

CANE POLES & KIDS: CREATING A COMMUNITY R3 BUSINESS

6th-8th Grade Discussion Guide

Developed by: Dan Bertalan and Phyllis McKenzie

SCIENCE CATEGORIES

Life Science, Physical Science, Social Studies, Environmental Science, Natural Resource Science

TIMEFRAME

Three, 45-minute Sessions

MATERIALS

Access to computers and the internet, Pre-lesson Worksheet, Four (4) Student Stakeholder Group Worksheets

TOPICS

Recreation planning, environmental awareness, social and cultural interaction



LEARNING OBJECTIVES

Students will be able to:

- Understand the different considerations in developing a community recreational R3 angling plan. They will also understand that natural resource recreational plans can be adapted to fulfill the needs of people, communities and ecosystems.
- Define the reasons for developing a plan and identify the key concepts in a recreational development plan that can affect their community and benefit friends or family.
- Use video, online research and classroom discussion in developing and supporting their understanding of a Community Recreational Plan.
- Work in small and large groups to process new information and use various life science evidence to develop and come to conclusions.

ACTIVITY SUMMARY

Students will research, debate and develop their own custom Cane Pole R3 Business Plans. Their plans will consider factual statistics, logic, and balanced reasoning to create an angling-related business while helping their community enhance and connect with aquatic ecosystems.

BACKGROUND INFORMATION

OVERVIEW (Teacher reads to the students and is included in the various Student Group Worksheets)

Like most kids your age, summers hold the promise of fun and adventure with your friends. But after a few weeks of riding your bikes around the town park, you find yourselves sitting on a log staring idly at the nearby pond that borders the edge of town, wondering, "What else can I do for fun?" Your eye catches the movement of a dragonfly dimpling the water when suddenly it disappears in a splash. What the heck? Was that a fish?

Despite the summer sun beating on your head, synapses begin firing in your mind... hmmm? A park pond that nobody uses because it's too weedy and the shoreline is choked with cattails. Groups of kids wandering around aimlessly looking for something fun to do. Fish eating bugs that nobody seems to know are even there. Like a lightning bolt, the idea explodes in your mind... Hey! Maybe get all those kids having a blast catching all those fish! And maybe there's a way to be innovative and turn it into a community-based business opportunity?

So, you race off to meet with your group of friends to develop a comprehensive plan that's a win-win-win for the community, the aquatic ecosystem, the park, and all the kids who are about to discover the fun of fishing.

By taking part in this lesson, students will develop an understanding of the importance and concepts of conservation and recreational development, using critical thinking in a peer-driven activity where students ask critical questions, perform research, debate, and create their own "Cane Poles & Kids Community Recreational Plan".

MATERIALS NEEDED (each group, each student):

- Access to computers and the Internet
- *Cane Pole & Kids* classroom video and background information can be found at: intotheoutdoors.org/topics/into-fishing-with-cane-poles/
- Pre-lesson Worksheet with questions to fill in while watching the video
- Four (4) Student Stakeholder Group Worksheets;
 - Park Officials
 - Cane Pole Business Innovators
 - Parents Safety Association
 - Friends of Aquatic Ecosystems



LEARNING PROCEDURE

SESSION 1

Before watching the *Cane Poles & Kids* classroom video, or, reading the website background information, ask students what they know about fishing, R3, or recreational development. Also ask students how many have actually been fishing and what might be their motivations to fish with friends. Then lead a class discussion about the positive and challenging aspects of fishing.

Print and distribute the *Pre-Lesson Student Worksheet* (copy contained in this PDF). Instruct students to fill in the worksheet while watching the *Cane Poles & Kids* video. Go over the questions with the students before viewing so they know what to look and listen for. After viewing the video, review and discuss the answers to the questions as a class.

Next, divide the class into these four (4) Stakeholder Groups;

1. Park Officials
2. Cane Pole Business Innovators
3. Parents Safety Association
4. Friends of Aquatic Ecosystems

Print and hand out the four group worksheets (copies contained in this PDF). Inform students they will be working together within their respective groups to achieve the different and group-specific goals detailed in their assigned worksheets. Explain briefly what they will do in each of the three sessions. Answer any questions about the assignment.

