



The Children's School · K - 8

TCS Middle-Level Approach to High School Readiness

As a progressive school, we strive to create learning opportunities that, to the greatest extent possible, mirror and prepare students for the world they will encounter throughout their lives. At the same time, we are intentional in helping students build the skills necessary for their success and enjoyment during the high school experience.

Middle-Level High School Readiness Curricular Goals

Names and uses a range of strategies to prepare for different forms of assessment.

Advocates for own learning in the classroom.

Comes to school/class prepared with necessary materials and preparatory work completed.

Takes and uses notes productively.

Volunteers relevant ideas, observations, and questions to clarify understanding, extend learning, and seek new meaning.

Employs active listening techniques.

Sets short and long-term academic goals, works toward them, assesses progress, and redirects when necessary.

Uses independent time purposefully.

Self-evaluates prior to submitting projects or assignments.

Gets along with others, negotiates, compromises, and works collaboratively.

Assesses own academic, social, emotional, and physical strengths and weaknesses and employs strategies for addressing weaknesses and utilizing strengths in various settings.

Learns from mistakes, accepts constructive criticism, and uses reflection as a tool for growth.



TCS Middle-Level Approach to Research

The ability to distinguish truth from falsehood is a crucial skill for all. At The Children's School, research is fundamental to our emergent curriculum as students explore their own interests and questions in all academic fields. Students in the Middle Level routinely engage in the full range of research activities, from asking questions and conducting preliminary research, to crafting and building support for a thesis, to creating a final product demonstrating their analysis of the information they have uncovered. In our project-based model of learning, students are supported and expected to share the results of their research with others and to take meaningful action based on what they have learned.

Middle-Level Research Curricular Goals

Conducts research on issues and interests by generating ideas and questions and by posing problems.

Gathers, evaluates, and synthesizes information from a variety of sources (e.g., print and nonprint texts, electronic media, artifacts, people).

Determines the value of sources by evaluating their relevance and the motives (e.g., social, commercial, political) behind their presentation.

Determines the credibility of sources based upon their origin, authority, and context; determines whether credible sources support each other.

Develops claims and/or explanations that can be supported by the available evidence.

Constructs arguments to support claims using clear reasons and relevant and sufficient evidence; acknowledges counterclaims as well as the strengths and limitations of evidence.

Constructs explanations using reasoning, correct sequence, examples, and details, while acknowledging their strengths and weaknesses.

Presents claims and findings through speaking, writing, or multimedia forms, emphasizing salient points in a focused, coherent manner with relevant evidence, sound reasoning, and well-chosen details.

Cites sources appropriately.

Uses technology to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

Where appropriate, takes informed action as a result of the research process.



TCS Middle-Level Approach to Science

Our experiential approach to learning inspires students to engage with the world in the ways that scientists do: by posing questions, observing phenomena, recording data, and making and testing hypotheses. Students learn to distinguish between subjective judgment and factual analysis, and they come to appreciate scientific study as a means of advancing human understanding and dispelling ignorance and prejudice. Throughout the program, students experience the joy of discovery, the magnificence of nature, and the fragile balance of elements which makes our lives possible, and which all of us are responsible to maintain.

Middle-Level Science and Engineering Curricular Goals

Understands the basic definitions, methods and vocabulary of the most established scientific disciplines (e.g. biology, chemistry, physics, etc.).

Asks questions and defines problems specifying relationships between variables.

Asks questions that can be investigated within the scope of the classroom, outdoor environment, museums, and other public facilities with available resources and, when appropriate, frames a hypothesis based on observations and scientific principles.

Plans and carries out investigations both individually and collaboratively.

Identifies independent and dependent variables, controls, procedures, tools, and methods of data collection.

Reflects on outcomes and provides evidence to confirm or refute claims and hypotheses.

Applies scientific ideas or principles to design an object, tool, process, or system.

Constructs and presents arguments supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for phenomena in the natural or designed world.

Uses models to describe phenomena and systems.

Understands the benefits and limitations of developing and using models to describe mechanisms or predict phenomena.

Identifies patterns in large data sets and uses mathematical concepts to support explanations and arguments.

