

Chicago Innovations

Read about individuals who brought about Chicago changes.

Analyze the importance of vision and determination to achieving change.

An innovation is a change in the ways people live or work that leads to other changes.

This part starts with a list of some Chicago changes.

Then it includes readings about Chicago innovations—ideas that led to city changes.

Chicago Learning Resources

"A Brief Architectural History of Chicago." 1995-1999. Museum of Contemporary Art, Chicago. <<http://www.tc.umn.edu/~peikx001/chichist.htm>>.

"Chicago: City of Neighborhoods." eCUIP: The Digital Library.
<<http://ecuip.lib.uchicago.edu/diglib/social/cityofneighborhoods/index.html>>.

"Chicago Timeline." 2008. Chicago Public Library.
<<http://www.chipublib.org/cplbooksmovies/cplarchive/timeline/index.php>>.

"The Encyclopedia of Chicago." Chicago History Museum,
<<http://www.encyclopedia.chicagohistory.org/>>.

"Great Chicago Stories." 2007. Chicago History Museum.
<<http://www.greatchicagostories.com/index2.php>>.

Library of Congress. "Photographs from the Chicago Daily News." Library of Congress American Memory. <<http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnhome.html>>.

Chicago History Museum, Chicago at the Crossroads:
<http://www.chicagohs.org/education/planavisit/exhibitions/crossroads/index>

Chicago Architecture foundation
<http://www.architecture.org/exhibitions/current>

Collaborative Learning

The Common Core standards are a kind of educational innovation. They are organized so that every student can learn what is essential at each grade to prepare for college and career progress. They tell you what competencies you need. A competence is more than a skill. It's a combination of skills and knowledge.

They include Speaking and Listening Standards—here are two for eighth grade.

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.
2. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

In **My View** activities, you can learn more if you collaborate.

But start with your own thinking.

Here's the sequence:

1. Think on paper—note what you think about the questions.
2. Pair and compare—see how what you noted is like or different from another student's response.
3. Share—you can collaborate to put together a shared response.

Start to Pair and Compare now—answer these questions, then compare your answers to those of another student.

Why would collaboration improve learning for both students?

Write two reasons.

My View asks you to analyze how collaboration helps people make progress.
How does collaboration help people accomplish progress?

Keys to Progress

CCSSR2 competence—identify and support a theme.

Here are three important concepts for learning about Chicago progress and making your own. We listed a few quotations that help explain each concept.

Think of an example from your own experience or history you have learned that shows how important each concept is.

innovation—creating something new that changes the ways people live or work.

- “Creativity is thinking up new things. Innovation is doing new things.”
--Theodore Levitt
- “The future belongs to those who believe in their dreams.” (*Eleanor Roosevelt*)

Example: _____

collaboration—working together to solve a problem or achieve a goal.

- “There are two kinds of people, those who do the work and those who take the credit. Try to be in the first group; there is less competition there.”
- --Indira Gandhi
Only when all contribute their firewood can they build up a strong fire. (*China*)

Example: _____

grit—that is a kind of **determination** in which a person overcomes obstacles, is **resilient**--does not give up even though there are difficulties.

- “The greatest glory in living lies not in never falling but in rising every time we fall.” --Nelson Mandela
- “Part of what makes America strong is our resilience, tenacity, innovation, and our willingness to be optimistic about our future.” --Valerie Jarrett
- Beginning is easy; continuing is hard. (*Japan*)
- There are no secrets to success. It is the result of preparation, hard work, and learning from failure. (*Colin Powell*)

Example: _____

As you read about Chicago progress and plan your own, look for ways these ideas are important to that progress.

Analyze Changes

CSSR1—Infer with evidence.

- 1830 A lighthouse is built.
- 1833 Eliza Chappell opens the first publicly funded school in Chicago.
- 1834 The first drawbridge across the Chicago River is built at Dearborn Street.
- 1845 The first foreign language newspaper in Chicago is printed.
- 1897 The new "L" lines are completed, and they make a kind of circle in the downtown area that becomes known as the "Loop".
- 1855 The city begins to raise the street level to improve drainage—the city's swampy conditions have caused many serious illnesses.
- 1888 Sears sends out his first mail order catalog.
- 1889 Jane Addams moves to Chicago and starts her work to help families living in poverty.
- 1900 The flow of the Chicago River is reversed to improve sanitation.
- 1901 The population is 1,698,575. More than 100,000 persons have moved here in the 7 years since 1894.
- 1903 Illinois passes a Child Labor Law—it says children can work only 8 hours a day.
- 1907 Garfield Park and Conservatory are built.

