

21CLD Learning Activity Description

Please fill in one of these sheets and attach it to *EVERY* learning activity you submit. Choose the learning activities that you feel **provided the best learning opportunities for students**.

1. Title of Learning Activity & Average Age of Students

Title: Doing Business in Birmingham

Average Student Age: 11 years

2. What did you hope your students would learn from this learning activity?

Students will learn:

- about sustainable practices and how to effect change within their community
- how technology tools can enable them to make authentic connections beyond the classroom
- to synthesize their learning and generate creative solutions to real world problems

Students will also create a wiki as public evidence of what they learned and their contributions to the community.

I am attaching a lesson plan that I used to guide the activities, but this was not distributed to the students. I really wanted students to shape the project so I left details open for discussion, such as the rubrics and planning the wiki.

3. Did you have learning goals from more than one discipline (for example, literature and history, or science and math) for this learning activity?

Yes. See lesson.



4. Were students required to work in pairs or as a group on any part of this learning activity?

- No
- Working in groups was *optional*. Please describe below the work that students did together.
- Working in groups was *required*. Please describe below the work that students did together.

Students worked in teams throughout the project. Each student had specific roles and responsibilities, and contributed to the team's work and the class wiki.

5. Were students allowed to work with technology (ICT) such as computers or digital cameras for any part of this learning activity? Please describe.

- No technology was used for this learning activity.
- Students *could* use technology for this activity
- Students were *required* to use technology for this activity

We used several technology products throughout the project such as Bing Maps and Photosynth. See lesson for complete list.

6. What criteria did you use to judge the quality of students' work on this learning activity? Were students aware of the criteria in advance of completing the learning activity?

The students and I worked together to create two rubrics for evaluating student work. One was used to grade their work on the project: grading their own work, the work of their team-mates, and for me to grade their work. The second rubric was used to evaluate our wiki. We took an existing wiki rubric and adopted it for our needs. These rubrics are posted on the resources page of our class wiki: <http://doingbusinessinbirmingham.wikis.birmingham.k12.mi.us/Resources>. I am also attaching them to this lesson for your convenience.

7. How long did the learning activity take?

- Completed in a single class period
- Completed in 2-4 days
- Required one week or more to complete

8. What verbal instructions did you give to students?

Throughout the project we had class discussions about how to approach each task. This included assigning student roles on the team, creating a plan for visiting businesses and collecting the information (data) from the field. We had discussions to create the rubrics for evaluating the work students would do.

Later, we developed evaluation criteria for the businesses as a way to describe their progress towards implementing sustainability practices.

As a class, we determined how to create the wiki pages and design the entire wiki experience to be user-friendly and useful. The students have created wikis before, so we did a quick review of how to work in a wiki.

9. Is there any other information you would like to include to help another teacher using this learning activity be successful?

Students enjoyed being able to influence their community by learning about sustainability in business and sharing what they learned.

They also liked having an opportunity to get out into the community to meet business owners, and creating a Wiki to share their findings and their hard work.

To view the Wiki and resources we created, please visit:
<http://doingbusinessinbirmingham.wikis.birmingham.k12.mi.us/>

PLEASE INCLUDE THE FOLLOWING WITH THIS COVER SHEET:

- *Instructions for the learning activity*
- *Handouts and materials*
- *Grading rubrics*



Doing Business in Birmingham

A challenge to increase awareness about sustainability in our community

Objectives:

- Students will learn about sustainable practices and how to be effect change within their community
- Students will learn how technology tools can enable them to make authentic connections beyond the classroom
- Students will learn to synthesize their learning and generate creative solutions to real world problems
- Students will create a wiki as public evidence of what they learned and their contributions to the community

Materials:

- Equipment: PC, Tablet, Mobile phone, video camera, etc.
- Software: *Bing Maps, Microsoft Office, Microsoft Word, Photsynth, Clipart, Mobitags, MovieMaker*

Standards:

- Citizenship
- Digital and Media Literacy
- Environmental Science
- Language Arts & Literacy
- Social Studies
- Technology and ICT
- 21st Century Skills

Lesson Outline:

Day 1: PLANNING

1. Outline the project and lead class discussion on the goals, purpose and impact of the project.
2. Assign students to teams. Introduce roles, and brainstorm as a class how each role will contribute to the project. Students assign roles within their teams. (Some teams may require students to do two roles.)
 - Communications Manager
 - Materials Manager
 - Photographer
 - Project Manager
 - Videographer
3. Lead a discussion to define rubrics for project grading and specify the success criteria for each role. Remind students that the rubrics will be used in 3 ways: for self-reflection on their own contribution, to rate fellow members of the team, and for my evaluation of their work.