SESSION 2 - Group Research & Plan Development

Each of the four (4) groups have specific and sometimes different subjective goals in developing a Cane Poles & Kids Recreational Plan.

In their separate groups, have students perform online research from the resource links provided on the webpage, plus other sources they discover, then discuss and develop their group's "Cane Poles & Kids Recreational Plan" that explores the innovate approaches to creating a plan that fulfills the needs of the community, park and aquatic ecosystem. The worksheets provide specific group (and different) instructions for students on what to consider in developing their plans. Inform each group that two members of their group will also present their "Cane Poles & Kids Recreational Plan" and recommendations to the entire class during Session 3. Their presentations should be supported by research and/or evidence, and presented with at least one form of art or media prepared by the group (either video, poster, graphs, charts, images, or art).

SESSION 3 – Student Group Presentations & Class Debate

Using their completed worksheets, have each group present their Cane Poles & Kids Recreational Plan and supporting research. Limit each group to five minutes presentation time followed by several minutes of questions and discussion between the groups representing their respective stakeholder roles. Encourage discussion about differences in the four plans and how to mediate or compromise on differences.

After the four groups each present their Cane Poles & Kids Recreational Plan, lead a class discussion on how the different groups might develop a comprehensive Cane Poles & Kids Recreational Plan that could be used in almost any part of the country. Consider the logistics of their plan being used within actual communities and parks that have access to water that could synergistically benefit kids, parks, ecosystems and anglers.

Conclude Session 3 by listing on the board the four most important aspects of each groups' plan. Then list the most important aspects that were part of two or more groups. Lead a discussion with student input on how they might refine an overall "Classroom Cane Poles & Kids Recreational Plan" and how they might distribute their refined plan to other classrooms or communities. Also, explore how certain plans could increase cultural and ecosystem awareness in various communities.

ASSESSMENT

Students will be informally assessed based on their participation within their groups and during class presentations and discussions. Teachers could collect the discussion notes students took during the video to check for completion.

Students can be formally assessed using their Student Stakeholder Worksheets. Students can be assessed on meeting the formal learning objectives on how thoroughly students completed their respective worksheets.

EXTENDING THE LESSON *(Options for extended/additional activities and lessons)*

- Custom Plan for Their Own Community – Students can select their favorite park or community locale with access to angling opportunities. Then have them develop a custom plan that blends the circumstances of their park, pond, and community with key parts of the final Classroom Cane Poles & Kids Recreational Plan. They can present their plan to real park officials or local R3 angling agencies or orgs for constructive feedback. They then present their findings to the classroom on how they could modify their plan considering the actual feedback they received.
- Visit a local bait shop that sells fishing supplies and consider how the shop might design an exclusive "angling starter" section that focuses on outfitting kids with cane poles and gear to be safe and successful. Present their findings and ideas to the rest of the class. Share with the bait shop owner – with permission from teacher and parents.



WORKSHEET FOR CANE POLES & KIDS VIDEO

Developed by: Dan Bertalan and Phyllis McKenzie



Student Name: _____ Class: _____ Date: _____

Before watching the video or exploring the website, review these questions, look for and write down your answers while watching the video.

1) What are some personal rewards to going fishing within your community?

2) What are the personal risks of kids going fishing from a dock or shore?

3) How can kids benefit from learning about aquatic ecosystems?

4) What might be the benefits to a community of developing a kid's fishing pond?

5) How might local businesses benefit from angling recreational development?

6) How can kids have fun fishing while preserving the health of the pond?

7) What are the basic needs for being successful with cane poles and live bait?

8) How is fishing related to conservation?

CANE POLE BUSINESS INNOVATORS

Cane Poles & Kids Community Recreational Plan Worksheet

Developed by: Dan Bertalan and Phyllis McKenzie



Student Name: _____ Class: _____ Date: _____

Welcome to the Cane Pole Business Innovators group. Here's the deal...

Like most kids your age, summers hold the promise of fun and adventure with your friends. But after a few weeks of riding your bikes around the town park, you find yourselves sitting on a log staring idly at the nearby pond that borders the edge of town, wondering, "What else can I do for fun?" Your eye catches the movement of a dragonfly dimpling the water when suddenly it disappears in a splash. What the heck? Was that a fish?