Uses mathematical representations to describe and/or support scientific conclusions and design solutions.

Analyzes investigations, distinguishing between correlation and causation, using basic statistical techniques of data and error analysis.

Analyzes and interprets data to determine similarities and differences in findings.

Undertakes and designs projects to construct and/or implement a solution that meets specific criteria and constraints.

Assesses the credibility and accuracy of methods and evidence in drawing conclusions.

Adapted from the *Next Generation Science Standards* (June 2016).



TCS Middle-Level Approach to Mathematics

We believe that every student can learn high level mathematics, and we strive to make the study of mathematics an open, engaging, and creative pursuit for all students. We intentionally pose problems and questions that elicit multiple solution paths and multiple representations from students. As students and teachers explore mathematical ideas and solutions, they engage together in the discourse, reasoning, and sense-making that are at the heart of mathematics. Our mathematics curriculum draws from established national standards and emphasizes number sense, algebraic problem-solving, reasoning and proof, and mathematical modeling. Our aim is that all students will appreciate mathematics both as a set of tools for exploring and explaining the world, and as a challenging and enjoyable activity in itself.

Middle-Level Mathematical Process Goals

Problem solving

Builds new mathematical knowledge through problem solving.

Solves problems that arise in mathematics and in other contexts.

Applies and adapts a variety of appropriate strategies to solve problems.

Monitors and reflects on the process of mathematical problem solving.

Reasoning and proof

Recognizes reasoning and proof as fundamental aspects of mathematics.

Makes and investigates mathematical conjectures.

Develops and evaluates mathematical arguments and proofs.

Selects and uses various types of reasoning and methods of proof.

Communication

Organizes and consolidates their mathematical thinking through communication.

Communicates their mathematical thinking coherently and clearly to peers, teachers, and others.

Analyzes and evaluates the mathematical thinking and strategies of others.

Uses the language of mathematics to express mathematical ideas precisely.

Connections

Recognizes and uses connections among mathematical ideas.

Understands how mathematical ideas interconnect and build on one another to produce a coherent whole.

Recognizes and applies mathematics in contexts outside of mathematics.

Representation

Creates and uses representations to organize, record, and communicate mathematical ideas.

Selects, applies, and translates among mathematical representations to solve problems.

Uses representations to model and interpret physical, social, and mathematical phenomena.

Middle Level Mathematical Content Goals

Number and Operations

Works flexibly with fractions, decimals, and percents to solve problems.

Compares and orders fractions, decimals, and percents efficiently and finds their approximate locations on a number line.

Develops meaning for percents greater than 100 and less than 1.

Understands and uses ratios and proportions to represent quantitative relationships.

Develops an understanding of large numbers and recognizes and appropriately uses scientific, exponential, and calculator notation.

Uses factors, multiples, prime factorization, and relatively prime numbers to solve problems.

Develops meaning for integers and represents and compares quantities with them.

Understands the meaning and effect of arithmetic operations with fractions, decimals, and integers.

Uses the associative and commutative properties of addition and multiplication, and the distributive property of multiplication over addition, to simplify computations with integers, fractions, and decimals.

Understands and uses the inverse relationships of addition and subtraction, multiplication and division, and squaring and finding square roots to simplify computations and solve problems.

Selects appropriate methods and tools for computing with fractions and decimals from among mental computation, estimation, calculators or computers, and paper and pencil, depending on the situation, and applies the selected methods.

Develops and analyzes algorithms for computing with fractions, decimals, and integers and develops fluency in their use.

Develops and uses strategies to estimate the results of rational-number computations and judge the reasonableness of the results.

Develops, analyzes, and explains methods for solving problems involving proportions, such as scaling and finding equivalent ratios.

Algebra

Represents, analyzes, and generalizes a variety of patterns with tables, graphs, words, and, when possible, symbolic rules.

Relates and compares different forms of representation for a relationship.

Identifies functions as linear or nonlinear and contrasts their properties from tables, graphs, or equations.

Develops an initial conceptual understanding of different uses of variables.

Explores relationships between symbolic expressions and graphs of lines, paying particular attention to the meaning of intercept and slope.

Uses symbolic algebra to represent situations and to solve problems, especially those that involve linear relationships.