Days 2-3: RESEARCH

1. Define “sustainability” as it relates to business practices. Students discuss within teams, then as whole class.



2. Student teams plan and conduct their own research on sustainability practices. The teams will answer these questions:
 - o What are the **benefits** of being a sustainable business?
 - o Who are the **stakeholders** of sustainable business practices?
 - o What is **waste prevention**?
 - o How can a business **recycle**?
 - o How does the use of **energy and water** affect sustainability?
 - o How can businesses **operate** more sustainably?
 - o How does the **purchasing** that a business does affect sustainability?
 - o How does the use of **transportation** affect sustainability? Both for customers, and for getting materials to and from the business?

Days 4-6: PLANNING FOR DISSEMINATION

1. Facilitate a discussion on what students learned about sustainability and decide how the class can communicate their knowledge to local businesses and the community. (Students decided to create two brochures: one about the project and one about sustainable practices, to be distributed to local businesses.)
2. Students plan and develop their materials, and plan their field trips. Some of this work is done in teams, and some is done in role groups (with all Materials Managers and Photographers working together to plan the brochure, for example).
 - Materials Managers and Photographers plan the layout of the two brochures. Their goal is to create a pre-print for review. Photographers also use this time to become familiar with *Photosynth* so they can stitch photos together to create a 3D view of the area surrounding the business.
 - Videographers plan how to obtain the photo and video equipment for every team. They also use this time to familiarize themselves with *MovieMaker* so they are ready to edit their footage.
 - Communications Managers and Project Managers plan the field trips to the businesses. This includes using *Bing maps* to research the locations of the businesses. Their plans should address the following:
 - o What area are we visiting? (Use *Bing maps* and assign territories)
 - o What businesses are in the team's territory?
 - List the businesses.
 - Do searches on what the businesses do and produce.
 - Each team selects two businesses within their territory to visit.
 - Begin thinking about specific sustainable processes for those businesses.
 - o What can we learn in advance about each business?
 - Create tables with information on businesses.
 - Possible sustainable practices.
 - Who we might speak to? (Owners? Managers?) Try to get specific names.
 - o What can we do during the field trip?

Days 7-8: REVIEW AND FINALIZE MATERIALS

1. Group members change roles: Materials Managers, Photographers and Videographers review business maps and information while Project Managers and Communications Managers edit the two brochures. Remind students to give detailed and specific feedback for improvement.
2. Students integrate the feedback they received.
3. Brochures are printed for distribution.



Day 9: FIELD TRIP TO BUSINESSES!

Day 10: DEVELOP RUBRIC FOR RATING BUSINESSES

1. Discuss the trip in teams, and what teams learned.
2. As a class, build a rubric for rating the sustainability of businesses.
 - How can we rate the businesses?
 - What indicators and descriptors can we use that people outside of the classroom will understand?
 - How can we illustrate the ratings?
3. Teams apply the rubric to the data they gathered and rate each business they visited. Each team has to provide evidence to support their rating.

Days 11-15: PLAN & DEVELOP THE WIKI

1. The class reviews an existing rubric for evaluating wikis and adapts it to our needs.
2. The class also defines proper wiki etiquette and rules for team members to ensure successful collaboration.
3. Students plan content and layout of the Wiki.
 - What do we want on the Wiki?
 - Contents of pages
 - Materials collected: videos and photos taken during field trips
 - Information that will be useful to the participating businesses?
 - Information that will help others in the community learn about sustainable practices?
 - What will the “feel” or layout look like?
 - Colors
 - How we lay out our materials
 - How we lay out our findings
 - What attachments/links do we want?
 - How can each team document their research on Days 2-3? What is a standard format that can be used across all research areas?
 - How can users interact with the site? How can we encourage them to use it actively?
4. Remind students that there should be at least 1 review cycle for the wiki. Every student must review at least one other page they did not create and provide concrete feedback.
5. Provide time for students’ self-reflection on their role, and evaluation of fellow team members.
6. Student volunteers from each team complete the following tasks:
 - Write letters of appreciation to the participating businesses.
 - Create invitations for the wiki launch party. Invite the businesses and parents.
 - Plan the wiki launch party.

CELEBRATE THE CLASS’S SUCCESS AT THE WIKI LAUNCH PARTY!



