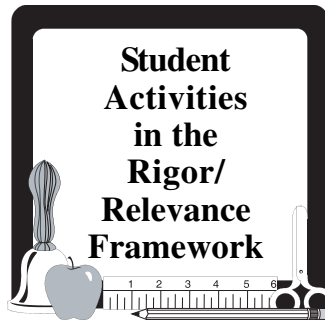


English Language Arts



Elementary Examples

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Quadrant C Assimilation

- Give and seek constructive feedback in order to improve writing.
- Role-play stories.
- Write a poem about yourself.
- Develop a WebQuest on learning language skills.
- Brainstorm as many words as possible to describe an object.
- Create and decipher coded messages.
- Describe mystery objects to partners to strengthen use of descriptions.
- Create word puzzles.

Quadrant D Adaptation

- Create new words to describe phenomena or objects.
- Publish a brochure.
- Design and create objects related to a children's book.
- Plan a family vacation trip.
- Research an issue and write a letter to the school board, elected official, or local newspaper.

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Quadrant A Acquisition

- Create a drawing, picture, sign, or other graphic to represent a word or concept.
- Put words together in sentence format.
- Retell stories.
- Respond to oral directions.
- Participate in word games.
- Develop outlines from a nonfiction presentation.
- Memorize spelling words.
- Create a list of commonly misspelled words.

Quadrant B Application

- Record observations on a field trip.
- Use job-related tools or clothing to stimulate writing and drawing about a career.
- Read, analyze, and share content of local newspaper.
- Present a story through a computer graphics application.
- Communicate with e-mail pals in another country.
- Search newspapers for abbreviations and acronyms.
- Write factual stories of personal experiences.

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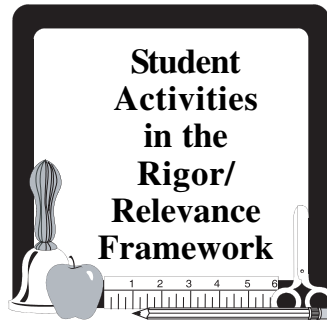
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English Language Arts



Middle Level Examples

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Quadrant C Assimilation

- Play word games to identify specific language usage, such as figurative language.
- Research the history of words and phrases.
- Keep a journal of reflection on literature.
- Write a creative story, such as surviving in the wilderness.
- Create analogies to explain an idea.
- Analyze commercials for fact and opinion.
- Analyze a character in a novel.
- Create a new character in mythology.

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Quadrant D Adaptation

- Create a Bill of Rights for your school or classroom.
- Write directions for assembling a product or carrying out a procedure.
- Create a rubric for evaluating writing assignments.
- Research and debate a controversial issue.
- Write a folk tale based on contemporary life.
- Analyze and rewrite political cartoons.

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Quadrant A Acquisition

- View movies that depict human emotions and behaviors.
- Analyze sentences for parts of speech.
- Look up the definition of the "word of the day."
- Use library reference tools.
- Give an oral presentation.
- Read nonfiction or historical literature.
- Locate and describe technical writing.
- Act out characters in a story.

Quadrant B Application

- Conduct an interview.
- Conduct a meeting using parliamentary procedure.
- Conduct an Internet search.
- Write captions for cartoons.
- Lead a class discussion on a current event.
- Assemble a product following written directions.
- Write articles and headlines for a class newsletter.

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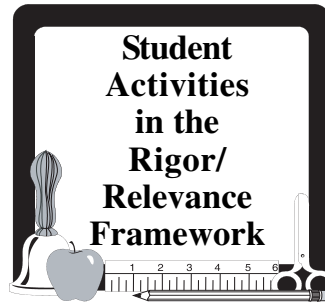
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English Language Arts



High School Examples

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Quadrant **C** Assimilation

- Compare and contrast literary styles of different authors.
- Relate literature to historical context.
- Discuss role of media in a democracy.
- Research limits of First Amendment freedoms.
- Analyze characters from a novel.
- Create a storyboard.
- Analyze and improve typical student writing.
- Role-play characters from literature in new situations.

