is fanned, their questions are honored, their work ethic stimulated, and their craftsmanship and pride are rewarded. The pursuit of knowledge is the most delightful and natural classroom diet of all! No matter how much noise, interference, shouting, badgering, and static is happening in the outside world, this classroom - with this very special adult – is a sacred place. It is one where spirits sing, lives change, and futures and goals are forged. We hope to bring this magic to our work with all of our students at TRCS daily, lesson by lesson, in this very special space.