Choose three changes you think are most important. Infer one effect of each change.

<i>Change</i>	<i>Immediate Effect</i>

An innovation is a different way of working or living. It can be a change in technology, a change in how people communicate, a change that improves living conditions. It is a change that leads to other changes in the ways people live or work. Which of these changes is an innovation that would have led to important changes?

Pair and compare your ideas.

*For an extended timeline of Chicago, go to
<http://www.chipublib.org/cplbooksmovies/cplarchive/timeline/index.php>.*

Analyze Chicago Innovators

CCSSR3 competence: Analyze one individual's choices, actions, and relationships.

We included readings about individuals or groups who influenced the city in the My View materials. Learn more about these innovations and other Chicago choices and changes at <http://www.encyclopedia.chicagohistory.org/> .

Complete this chart to analyze their histories.

Person or Group: _____

Vision <i>What did they think was important?</i>	
Challenges They Faced	
“Grit” <i>Examples that show that they were persistent, overcoming obstacles</i>	
Collaboration <i>How they collaborated with others to accomplish their vision</i>	
Connections <i>Infer changes their choices led to.</i>	

DuSable: Creating Chicago Possibilities

CCSSR 2 competence. Identify examples of an idea.

Jean Baptiste Pointe du Sable came to Chicago more than 220 years ago. Chicago was a very small place then—only about 350 people lived here at that time, which really was a time of great challenge. It must have been hard to live in Chicago then as the environment was challenging—each season brought problems. There were no stores or really any pathways you could use to move about easily, and it was difficult to get everything you needed to survive. He had come from a distant land, Haiti, and it's unclear how he learned about this place of possibilities and challenges.

DuSable chose to come here because it was a place where he could build a trading post and transform the area—there was no other trading post here at that time. He thought it was a place of great possibility, that it would grow and hold more and more people who would need a trading post. His trading post would become the catalyst for Chicago's progress, the starting point that brought about the beginning of the city in which millions live today.

DuSable built his trading post himself using his own labor and abilities, using local resources to construct it from wood. First he chose a strategic location, a place where the river and lake converged. That enabled people to reach the post more easily by water. Probably it was easier to get there by water than by land, since it was so muddy in spring and in winter there were deep snows. But in winter the river would be frozen, making it impassable. So it still was a struggle, in every season.

DuSable traded with the Potawatomi, Native Americans who had lived in this area for many years before the first settlements by pioneers from Europe and other places. He traded tools to them for furs, which they produced by hunting animals, using spears, arrows, and clubs until they were able to get guns and other metal tools. With the trading post came new technologies that would make it easier to hunt and live in the area.

DuSable traded with settlers, too, who were moving to this area and brought hopes but also many needs. They moved here without all the tools and supplies they would need to build homes and survive in the challenging environment. It's not clear how people learned about Chicago as a place of possibility, but soon more and more pioneers moved to this location to settle. DuSable's vision was being realized—Chicago was becoming a destination that would keep growing.

DuSable probably knew Chicago was going to grow—he saw more settlers moving here every year, and business was an important place to all of them. DuSable sold the trading post and moved away in 1800, leaving a legacy. The trading post had been a kind of anchor of the growing community. In 1968 Chicago declared DuSable the “Father of Chicago”. His legacy continues today.

For a view of DuSable's Chicago, go to

<http://encyclopedia.chicagohistory.org/pages/410078.html>

Think More:

DuSable's innovation—establishing a trading post—created possibilities.

List possibilities that his work brought about in Chicago.

Then answer the questions about Chicago innovators to analyze DuSable's achievements.

A Social Innovation

CCSSR 2 Competence. Figure out important ideas and explain how a writer supports them.

Reform means to make things better. Jane Addams saw things in Chicago to reform. She saw poor people living in crowded neighborhoods in very small homes without enough room for all the people who lived there. The streets were very dirty, and that contributed to health problems. People did not have places to get clean water or places to bathe, so that, also, added to the health problems. Jane Addams wanted to help poor people have a better life. She believed that helping poor people would make everyone's life better. She would make Chicago a better place to live with her forceful commitment and innovative ideas.