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Quadrant **A** Acquisition

- Practice SAT vocabulary words.
- Select books and read to younger children.
- Read important works of literature.
- Give an extemporaneous speech.
- Learn several graphic organizers.
- Use word processing outlining and table tools.
- Write an essay on a historical topic.

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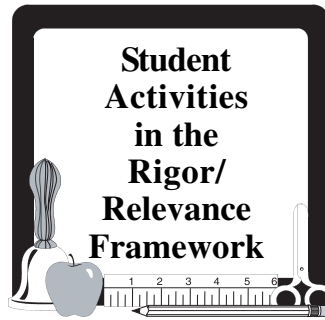
Quadrant **D** Adaptation

- Write and perform a radio play.
- Simulate a presidential debate.
- Write a legal brief defending a school policy.
- Prepare a demonstration video.
- Review newspaper editorials for a week and write a letter to the editor expressing an opinion in response to one of them.
- Develop guidelines for publishing content on Internet pages.
- Develop a reading list of historical biographies for a middle level social studies course.

Quadrant **B** Application

- Participate in a debate on a current political issue.
- Write a research report on a national problem.
- Identify and analyze typical body language traits.
- Create a personal or class Website.
- Research a career field.
- Use word processing software to write a business letter.
- Prepare a multimedia presentation.

Mathematics



Elementary Examples

6

Quadrant C Assimilation

- Create a measurement scale (hand span, book, length of string, etc.) and measure objects in classroom.
- Predict and analyze patterns of sides of three-dimensional boxes.
- Use pattern blocks to construct desired shapes.
- Identify next numbers in a sequence.
- Find values in number sentences when represented by unknowns.
- Round off numbers and estimate answers.
- Use a balance to predict and determine equivalent value.
- Create math word problems for younger students.

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Quadrant A Acquisition

- Explore likenesses and differences of objects (color, shape, size).
- Sort and classify objects, such as buttons, blocks, bottle tops.
- Use color counters to solve simple computational problems
- Divide objects to illustrate whole, half, third, quarter.
- Construct shapes and patterns with craft sticks.
- Memorize multiplication tables.
- Find the lines of symmetry in letters of the alphabet and numerals.
- Use pegboards to discover multiplied values.

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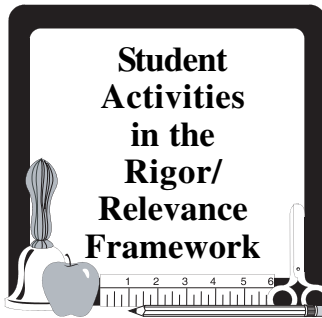
Quadrant D Adaptation

- Develop formula for determining a large quantity without counting, such as beans in a jar.
- Calculate change of values to double or halve a recipe.
- Discover similar characteristics of different geometric solids.
- Collect data on an event and compare to expected results, such as the number of faulty parts manufactured.
- Evaluate situations when estimates are acceptable and unacceptable, e.g., paying for something vs. making a budget.

Quadrant B Application

- Divide quantities of objects into equal groups.
- Calculate the area of objects.
- Make a graph comparing characteristics of two groups.
- Find patterns outdoors and indoors.
- Collect temperatures at different times of day for several days and make a graph to display recorded data.
- Use rulers to measure objects.
- Sort quantities to discover fractions of the whole.

Mathematics



Middle Level Examples

6

Quadrant C Assimilation

- Measure interior angles of polygons and discover the relationship between number of sides and sum of angles.
- Graph the perimeters and areas of squares of different sizes.
- Express probabilities as fractions, percents, or decimals.
- Evaluate equivalency and relationship of decimal and fractions.
- Determine the largest area for a fixed perimeter.
- Fill in missing numbers for ordered pairs for an algebraic function.
- Evaluate objects for similarity and congruence.
- Estimate sums of complex fractions.

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Quadrant A Acquisition

- Select computational operation to solve word problems
- Calculate volume of regular solids.
- Measure angles with a protractor.
- Find and measure the sides and angles of a right triangle using the Pythagorean theorem and trigonometric ratios.
- Organize and display collected data, using tables, charts, or graphs.
- Use basic properties of equality to solve equations with one variable.
- Plot the coordinates for quadrilaterals on a grid.