Despite the summer sun beating on your head, synapses begin firing in your mind... hmmm? A park pond that nobody uses because it's too weedy and the shoreline is choked with cattails. Groups of kids wandering around aimlessly looking for something fun to do. Fish eating bugs that nobody seems to know are even there. Like a lightning bolt, the idea explodes in your mind... Hey! Maybe get all those kids having a blast catching all those fish! And maybe there's a way to be innovative and turn it into a community-based business opportunity?

So, now your goal is to work within your group to develop a Cane Poles & Kids Community Recreational Plan that meets your specific needs while hopefully fulfilling the anticipated desires of these other stakeholder groups:

- Park Officials
- Parents Safety Association
- Friends of Aquatic Ecosystems

However, unlike the other groups, one of your main goals is to create a profit-driven innovative business that also benefits the other groups. You want to start saving for college, right? So why not start a business that also gets kids connected with fishing?

One reason you want to create a business is that your recent study revealed that one of the prime groups to recruit as new anglers are kids. And you know how to connect kids with the untapped fishing opportunities in your park pond. So here are your goals:

- Work with the local bait shop to give your group a "sales commission" on all "cane pole starter sets" that they sell (from a discount coupon you create and issue).
- Work with Park Officials to improve fishing access and safety around the pond.
- Recruit and instruct kids on how to catch fish with cane poles.

On a separate sheet of paper or on your computer, work as a team to research-research-research and develop your own Cane Poles & Kids Community Recreational Plan that should include:

- What could be done with the cattail choked shoreline to make fishing more accessible and safer for kids? Who might help do that?
- How could you put on “how to catch fish” classes at the park? Could you enlist local R3 angling officials to help?
- What are some concepts of your business plan that might work for all the stakeholder groups while still making you college money with the local bait shop?
- What rules or procedures might you develop that could help the aquatic health of the park pond and ensure public safety?
- Sequentially list the parts of your plan to logically make it happen.

In class Session 3, all of the groups will present their Cane Poles & Kids Community Recreational Plan then have a class debate on solutions to developing an overall plan that best serves the combined goals of the four different stakeholder groups.

Develop your realistic and achievable plan using the following methods:

- Begin your research by watching the classroom video again, and decoding some key points on the webpage; intotheoutdoors.org/topics/into-fishing-with-cane-poles
- Do online research to support the key parts of your plan. Cite references.
- Because you understand the social and environmental benefits of getting kids fishing better than the other groups, try to work with Friends of Aquatic Ecosystems during debate to combine some of their goals with yours.

Now go create an awesome Cane Poles & Kids Community Recreational Plan to present in Session 3.



FRIENDS OF AQUATIC ECOSYSTEMS

Cane Poles & Kids Community Recreational Plan Worksheet

Developed by: Dan Bertalan and Phyllis McKenzie



Student Name: _____ Class: _____ Date: _____

Welcome to the Friends of Aquatic Ecosystems group. Here's the reality of what you're facing.

You've been battling the forces of urban expansion, climate change, environmental pollution and city runoff water management to help stem the tide of degrading aquatic ecosystems within your community. Mostly, you've been losing environmental battles to save shrinking wetlands, ponds and creeks within the community. There's little rest for those who really care.

Now to top off your list of challenges, you've just heard that some kids are planning on promoting fishing in the weedy pond along the edge of the park. One of the few undisturbed aquatic ecosystems is about to be assaulted by hordes of careless kids catching and killing fish while trampling the protective shoreline filled with the delicate biotic food web of the ecosystem. Oh, dear.

As you hang your head in despair, a long-lost memory strikes you... My gosh, the reason I began to care about and for aquatic ecosystems is because I went fishing as a kid and fell in love with all that it meant in the great circle of life. So it only makes sense that getting more kids to learn about that aquatic food web and water quality through fishing is a remarkable opportunity to enlist our next generation of aquatic ecosystem stewards!