In 1889 Jane Addams set up a place to help people, Hull-House, a settlement house. A settlement house helps people in many ways, particularly immigrants who moved to Chicago from other countries. The immigrants needed to find homes, and also how to speak English. They needed to learn about the city, get jobs, and send their children to good schools. Jane Addams wanted to teach them the skills they needed to live well on their own. At Hull House, she organized programs to do all that more—including arts lessons. When people came to thank her, that was fine, but she liked it better when they did not come back. She was glad that they were independent.

Jane Addams had more than one idea about how to help the people of Chicago. One thing she did was to live in the same community where the poor people lived. This helped her to understand their problems and them to trust her. She helped them work together to change things in their neighborhood. She was one of Chicago's first community organizers.

Another way Jane Addams made progress was by going to meet with Chicago's leaders. Jane Addams was a powerful woman who met with civic leaders, including the Mayor. She explained to him and the other leaders the serious problems of the poor people. Sometimes the leaders listened; sometimes they did not. They had other priorities, but she insisted that they pay attention to the problems she pointed out.

She was collaborative: she accomplished progress by working with other reformers. Three results included: improving schools; creating playgrounds; getting safer working conditions for workers. She also fought for people to get better pay, which would enable them to afford better living conditions. She even became the Garbage Inspector in her ward, so then she could help clean up the neighborhood.

Jane Addams left Chicago an important legacy—the laws and conditions she changed and the people's lives that improved. She showed how one person with important ideas and persistence can work with others to make progress for a whole city. She made a difference in laws, systems, and the health of the city. She was a social innovator, someone who brought about changes in the ways people lived in Chicago. She showed her ideas could work, that people could change their community for the better. She became famous around the world for her hard work, and in time she won a Nobel Peace Prize. That is a very important honor—it recognizes achievement that the whole world respects. She created a model in Chicago that people imitated in many other places.

Think More: Answer questions 1 and 2, then answer the questions about Chicago innovators to analyze her achievements.

1. What resulted from Jane Addams' innovation—establishing a settlement house?
2. What is the main idea? Underline five sentences that support it.

Collaborating to Meet Challenges

CCSSR1 Competence: Infer effects.

CCSSR2 Competence: Evaluate events to identify importance. Summarize, then identify the central idea.

Pilsen is an old community in Chicago with a long history. This part of Chicago started small and got bigger, as most neighborhoods in the city did. Its cultural history is about moving, changing, and connecting. Many people have moved there over the decades. This movement started when immigrants chose to settle in this part of the city when Chicago was growing rapidly. An immigrant is a person who moves from one country to another. Pilsen's first people spoke German. They had moved from Germany. If you go to Pilsen today you will see some of the places they built. But when they first moved there, it had just a few homes. Then immigrants continued to migrate there, newcomers moved to Pilsen so they could be near people who came from the same country.

Many immigrants found homes and jobs in Pilsen, and it was a time of challenge and change for them. They had to figure out how to live in the new country. They had to find a place to live, and they needed employment for income. They worked on railroads and on docks along the Chicago River, loading and unloading lumber, and in factories, too. They had a lot to do to make a home in their new country, it was not easy to accomplish the changes. Cooperation and collaboration were important for the progress of each family and the whole community.

The newcomers built churches, created gardens, opened stores, and set up newspapers. The newspapers were published in their own language, and they were a way to educate the newcomers about their own community and the city through articles and editorials. Many entrepreneurs opened businesses, and soon the community was bustling. Some social workers supported this progress, they guided the immigrants who kept coming to the community. They set up settlement houses, where people could learn English and get help finding work and housing. But then there was movement out of the community, it was a local migration to suburbs and other parts of the city. People were looking for more opportunities. As the population declined, businesses closed. That trend probably would have continued without a change.

Then there was another movement into Pilsen, which you'll see a symbol of if you go to 1831 South Racine today. There you will find Casa Aztlan, which is a Mexican-American center. About 50 years ago, many Mexican-Americans moved to Pilsen from another part of Chicago—so the community was renewed. They liked the buildings, they wanted to create a Mexican-American community. They joined the churches of Pilsen.