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Quadrant D Adaptation

- Hold a competition to determine when using a calculator or doing mental math is most efficient.
- Obtain historical data about local weather to estimate amount of snow, rain, or sun during a given season of the current year.
- Use graphing calculators and computer spreadsheets to organize and analyze data.
- Test consumer products, such as absorbency of paper towels, devise a scale, and illustrate data graphically.
- Plan a large school event and calculate resources (food, decorations, etc.) needed and costs.

Quadrant B Application

- Make a scale drawing of the classroom.
- Calculate percents of daily requirements met through a typical school lunch.
- Calculate potential combinations of a group of variables, such as wardrobe components, and estimate the probability of any one combination being picked at random.
- Calculate percentages of advertising in a newspaper.
- Play a simulated baseball game and calculate statistics.
- Calculate paint needed for a summer business painting houses.

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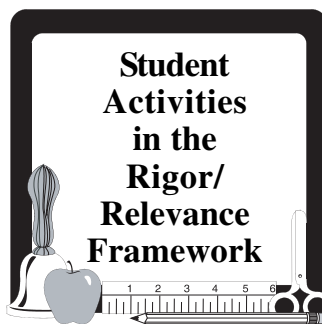
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Mathematics



High School Examples

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Quadrant C Assimilation

- Solve interdisciplinary problems with signed numbers, such as molecules with a charge of protons and electrons.
- Identify congruence of shapes from expressions and truth statements.
- Complete Euclidean proofs in geometry.
- Construct truth tables as a shorthand method for discussing logical sentences.
- Analyze factors in difference between theoretical and empirical probability.
- Select best measures of central tendency to support a particular point of view.
- Solve quadratic equations and linear inequalities.

Quadrant D Adaptation

- Determine types of measurements/calculations involved in designing everyday items.
- Make calculations of electrical load of appliances based on usage in homes in the community.
- Examine the different elements, visual effects, and features found in a computer game and use mathematics to design some of these elements.
- Create formulas to predict changes in stock market values.
- Design support posts of different materials and size to handle stress load in a building.
- Develop a sampling plan for a public opinion poll.
- Design a roller-coaster ride.

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Quadrant A Acquisition

- Distinguish rational and irrational numbers
- Simplify, factor, and compute polynomials.
- Solve and graph linear equations.
- Create and solve factorial expressions for permutation problems.
- Construct and solve for unknowns in ratio problems.
- Compute numbers with scientific notation.
- Predict the probability of events using ratios.
- Bisect line segments and angles.
- Provide examples to illustrate properties of real numbers.

Quadrant B Application

- Draw Venn diagrams to represent a set of real conditions, e.g., common characteristics of students in class.
- Find length of line segments without measuring.
- Take measurements using calipers and micrometers.
- Calculate measurement error in real observations.
- Calculate frequency of vibration of various piano strings.
- Calculate medical dosages for different weight animals.
- Calculate mathematical values for an excellent golf swing.
- Plot changes in temperature at different altitudes from a NASA space flight.

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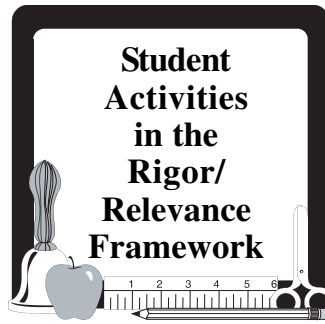
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Science



Elementary Examples

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Quadrant C Assimilation

- Write and illustrate biographies of inventors.
- Make diagrams of animal life cycles.
- Classify a group of similar objects to create a dichotomous key.
- Conduct experiments to show photosynthesis.
- Research an endangered species.
- Make observations of similarities and differences of fish heads and predict food sources.
- Research characteristics and habits of insects.
- Write a story describing the movement of water through municipal water systems.