Recognizes and generates equivalent forms for simple algebraic expressions and solves linear equations.

Models and solves contextualized problems using various representations, such as graphs, tables, and equations.

Uses graphs to analyze the nature of changes in quantities in linear relationships.

Geometry

Precisely describes, classifies, and understands relationships among types of two- and three-dimensional objects using their defining properties.

Understands relationships among the angles, side lengths, perimeters, areas, and volumes of similar objects.

Creates and critiques inductive and deductive arguments concerning geometric ideas and relationships, such as congruence, similarity, and the Pythagorean relationship.

Uses coordinate geometry to represent and examine the properties of geometric shapes.

Describes sizes, positions, and orientations of shapes under informal transformations such as flips, turns, slides, and scaling.

Examines the congruence, similarity, and line or rotational symmetry of objects using transformations.

Draws geometric objects with specified properties, such as side lengths or angle measures.

Uses two-dimensional representations of three-dimensional objects to visualize and solve problems such as those involving surface area and volume.

Uses visual tools such as networks to represent and solve problems.

Uses geometric models to represent and explain numerical and algebraic relationships.

Recognizes and applies geometric ideas in areas outside the mathematics classroom, such as art, science, and everyday life.

Measurement

Understands both metric and customary systems of measurement.

Understands relationships among units and converts from one unit to another within the same system.

Understands, uses, and selects units of appropriate size and type to measure angles, perimeter, area, surface area, and volume.

Uses common benchmarks to select appropriate methods for estimating measurements.

Selects and applies techniques and tools to accurately find length, area, volume, and angle measures to appropriate levels of precision.

Develops and uses formulas to determine the circumference of circles and the area of triangles, parallelograms, trapezoids, and circles and develops strategies to find the areas of more complex shapes.

Develops strategies to determine the surface area and volume of selected prisms, pyramids, and cylinders.

Solves volumes involving scale factors, using ratio and proportion.

Solves simple problems involving rates and derived measurements for such attributes as velocity and density.

Data Analysis and Probability

Formulates questions, designs studies, and collects data about two populations or different characteristics within one population.

Selects, creates, and uses appropriate graphical representations of data, including histograms, box plots, and scatterplots.

Finds, uses, and interprets measures of center and spread, including mean and interquartile range.

Discusses and understands the correspondence between data sets and their graphical representations, especially histograms, stem-and-leaf plots, box plots, and scatterplots.

Uses observations about differences between two or more samples to make conjectures about the populations from which the samples were taken.

Makes conjectures about possible relationships between two characteristics of a sample on the basis of scatterplots of the data and approximate lines of fit.

Uses conjectures to formulate new questions and plan new studies with which to answer them.

Understands and uses appropriate terminology to describe complementary and mutually exclusive events.

Uses proportionality and a basic understanding of probability to make and test conjectures about the results of experiments and simulations.

Computes probability for simple and compound events, using such methods as organized lists, tree diagrams, and area models.

From the National Council of Teachers of Mathematics' *Principles and Standards for School Mathematics* (2000).



TCS Middle-Level Approach to Social Studies

At The Children's School, the social sciences offer opportunities for inquiry into the many processes that shape our culture, society, and world. As students learn about historical and contemporary events, they begin to uncover patterns, themes, and implications of human interaction over time and into the present. Through critical reading, academic discourse, and collective action, students situate themselves and their communities in historical and global contexts.

Middle-Level Social Studies Curricular Goals

Undertakes historical investigations by asking questions about the past, gathering information from primary and secondary sources, analyzing connections among historical events, and developing and defending claims about the past.

Compares and contrasts different historical accounts and analyzes how people's perspectives influence what information is available in the historical sources they create.

Explains how and why individuals or groups hold different perspectives, and how their perspectives can change over time.

Explains multiple causes and effects of historical events.

Analyzes relationships between historical events and present-day circumstances.

Explains the origins, functions, and structure of the U.S. government with reference to the Constitution and other founding documents.

Understands the role and responsibility of active civic engagement in maintaining a healthy democracy.

Describes the roles of political, civic, economic, and other organizations in shaping people's lives.