Sometimes change in a community's population brings conflict. Community leaders innovated to collaborate—to avoid conflict. To avoid conflict, leaders of the Mexican Americans and European Americans talked about ways to collaborate to continue Pilsen's progress. One way the two groups worked together was to create, which are enormous paintings on walls. Pilsen has many beautiful murals created during that period. When you see those murals you will notice that there are symbols of Germany and other European countries as well as representations of Mexican history. They are inter-cultural art that represents the connections that were made through that collaboration.

Pilsen used to be called the "Heart of Chicago" when people first settled there, then there was an exodus. But through the second migration, it became the "Heart of Chicago" again, this time for families from Mexico. People opened businesses, and Mexican American community groups supported the community's families. Now as in the past there still are organizations that help people who move to this part of Chicago.

A heritage is a legacy, it comes from the past and influences the present. The Mexican Americans have a rich heritage from their own country and from their experience in Pilsen. Each August, the community has a special day. On the Fiesta Del Sol, a gathering includes the Mexican Americans and people from all over the metropolitan area. People who used to live in Pilsen return come and see the changes. They see their own heritage, as well, in the murals.

Think Clearly

- *What is a choice someone makes in this history? What are effects of that choice?*
- *What is the most important event? Why do you think it is most important?*
- *What is the main idea of this passage?*
- *Underline three sentences in the passage that support that idea.*

Then answer the questions about Chicago innovators about the Pilsen community innovations.

Reversing the Chicago River: An Engineering Innovation

CCSSR1 competence: I can identify cause-effect relations and make predictions.

CCSSR6 competence: I can identify bias.

In 1900, Chicago's government did something very bold. They changed the direction of the Chicago River. Until 1900, the river flowed into the lake.

Chicago started as a small town. But it grew to a great city. In 1890, there were 1 million people living here. By 1900, just ten years later, there were 600,000 more people here. The river was polluted. Factories dumped trash into it. Sewers drained into it. Because the river flowed into the lake, people were getting sick. The lake was getting polluted. People got their drinking water from it.

Chicago has a history of bold planners. Chicago leaders made a plan. They would turn the river back. It would flow the other way. Then they would send the pollution away from the lake. It was a big job. They had to dig a canal to move the water the other way. They had to put a wall across the river where it met the lake. Then they would be able to lower the water in the river and pull the lake water out.

They did it. They build the wall, called a lock. They were ready to move the river the other way. But the people of St. Louis heard about the plan. They were worried. They knew that the pollution would come their way. The river would reach the Mississippi River, which flows by St. Louis. It would bring pollution to them.

Chicago has a history of bold leaders. The mayor decided to go ahead with the project. The mayor of St. Louis was fighting the plan. He was angry. So were citizens of St. Louis. Early one morning on January 2nd, 1900, Chicago leaders took shovels to the place where the river would join the new canal. They dug at the place between the river and the canal. They found it was too big to do with shovels, so they used dynamite. Still it would not work. They were very worried. It might not work. Then they used a big machine called a dredge. It pulled out the last big pieces of earth. Then the water rushed backwards. They had reversed the river. The leaders cheered.

Once it was done people of Chicago marveled. The citizens cheered the mayor. And the people of St. Louis complained. Only later would people figure out how to stop pollution before it got into water. Today, Chicago filters its waste. But the river will always go the other direction. Once reversed, it would be very difficult to put back. But in 2014, the government was asked to change it back again because of problems with invasive fish that are swimming into the lake, coming from the Mississippi River. They can destroy the balance of fish life in Lake Michigan.

This passage tells about two changes in the Chicago River.

What caused the first change—pollution?

What caused the second change—reversing the river?

What do you think happened after the river was reversed? Why do you think so?

Underline statements in this text that are opinions.

How does the writer of the passage want you to feel about this event?

Much More than an Invention: Changing Agriculture

CCSSR2 Competence: Identify information that supports a concept.

Cyrus McCormick introduced better farm equipment, the McCormick Reaper, and changed the agriculture industry and the economy of the city of Chicago. This machine would enable a farmer to harvest crops much more quickly than the farmers could do with horse-drawn equipment.

When Cyrus McCormick showed his reaper to people, many thought it was a joke. The London Times called it “a cross between an Astley chariot, a wheelbarrow, and a flying machine.” And in the mid-1800s, you can imagine how believable a flying machine was. While people laughed at his idea, McCormick kept working on it.