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Quadrant D Adaptation

- Design a candy dispenser that works without gravity.
- Invent a musical instrument.
- Design a zoo.
- Study bread chemistry, purpose of ingredients, and how changes affect final product.
- Set up experiments to test life length of batteries.
- Research and write a field guide for identifying local trees.
- Build a simple robotic device with string, tape, and rubber bands.

Quadrant A Acquisition

- Memorize names of planets in solar system.
- Demonstrate phases of the moon.
- Participate in simple hands-on activities that demonstrate Bernoulli's principle of air pressure and air flight.
- Match pictures of insects with their names.
- Illustrate parts of a cell.
- Make a model of the layers of Earth's atmosphere.
- Make daily observations of the life cycle of a selected species.
- Create a mural showing various kinds of creatures that live in the ocean.

Quadrant B Application

- Develop a food list for a space trip.
- Create a class book about the animal and plant life in local rivers.
- Take photographs of insects to describe characteristics and behaviors.
- Study examples of paper airplanes and then create one.
- Keep a field journal about the insects that live near your school.
- Develop an acid test and sample rainwater for acidity.
- Create electric circuits of various materials and determine properties of conductivity and insulation.
- Analyze characteristics of different soil types.

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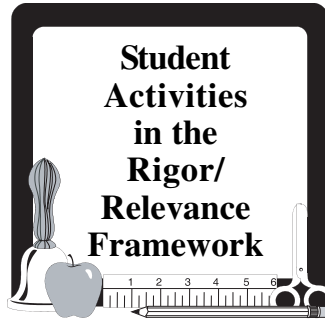
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Science



Middle Level Examples

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Quadrant C Assimilation

- Design a science project to illustrate a science concept (e.g., photosynthesis).
- Analyze similarities and differences of spiders and insects.
- Research and sequence ages of plant and animal species.
- Discuss the impact of fat and cholesterol in nutrition and health.
- Research and produce news program on earthquakes.
- Research and give presentations on astronomy topics.
- Identify chemicals dissolved in an unknown solution.

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Quadrant D Adaptation

- Measure light pollution in the community.
- Collect data and make recommendations to address a community environmental problem.
- Design an air pollution control device.
- Design a device to transport human organs.
- Develop a concept for a new product and research the process for patenting the design.
- Collaborate with other students in collecting data on acid rain pH levels in area lakes.
- Design a model bridge to carry a specific load.
- Research communication innovations and predict innovations in the next 20 years.

Quadrant A Acquisition

- Measure the effect of temperature and concentration on the rate of a reaction, such as Alka-Seltzer in water.
- Observe wave properties of light, especially the phenomenon of interference, using soap bubbles.
- Construct models of molecules using toothpicks, marshmallows, and gumdrops.
- Examine biological rhythms by recording changes in body temperature.
- Use different colored clay/dough to demonstrate tectonic plates.
- Catalog human physical traits to determine inherited genetic traits.
- Illustrate proportion of world's freshwater, ice caps, and saltwater using an aquarium.

Quadrant B Application

- Analyze heat produced from different fuel sources.
- Build a simple electrical circuit to illustrate digital principle of computers.
- Explore the stopping characteristics of a toy car, altering one variable at a time.
- Investigate the importance of interdependency and diversity in a rain forest ecosystem.
- Collect data on dissolved oxygen, hardness, alkalinity, and temperature in a stream.
- Complete an energy audit of heat loss in a home.
- Conduct experiments to measure calories in foods.

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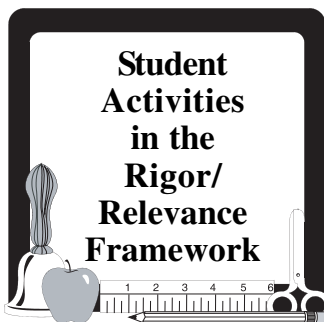
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Science



High School Examples

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Quadrant C Assimilation

- Solve a hypothetical science-related problem, such as helping dinosaurs to survive.
- Design experiments and collect evidence to describe the movement of light.
- Design a WebQuest on an aspect of chemistry.
- Design observations to demonstrate basic laws of physics.
- Calculate potential and kinetic energy in the movement of a roller coaster.
- Create a digital electronic counter.
- Write test questions to illustrate understanding of empirical gas laws.
- Research the discovery of a chemical element.