So armed with this revelation and opportunity, your job is to creatively develop your Cane Poles & Kids Recreational Plan that meets your needs and the desires of these other stakeholder groups:

- Cane Pole Business Innovators
- Park Officials
- Parents Safety Association

Unlike the other groups, you alone understand the delicate balance of biotic and abiotic factors that can be altered by humans within an aquatic ecosystem, especially a "closed ecosystem" like the Park pond. So here are your goals:

- Improve the water quality and biodiversity of the pond's ecosystem
- Design a method to educate the kids about the value of aquatic ecosystems
- Form relationships with other stakeholders to achieve your environmental and educational goals

On a separate sheet of paper or on your computer, work as a team to research-research-research and develop your own Cane Poles & Kids Community Recreational Plan that should include:

- What could be done with kid fishing access to protect much of the pristine shoreline ecosystem? What could be constructed?
- What rules might you develop with other groups to ensure biodiversity?
- What kind of “aquatic education” program could you develop that kids would be required to take before they got their “Park-Pond Fishing Permit”? What other groups could you work with on this?
- How might you enlist kids to want to become aquatic ecosystem stewards?
- Sequentially list the parts of your plan to logically make it happen while helping kids connect with aquatic biodiversity.

In class Session 3, all of the groups will present their Cane Poles & Kids Community Recreational Plan then have a class debate on solutions to developing an overall plan that best serves the combined goals of the four different stakeholder groups.

Develop your realistic and achievable plan using the following methods:

- Begin your research by watching the classroom video again, and decoding some key points on the webpage; intotheoutdoors.org/topics/into-fishing-with-cane-poles
- Do online research to support the key parts of your plan. Cite references.
- Because you understand the implications “recruiting” kids to become environmentally responsible anglers, try to work with the Cane Pole Business Innovators during debate to combine some of their goals with yours.

Now go create an awesome Cane Poles & Kids Community Recreational Plan to present in Session 3.

PARK OFFICIALS

Cane Poles & Kids Community Recreational Plan Worksheet

Developed by: Dan Bertalan and Phyllis McKenzie



Student Name: _____ Class: _____ Date: _____

Welcome to the Community Park Officials group. Here's the deal...

You're in charge of managing the community park that's mostly where people have picnics and kids play on your outdated playground set. Everything has been going status quo like past years but you've just heard that some kids are now planning on promoting fishing in the weedy pond along the edge of the park. Oh my!

Because you have a limited budget and employees, you can't manage all kinds of kids mucking around in the pond and making a mess with bait trash and dead fish. Plus, the park liability insurance might be unaffordable if kids are messing with sharp hooks, fish spines, water hazards and kids knock for getting hurt. Not cool. You might lose your job!

So how in the world can you turn this potential problem and liability into something positive for the community while improving the quality and opportunities within the park? Well, that's your job in creatively developing your Cane Poles & Kids Recreational Plan that meets your needs and the desires of these other stakeholder groups:

- Cane Pole Business Innovators
- Parents Safety Association
- Friends of Aquatic Ecosystems

Unlike the other groups, you are recreational development experts who know how to combine community needs within the constraints of your natural resources and logistics inside the park. So here are your goals:

- Improve public recreation within the park
- Maintain public safety within the park
- Form relationships with other stakeholders to achieve your goals

On a separate sheet of paper or on your computer, work as a team to research-research-research and develop your own Cane Poles & Kids Community Recreational Plan that should include:

- What could be done with the cattail choked shoreline to make fishing more accessible and safer for kids? Who might help do that?
- What rules might you develop to ensure the quality of the park is maintained?

- How could allowing kids to fish with cane poles help the park or the quality of the pond?
- With your limited staff, how might other groups help make kids fishing happen?
- Sequentially list the parts of your plan to logically make it happen while protecting the quality of the park and public safety?

In class Session 3, all of the groups will present their Cane Poles & Kids Community Recreational Plan then have a class debate on solutions to developing an overall plan that best serves the combined goals of the four different stakeholder groups.

Develop your realistic and achievable plan using the following methods:

- Begin your research by watching the classroom video again, and decoding some key points on the webpage; intotheoutdoors.org/topics/into-fishing-with-cane-poles
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- Do online research to support the key parts of your plan. Cite references.
- Because you understand the social and safety implications of letting kids go fishing better than the other groups, try to work with Parents Safety Association during debate to combine some of their goals with yours.