Yet by 1859, McCormick’s firm had sold more than 50,000 reapers. Why did Cyrus McCormick’s invention succeed? He succeeded because he figured out how to make the invention work well and how to help people understand how it could help them. He was a successful business entrepreneur. A business entrepreneur starts a new kind of business or changes the way businesses work.

To succeed, an invention must work. That may sound very simple, but it is an idea that not every inventor has recognized. Here is a report Cyrus McCormick wrote about his project.

From the experiment in 1831 until the harvest of 1840, I did not sell a single reaper, except one, which I afterwards took back... Experience proved to me that it was best for the public, as well as myself, that no sales were made, as defects presented themselves which would have made the reaper unprofitable in other hands... I was not sufficiently satisfied of its being a ‘useful’ machine, to patent the reaper, until the year 1834, its construction and proportions having been imperfect, requiring much effort to make them, while light, yet simple, strong, and durable.

An invention does not introduce itself; the entrepreneur must find ways to introduce it effectively so that people will recognize its usefulness. Cyrus McCormick originated two new ways of selling:

- He gave a written guarantee with every machine
- He set one price—until then, a seller might change the price at different times.

An innovation that is introduced in one city can affect people in places far beyond that city’s limits—as well as the city’s economy. McCormick’s factory brought jobs directly and indirectly, as Chicago dock workers and railroad workers loaded more and more reapers for shipment to farms. Those reapers would change the farm industry throughout the Midwest and beyond. Without the magical grain machinery that gives us cheap bread, the whole new structure of our civilization ... would be withered by the blight of Famine.” [Herbert N. Casson, 1908.]

Annotate this text. Write one of these concepts next to the part or parts that are examples of this concept. Underline the sentences that support that concept.

collaboration

grit

innovation

Collaboration Accomplishes Two Kinds of Progress

CCSSR2 competence: identify examples to support an idea.

CCSSR1 Competence: Make inferences based on information in a text.

Read this article to learn about a Community Organization that works with communities to organize progress—the Center for Neighborhood Technology--CNT.

Getting Out of the Gutter: A Rain Garden at Pulaski Park

Center for Neighborhood Technology, Chicago, October 29, 1998

Pulaski Park, in Chicago's West Town neighborhood, has a long history of community participation. The park field house, built in 1914, now plays host to neighborhood classes and fitness programs, local crafts fairs, a theater group and a sword-fighting club, and a legendary Haunted House. Now Pulaski Park is serving the community in a new way—by demonstrating green technologies and how communities can get involved.

On Saturday October 18th, a group of 40 volunteer engineers and 30 local students from Kelly High School built a rain garden at the Pulaski Park pool house. The rain garden event was organized by CNT in collaboration with the Water Environment Federation (WEF) Students and Young Professionals Committee and the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) as part of the 2008 WEF Technical Exhibition and Conference (WEFtec).

The garden is 250 square feet and contains 250 native Illinois prairie and woodland plants. In addition to soil conditioning and planting, the event included a “hose-cutting” ceremony with media and Chicago dignitaries, demonstrations of disconnecting a downspout and installing rain barrels, a working model of a wastewater treatment facility, and sessions on the importance of preserving water quality through community action.

The rain garden and disconnected downspout are located next to the Pulaski Park pool house. ... The rain garden will provide a beautiful landscape feature for the community and educational signage will further the outreach and impact of the demonstration garden. The substantial runoff from the pool house roof now frequently overwhelms the gutter and downspout; by disconnecting the downspout the rain garden helps to relieve that pressure while absorbing that water into the ground rather than dumping it into the sewer.

“Getting out of the gutter” is a new theme for CNT's green infrastructure core belief: that rain water is an asset not a waste product, and by infiltrating that water into the ground we can significantly reduce the threat of flooding as well as the pollution destroying our streams, rivers, and lakes.

The title of this passage says it is about two kinds of progress. One is for the environment. What is the other? It is collaboration—people learning how to work together to make progress.

Underline statements in the passage that show that it is about collaborating to solve a problem.

What is a challenge that CNT probably faced in organizing this collaboration?

Which concepts does this report represent—check any or all that you think are part of this history. ☐ innovation ☐ collaboration ☐ grit