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Quadrant A Acquisition

- Conduct laboratory experiments to observe chemical reactions.
- Apply number and computation skills to science, including scientific notation and significant figures.
- Determine latitude and longitude of geographic locations.
- Use a mnemonic system for remembering metric conversions.
- Demonstrate modulation of sound waves using computer animation.
- Conduct experiments to observe properties of acids and bases.
- Memorize elements in Periodic Table.
- Make observations about the visual effects of concave and convex lenses.

Quadrant D Adaptation

- Explore designs of car safety restraints using eggs in model cars.
- Design and construct a robot.
- Conduct debate on genetically modified food (GMF).
- Solve an organic chemistry case study problem in petroleum distillation.
- Select a method to build a tunnel under a real city.
- Discuss the social, ethical, and emotional consequences of genetic testing.
- Participate in an online debate on a science issue, such as acid rain or deformed frogs.
- Research and write a newspaper article on a viral disease, examining economic and societal impacts.

Quadrant B Application

- Map a community site by collecting data with GPS device.
- Collect and categorize organisms from a natural stream.
- Apply Laws of Gases to design gas storage containers.
- Make weather forecasts based on data.
- Solve electrical current values using Ohm's law.
- Isolate DNA from unknown plant tissues and compare to sample DNA.
- Participate in an online collaboration to collect scientific data on a global problem.

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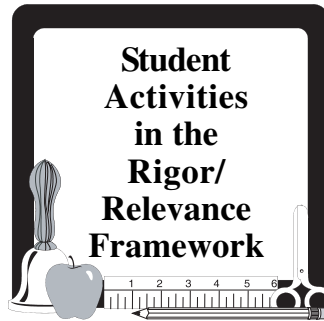
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Social Studies



Elementary Examples

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Quadrant C Assimilation

- Write an essay on some aspect of your family or neighborhood.
- Analyze similarities/differences between current and previous practices, e.g., compare school today to the 19th century.
- Role-play a simulation of the American Revolution to seek resolution of grievances.
- Study African art and folk tales and create art objects and related tales.
- Contrast citizens' roles/responsibilities under different forms of government.
- Speculate on and describe how changes in climate and natural resources will influence various regions of the world.
- Play a simulation game that illustrates supply and demand.

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Quadrant A Acquisition

- Brainstorm meaning of a term such as "citizenship" and read a related book.
- Create a book illustrating and describing landforms using geographic terms.
- Memorize names, locations, and capital cities of U.S. states.
- Read a biography of a Native American.
- Research and celebrate a holiday from another country.
- Read historical novels about the contributions of U.S. women.
- Develop a time line of U.S. history events.
- Visit a historical museum.

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Quadrant D Adaptation

- Create a class business by designing, producing, marketing, and selling a product, such as cookies.
- Explore an online resource on inventions, such as National Geographic Invention Game, and then design an invention to solve a problem.
- Research a location in the U.S. and explain why it is a good place to live.
- Create a school bank simulation to illustrate loans, investments, and interest.
- Read a story about survival and brainstorm strategies for surviving a disaster, e.g., snowstorm, tornado.
- Identify a family buying choice, list benefits and costs, and explain why decision was made.

Quadrant B Application

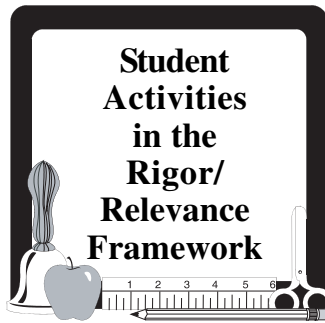
- Map a school facility.
- Describe geographic and climatic characteristics of the local community.
- Prepare foods from different countries.
- Trace family histories of the class and map immigration movements and time lines.
- Interview people who have lived elsewhere and develop a list of different community characteristics.
- Observe a local farming enterprise and discuss career and business opportunities.
- Explore buying options and comparison shop for a product.
- Use different map scales (linear, fractional, and word) to measure the distance between two places.

