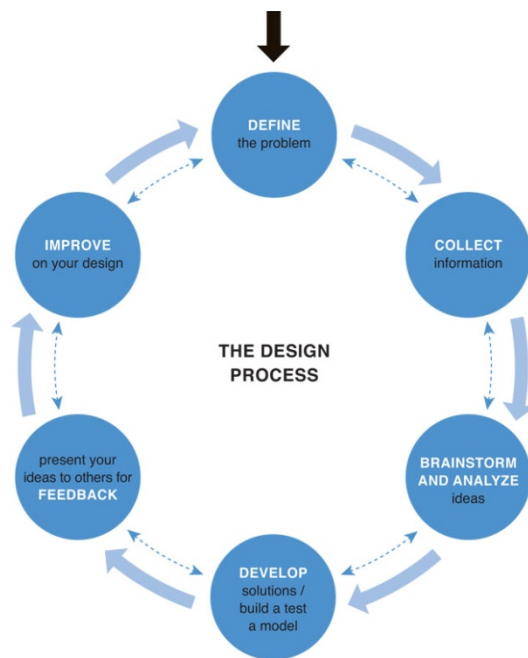


The American Skyscraper: Transforming Chicago and the Nation
Landmarks of American History and Culture Workshop for Teachers
Summer 2017

Using Free Digital Resources in Student Design Projects including CAC's DiscoverDesign.org



DEFINE the problem

COLLECT information

BRAINSTORM / ANALYZE ideas

DEVELOP solutions / build a test model

PRESENT your ideas to others for **FEEDBACK**

IMPROVE on your design

DEFINE the problem

COLLECT information

<http://factfinder2.census.gov>

US Census. Search by your zip code to see great data about the built environment under "Housing Characteristics"

<http://maps.google.com>

Google Maps with maps, aerial photos, and street view can help students understand the site of a new design project

BRAINSTORM / ANALYZE ideas

www.sketchup.com

Sketchup. Free, powerful, and easy to use modeling software.

www.youtube.com/user/4sketchupgo2school

Your school may block youtube.com for students, but we can recommend showing them to students or using them yourselves. Our favorite Sketchup tutorials from the guys at **g0-2-school.com**.

DEVELOP solutions / build a **TEST** model

<http://susdesign.com/tools.php>

Sustainable by Design. Free tools to help students understand sun angles, calculate overhangs on buildings, and understand the path of the sun... and why it matters in building design.

www.iesve.com/software/interoperability/sketchup

A free plugin from IES allows you to assign important sustainable design information like location, building and room type, construction types and HVAC systems to a SketchUp model.

www.energy-design-tools.aud.ucla.edu

Energy analysis tools that pull climate data from thousands of locations around the country.

PRESENT / GET FEEDBACK

www.gimp.org

A simple and free Photoshop-like program. Allows students to manipulate images in many ways.

www.xnview.com

Free software to download lets students convert most any graphic file type to any other type.

www.sketchup.com/products/3D-warehouse

Sketchup's 3D warehouse lets students share their models with the world, and also import them into Google Earth.

IMPROVE

<http://products.construction.com>

Sweets Network. Provides detailed information on thousands of building products. Free registration required. CAD/BIM files, SketchUp files, images, and specs also included.

Our favorite sites for architectural blogs and skyscraper news (as well as reference info on historic and contemporary buildings around the world)

www.skyscrapercenter.com

The global tall buildings database of the Council of Tall Buildings and Urban Habitat (CTBUH) .

www.archnewsnow.com/news/TodaysNews.htm

Our favorite at CAC. A free subscription with daily e-updates about architectural news around the world.

www.archdaily.com

Shows exciting architectural projects built or on the boards. Each project has a thorough explanation as well as photos, renderings, diagrams and a lot of technical drawings.

www.Bldgblog.blogspot.com

Architectural essays, including analysis of projects, book reviews, op/eds.

www.worldarchitecturenews.com

www.architectureweek.com

www.usgbc.org

US Green Building Council

www.architizer.com

Architizer is a new site for architects to interact, show their work, and find clients. It is an open community created by architects for architects.

www.morphopedia.com

Morphosis. An exciting architecture firm from Los Angeles that has taken the unique step of sharing a great deal of background info, drawings, design process sketches, technical drawings, and architect/client interviews on many of their projects.

www.greatbuildings.com

Provides background info and images of important buildings – both historic and modern – throughout the world.