Now go create an awesome Cane Poles & Kids Community Recreational Plan to present in Session 3.

PARENTS SAFETY ASSOCIATION

Cane Poles & Kids Community Recreational Plan Worksheet

Developed by: Dan Bertalan and Phyllis McKenzie



Student Name: _____ Class: _____ Date: _____

Welcome to the Parents Safety Association group. Here's the skinny...

You're a concerned group of parents who are aware of all the hazards that threaten the safety of your kids and all the children within your community. And at times the list seems overwhelming... drugs, drunk drivers, peer bullying, limited safe outdoor recreation.

Now to top off your list of worries, you've just heard that some kids are planning on promoting fishing in the weedy pond along the edge of the park. Oh great, now we get to add potential drowning and impaling fish hooks to your worry list!

Then a new thought strikes you... hey, maybe having our kids fishing safely and connecting with nature within the safety and supervision of the park is a ton safer than the dozens of other risky things they might be up to that we don't know about. When you stop to think about it, more kids have suffered injury from the outdated playground set than trying to catch a silly fish.

So how can you convert the potential risks of kids fishing into something positive in their lives while working in concert with the people who manage the Park? Well parents, that's your job in creatively developing your Cane Poles & Kids Recreational Plan that meets your needs and the desires of these other stakeholder groups:

- Cane Pole Business Innovators
- Park Officials
- Friends of Aquatic Ecosystems

Unlike the other groups, you alone are often haunted with the very personal worries of your cherished kids getting injured... or worse. So here are your goals:

- Improve youth safety within the park
- Offer kids healthy alternatives for peer activities within the park
- Form relationships with other stakeholders to achieve your goals

On a separate sheet of paper or on your computer, work as a team to research-research-research and develop your own Cane Poles & Kids Community Recreational Plan that should include:

- What could be done with pond access to make fishing safe for kids? Who might help do that? What could be constructed?
- What rules might you develop with the Park to ensure youth safety?
- What kind of “safe angling education” could you develop that kids would be required to take before they got their “Park-Pond Fishing Permit”?
- What would be the motivations to have other groups support kids fishing safety?
- Sequentially list the parts of your kids safety plan to logically make it happen while helping kids connect with nature.

In class Session 3, all of the groups will present their Cane Poles & Kids Community Recreational Plan then have a class debate on solutions to developing an overall plan that best serves the combined goals of the four different stakeholder groups.

Develop your realistic and achievable plan using the following methods:

- Begin your research by watching the classroom video again, and decoding some key points on the webpage; intotheoutdoors.org/topics/into-fishing-with-cane-poles
- Do online research to support the key parts of your plan. Cite references.
- Because you understand the safety implications of letting kids go fishing better than the other groups, try to work with Park Officials and the business sense of the Cane Pole Business Innovators during debate to combine some of their goals with yours.

Now go create an awesome Cane Poles & Kids Community Recreational Plan to present in Session 3.

The following National Common Core Standards can be met teaching:

CANE POLES & KIDS: CREATING A COMMUNITY R3 BUSINESS

6TH GRADE:

CCSS.ELA-LITERACY.RI.6.1	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.6.2	Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
CCSS.ELA-LITERACY.RI.6.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
CCSS.ELA-LITERACY.RI.6.6	Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.
CCSS.ELA-LITERACY.RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
CCSS.ELA-LITERACY.W.6.1	Write arguments to support claims with clear reasons and relevant evidence.
CCSS.ELA-LITERACY.W.6.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.6.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.6.5	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
CCSS.ELA-LITERACY.W.6.6	Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.
CCSS.ELA-LITERACY.W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
CCSS.ELA-LITERACY.W.6.8	Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
CCSS.ELA-LITERACY.W.6.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.W.6.10	Write routinely over extended time frames (time for research, reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
CCSS.ELA-LITERACY.SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.6.2	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.6.3	Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.