Understands the geographic relationships between people, cultures, and environments and how these relationships change over time.

Understands that social change, or the prospect of it, promotes conflict because social, economic, and political changes usually benefit some groups more than others.

Adapted from *National Curriculum Standards for Social Studies*, National Council for Social Studies (2010).



The Children's School · K - 8

TCS Middle Level Approach to Social Justice

Our approach to social justice focuses on helping students develop the courage to be upstanders and the capacity to be civically engaged, empathetic, and compassionate citizens. Believing in the inherent value of all individuals, we stress the importance of adolescents finding value in themselves and in other people, regardless of difference. As students develop their own values and beliefs, they critically examine how present and historical institutions and norms perpetuate injustice and inequity in our society. Students are encouraged to identify issues and concerns that are meaningful to them, determine how they can work towards solutions, and implement actions to create positive change in their communities.

Middle-Level Social Justice Curricular Goals

Participates in classroom and school deliberation observing established protocols and taking an active role in critiquing and improving upon democratic processes.

Investigates the origins of institutional power, bias, and privilege.
Develops a positive self-concept and recognizes that each person's multiple identities interact to create a unique and complex individual.

Recognizes personal responsibility to stand up to exclusion, prejudice, and injustice.

Speaks up with courage and respect when they or someone else has been hurt or wronged.

Works effectively and respectfully with others who have different ideas or experiences.

Names and investigates problems arising from social, economic, and environmental inequities inside and outside of the school community and seeks ways to address these problems.

Identifies strategies for individual and collective action and evaluates their effectiveness.

Speaks and acts with fairness, kindness, and compassion.



The Children's School · K - 8

TCS Middle-Level Approach to Language Arts

Reading and writing for a variety of purposes and audiences is integral to our approach to Language Arts in the Middle Level. As readers, students encounter and engage with texts to obtain information and to expand their understanding of the world and their place in it. Of equal importance, students are provided time to read for enjoyment and to feed their own imaginations. All students at The Children's School are seen and celebrated as writers with powerful voices and stories to tell. In the Middle Level, creative writing serves as an important and popular vehicle for self-expression. Middle Level students also produce expository and persuasive writing for a variety of purposes. From research papers and stories to emails and newsletters, students engage in authentic opportunities for drafting, revising, and editing their writing to accomplish specific goals and outcomes.

Middle-Level English and Language Arts Curricular Goals

Reads a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

Reads a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.

Applies a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. Draws on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

Adjusts their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

Employs a wide range of strategies as they write and uses different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Applies knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.

Conducts research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

Uses a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

Develops an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.

Students whose first language is not English make use of their first language to develop competency in the English language arts and to develop understanding of content across the curriculum.

Participates as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

Uses spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

From the National Council of Teachers of English and International Reading Association *Standards for the English Language Arts* (published 1996; reaffirmed 2012).



The Children's School · K - 8

TCS Middle-Level Approach to Digital Life Skills

Whether through social media, text messaging, or for academic and research purposes, digital technology is a ubiquitous part of the adolescent universe. This creates an array of learning opportunities and social challenges while representing an aspect of adolescent development markedly different than what was encountered in the past. Recognizing this, we approach digital life-skills as another aspect of the academic and social-emotional development of our students.

Middle-Level Digital Life Skills Curricular Goals

Builds and manages a healthy identity online and offline with integrity.

Manages screen time, multitasking, and engagement in online games and social media with self-control.

Detects situations of cyberbullying and develops strategies for handling them.

Protects data by creating strong passwords.

Handles with discretion all personal information shared online to protect their own and others' privacy.

Distinguishes between true and false information, good and harmful content, and trustworthy and questionable contacts online.

Understands the nature of digital footprints and their real-life consequences and manages them responsibly.

Shows empathy towards their own and others' needs and feelings online.

*Adapted from "8 digital life skills all children need – and a plan for teaching them" by Yuhyun Park. *World Economic Forum* (2016).



The **Children's** School · K - 8

Components of TCS Health Education

Sexual Abuse Prevention curriculum (taught by school social worker)

Human Sexuality Workshop (taught by outside provider)

Digital and On-line Safety session (presented by Cook County State's Attorney's Office)