CAREER INFORMATION

www.archcareers.org

A great gateway that introduces students to the steps in becoming an architect.

www.aia.org

The American Institute of Architecture Students

www.aia.org

The American Institute of Architects

Digital Resources for Architectural History Research

(Chicago and around the country)

www.encyclopedia.chicagohistory.org

an amazing treasure of resources for background / history on the city

maps.google.com

earth.google.com

<http://maps.cityofchicago.org/kiosk/mpkiosk.jsp>

aerial photographs

<http://sanborn.umi.com/>

a treasure trove of information on how places change over time! Your local university or state library will likely have an online subscription to digitized Sanborn Fire Insurance maps; in Chicago Illinois digital Sanborn maps are available only in person at UIC Daley Library, Newberry Library, and Chicago History Museum

<http://sanborn.umi.com/HelpFiles/key.html>

symbols and legends used on the Sanborn maps; includes both the color and black-and-white versions of the maps

www.chicagoancestors.org/#tab-tools

<http://stevemorse.org/census/changes.html>

Chicago city directories; Chicago street name / numbering changes tools; especially the address conversion tools and the City of Chicago Directory Street Guides available as PDFs; also stevemorse.org has great address look-up tools

<http://webapps.cityofchicago.org/landmarksweb/web/historicsurvey.htm>

Chicago Landmarks Historic Resources Survey database; includes basic building permit info for 17,000 architecturally significant historic buildings in Chicago

www.chsmedia.org/househistory/1898-1912permits/search.asp

Search the Chicago History Museum's online database for building permits noted in *American Contractor* between 1898 – 1912.

www.cookcountyassessor.com/data/searchflat/search.asp

www.ccrd.info

Cook County Assessor – provides assessment values, and also includes a photo and building age as reference

Cook County Register of Deeds – search property owners from 1985 to present

www.measuringworth.com/uscompare/

determine the relative value of a dollar at various times in history

www.bls.gov/data/inflation_calculator.htm

US Department of Labor, Bureau of Labor and Statistics Consumer Price Index (CPI) helps determine buying power. The CPI inflation calculator represents changes in prices of all goods and services purchased for consumption by urban households.

www.ancestry.com

www.heritagequest.com

US general population census in searchable format; require a monthly/yearly subscription
To protect the privacy of individuals, the National Archives does not release this specific information until 72 years after it was collected: the 1930 census was released to the public in 2002. Ancestry.com is easier to use, but requires subscription. In Chicago, Heritagequest.com is available free with a Chicago Public library card through remote online access.

www.alookatcook.com

Invaluable resources for doing ; includes Chicago ward maps and Cook County enumeration district maps when looking up census data for a particular location

OTHER HELPFUL WEBSITES

www.cityofchicago.org/Landmarks/pdf/Your_House_Has_A_History.pdf

Your House Has a History: A Step-by-Step Guide to Researching Your Property, Alison Zehr with the Commission on Chicago Landmarks, Chicago Department of Planning and Development, 1998.

www.chipublic.org/cplbooksmovies/research/database_atoz.php#c

The Chicago Tribune historical archive (1849 – 1986) – searchable and free with a Chicago Public Library card

www.census.gov

The main website for the current United States Census has easily searchable maps and data for any state, county, city, or zip code; it also includes information on previous census years dating back to 1980

<http://memory.loc.gov/ammem/gmdhtml/cityhome.html>

The American Memory Collection at the Library of Congress has a database of historical city maps from throughout the country and around the world

<http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnhome.html>

The Chicago History Museum has teamed up with the Library of Congress to put 1902 – 1933 Chicago Daily News photographs online; you may find photographs of your neighborhood or main cross streets

RESIDENTIAL ARCHITECTURAL HISTORY REFERENCE BOOKS

AIA Guide to Chicago, 2nd ed., Alice Sinkevitch, ed. San Diego: Harcourt, 2004. NA735.C4A43

America's Architectural Roots, Ethnic Groups That Built America, Dell Upton. New York: John Wiley & Sons, Inc., 1986. NA737.5.A43

Chicago, City of Neighborhoods: Histories & Tours, Dominic A. Pacyga and Ellen Skerrett. Chicago: Loyola University Press, 1986. F548.18.P33

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Ethnic Chicago: A Multicultural Portrait, 4th ed., Melvin G. Holli and Peter d'A. Jones, eds. Grand Rapids, MI: William B. Eerdmans Publishing, 1994. F548.9.A1E85

A Field Guide to American Houses, Virginia & Lee McAlester. New York: Alfred A. Knopf, Inc., 1984. NA7205.M35

How Buildings Learn, What Happens After They're Built, Steward Brand. New York: Viking, 1994. NA2542.4.B73

Streetwise Chicago: A History of Chicago Street Names, Don Hayner and Tom McNamee. Chicago: Loyola University Press, 1988. F548.67.A1H38

The Value of a Dollar: Colonial Era to the Civil War, 1600–1865, Scott Derks and Tony Smith. Millerton, NY: Grey House Publishing, 2005. HB235.U6D47

The Visual Dictionary of American Domestic Architecture, Rachel Carley. New York: Henry Holt and Company, Inc., 1994. NA7205.C27