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Social Studies



Middle Level Examples

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Quadrant C Assimilation

- Complete interdisciplinary research project for a significant historical event.
- Use physical, topographical, political, and economic maps to compare and contrast early American civilizations.
- Research and role-play the first U.S. Constitutional Convention.
- View a historical video and critically evaluate perspective and point of view.
- Play a budget simulation game to analyze results of economic decisions.
- Identify and analyze primary and secondary source documents to understand the usefulness of each.
- Research and compare how economic decisions are made in other countries compared to the U.S.

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Quadrant A Acquisition

- Discover characteristics of society in an earlier decade by reading historical documents, such as wills and letters.
- Read about and discuss personal credit options.
- Research inventions of ancient civilizations.
- Define common terms used in various forms of government.
- View an historical video and answer factual questions.
- Construct a replica of a Native American village.
- Study colonial life through historical fiction.
- Make a map showing the growth of the United States from 1783 to 1914.

Quadrant D Adaptation

- Participate in an online discovery adventure exploring historical ruins.
- Analyze and debate the role of advertising in school.
- Solve problems by evaluating, taking, and defending a position on an issue, such as immigration or public transportation policy.
- Create a WebQuest to illustrate the "American Dream."
- Create a Website for the local community.
- Research and present opinions of candidates running for office.
- Find examples of stereotyping in historic and current events.
- Compare the shaping of public opinion in Colonial times to modern times.

Quadrant B Application

- Develop a personal financial plan.
- Compete in a stock market investment simulation or game.
- Locate and catalog community services organizations in the community.
- Research status of specific legislation using Congressional Internet site.
- Research what items cost in other countries and use exchange rates to relate to U.S. prices.
- Explore buying options and comparison shop for products.
- Plan and participate in a community service activity.
- Hold an international festival.

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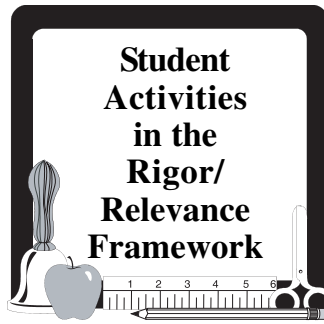
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Social Studies



High School Examples

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Quadrant C Assimilation

- Compare/contrast how ancient civilizations valued women, social responsibility, and equality.
- Research and give a presentation on a historical example of nationalism.
- Answer data-based questions using copies of original historical documents.
- Participate in a Socratic seminar on a policy issue, such as privacy.
- Use case studies to investigate how economic systems affect people's incentive for economic gain.
- Analyze decisions leading to major turning points in U.S. history and hypothesize about what might have happened if decisions had been different.

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Quadrant A Acquisition

- Observe local government proceedings.
- Complete interactive mapping activities on European geography.
- Report on a complex historical event.
- Complete an in-depth geographic study of a world region by analyzing demographic data.
- Recognize why international trade takes place and the role of exchange rates in fostering or inhibiting trade.
- Trace the evolution of U.S. values, beliefs, and institutions through a study of their constitutional and institutional development.
- Research key aspects of the state constitution.

Quadrant D Adaptation

- Conduct a survey and analyze results on First Amendment issues related to Internet use.
- Analyze a local, state, or national issue and prescribe a response that promotes the public interest or general welfare, e.g., a voter registration campaign.
- Research and debate economic issues and public policy related to the Internet, such as sharing of online music.
- Evaluate a common practice or proposed legislation for consistency with the Constitution/Bill of Rights and write your opinion in a letter to an elected official.
- Analyze a school/community problem, suggest a solution, and prepare a plan to solve it.

Quadrant B Application

- Be a juror on a local youth court.
- Conduct a school/community survey on a social issue and analyze results.
- Write letter of support for a proposed local or state policy.
- Complete an income tax form.
- Draw from memory a map of the world; indicating the relative location of continents, oceans, major river systems, nations in the news, and important cities.
- Locate and interpret current and historical economic data, e.g., GDP, CPI, employment.
- Analyze credit options, calculate purchase costs, and complete a credit application.

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