CCSS.ELA-LITERACY.SL.6.4	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.6.5	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.
CCSS.ELA-LITERACY.SL.6.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
CCSS.ELA-LITERACY.L.6.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.6.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.6.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.6.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.6.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.6.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

7TH GRADE:

CCSS.ELA-LITERACY.RI.7.1	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.7.3	Analyze the interactions between individuals, events, and ideas in a text e.g., how ideas influence individuals or events, or how individuals influence ideas or events).
CCSS.ELA-LITERACY.RI.7.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.
CCSS.ELA-LITERACY.RI.7.6	Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.
CCSS.ELA-LITERACY.W.7.1	Write arguments to support claims with clear reasons and relevant evidence.
CCSS.ELA-LITERACY.W.7.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.7.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.7.5	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
CCSS.ELA-LITERACY.W.7.6	Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

CCSS.ELA-LITERACY.W.7.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
CCSS.ELA-LITERACY.W.7.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
CCSS.ELA-LITERACY.W.7.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.W.7.10	Write routinely over extended time frames (time for research, reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
CCSS.ELA-LITERACY.SL.7.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.7.2	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.7.3	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.
CCSS.ELA-LITERACY.SL.7.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.7.5	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
CCSS.ELA-LITERACY.SL.7.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
CCSS.ELA-LITERACY.L.7.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.7.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.7.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.7.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.7.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.7.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

8TH GRADE:

CCSS.ELA-LITERACY.RI.8.1	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.8.3	Analyze how a text makes connections among and distinctions between individuals, ideas, or events.

CCSS.ELA-LITERACY.RI.8.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
CCSS.ELA-LITERACY.RI.8.6	Determine an author's point of view or purpose in a text and analyze how the author distinguishes acknowledges and responds to conflicting evidence or viewpoints.
CCSS.ELA-LITERACY.RI.8.7	Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multi-media) to present a particular topic or idea.
CCSS.ELA-LITERACY.W.8.1	Write arguments to support claims with clear reasons and relevant evidence.
CCSS.ELA-LITERACY.W.8.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.8.5	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
CCSS.ELA-LITERACY.W.8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.
CCSS.ELA-LITERACY.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
CCSS.ELA-LITERACY.W.8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
CCSS.ELA-LITERACY.W.8.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.W.8.10	Write routinely over extended time frames (time for research, reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
CCSS.ELA-LITERACY.SL.8.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.8.2	Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.
CCSS.ELA-LITERACY.SL.8.3	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.
CCSS.ELA-LITERACY.SL.8.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.8.5	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
CCSS.ELA-LITERACY.SL.8.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

CCSS.ELA-LITERACY.L.8.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.8.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.8.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.8.4	Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.8.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.8.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

6TH - 8TH GRADE:

CCSS.ELA-LITERACY.RST.6-8.1	Cite specific textual evidence to support analysis of science and technical texts.
CCSS.ELA-LITERACY.RST.6-8.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
CCSS.ELA-LITERACY.RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
CCSS.ELA-LITERACY.RST.6-8.6	Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.
CCSS.ELA-LITERACY.RST.6-8.8	Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
CCSS.ELA-LITERACY.RST.6-8.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
CCSS.ELA-LITERACY.WHST.6-8.1	Write arguments focused on discipline-specific content.
CCSS.ELA-LITERACY.WHST.6-8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
CCSS.ELA-LITERACY.WHST.6-8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.WHST.6-8.5	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
CCSS.ELA-LITERACY.WHST.6-8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.
CCSS.ELA-LITERACY.WHST.6-8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
CCSS.ELA-LITERACY.WHST.6-8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation

CCSS.ELA-LITERACY.WHST.6-8.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-LITERACY.WHST.6-8.10 Write routinely over extended time frames (time for research, reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

NEXT GENERATION SCIENCE STANDARDS:

- MS-LS2-1.** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. [Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.]
- MS-LS2-2.** Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. [Clarification Statement: Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory, and mutually beneficial.]
- MS-LS2-4.** Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations. [Clarification Statement: Emphasis is on recognizing patterns in data and making warranted inferences about changes in populations, and on evaluating empirical evidence supporting arguments about changes to ecosystems.]
- MS-LS2-5.** Evaluate competing design solutions for maintaining biodiversity and ecosystem services. [Clarification Statement: Examples of ecosystem services could include water purification, nutrient recycling, and prevention of soil erosion. Examples of design solution constraints could include scientific, economic, and social considerations.]