Wiki Rubric

We took an existing wiki rubric and edited it so that we could use it to assess the pages that we made for the wiki. Please edit it to meet your needs

ELEMENT	Exemplary 3	Proficient 2	Partially Proficient 1	Unsatisfactory 0	POINTS
Content	Provides comprehensive insight, understanding, and useful tips for sustainability in your assigned aspect of business	Provides a moderate amount of insight, understanding and useful tips for sustainability in your assigned aspect of business	Provides only minimal understanding or few tips for sustainability in your assigned aspect of business	Provides no understanding or useful tips for sustainability in your assigned aspect of business	____/3
	Explains all ideas clearly and concisely in a logical way	Explains most ideas clearly and concisely in a logical way	Incompletely explains ideas	Fails to explain ideas clearly	____/3
	Presents all information in a style that is appealing and appropriate for the intended audience.	Presents information in a style that is generally appropriate for the intended audience.	Presents information in a style that is often inappropriate for the intended audience.	Presents information in a disjointed, unpolished style which is inappropriate for the intended audience.	____/3
Organization	Uses a consistent organizational structure that includes grouping related information	Uses an organizational structure which groups some but not all, related information	Uses a loosely defined organizational structure which attempts to group similar items.	Fails to provide a consistent organizational structure, and information is difficult to locate.	____/3
Graphics and Multimedia	Includes high quality Photosynth that gives a comprehensive picture of your street	Includes a good Photosynth that gives a clear picture of your street	Includes a low quality Photosynth that gives an incomplete picture of your street	Does not include a Photosynth and no images of your street	____/3
	Includes a high quality Cliplet that portrays a significant moment from your trip	Includes a good quality Cliplet that portrays a significant moment from your trip	Includes a low quality Cliplet that portrays a moment from your trip	Does not include a Cliplet to portray a significant moment from your trip	____/3

ELEMENT	Exemplary 3	Proficient 2	Partially Proficient 1	Unsatisfactory 0	POINTS
Group/Partner Collaboration	Contributes equally with other group members in researching, writing, and editing.	Assists group members with most of the researching, writing and editing.	Provides minimal assistance to group members in researching, writing and editing, and does not follow through with all tasks.	Provides no assistance to group members in any of the researching, writing and editing and does not follow through with any of the tasks.	___/3
	Meets all goals and deadlines.	Usually meets goals and deadlines.	Occasionally meets goals and deadlines.	Does not meet goals and deadlines.	___/3
	Exhibits appropriate wiki etiquette when editing and respects the work of others.	Exhibits appropriate wiki etiquette most of the time and generally respects the work of others.	Exhibits a minimal knowledge of wiki etiquette and often fails to respect the work of others.	Exhibits no knowledge of wiki etiquette and fails to respect the work of others.	___/3
Writing Mechanics	Edits the text with no errors in grammar, capitalization, punctuation, and spelling.	Edits the text with minor additional editing required for grammar, capitalization, punctuation, and spelling.	Edits the text, but errors in grammar, capitalization, punctuation and spelling distract or impair readability. (3 or more errors)	Edits the text but numerous errors in grammar, capitalization, punctuation, and spelling repeatedly distract the reader and major revision is required. (more than 5 errors)	___/3
TOTAL POINTS					___/30

Here is an example of the Star Ranking we gave to businesses:

We are sustainable
leaders in our
community



Student Work Rubric

We worked as a team to develop rubrics for the field trip team roles: Communications Manager, Materials Manager, Photographer, Project Manager and Videographer. Here is a rubric for the Project Manager's role as an example.

Project Manager			
Name of Project Manager _____			
<i>Needs Improvement (0-1)</i>	<i>Satisfactory (2-3)</i>	<i>Excellent (4-5)</i>	<i>Score</i>
Responsibilities			
<ul style="list-style-type: none"> Rarely checked with team to offer help and support Rarely checked work for quality Rarely encouraged or supported the team 	<ul style="list-style-type: none"> Checked with team to offer some help and support Checked some work for quality Was a supportive leader who helped guide the team 	<ul style="list-style-type: none"> Checked constantly with team to offer help and support Checked all work for quality Was a strong, encouraging leader who helped guide the team successfully 	
Workload			
<ul style="list-style-type: none"> Often dominates, sits passively, or gets distracted. 	<ul style="list-style-type: none"> Sometimes dominates, sits passively, or gets distracted. 	<ul style="list-style-type: none"> Usually shares the workload equally, encourages others as needed, offers help as needed, and accepts direction from team members. Usually follows role assignments. 	
Listening			
<ul style="list-style-type: none"> Talks most of the time, rarely allowing input from others - Or - Rarely talks, requiring partner(s) to do most talking 	<ul style="list-style-type: none"> Usually balances talking and listening, though tends a little more to one than the other 	<ul style="list-style-type: none"> Listens attentively to others ideas, asks questions when needed, offers ideas, and encourages others input 	
<ul style="list-style-type: none"> Occasionally able to read and manage their own motivations and behaviors 	<ul style="list-style-type: none"> Able to read and manage their own motivations and behaviors. 	<ul style="list-style-type: none"> Able to read and manage their own and others' emotions, motivations, and behaviors. 	
Decision Making			
<ul style="list-style-type: none"> Dominates decision making - Or - Allows others to dominate decision making 	<ul style="list-style-type: none"> Sometimes seeks to reach a consensus, but often goes with just a majority rule 	<ul style="list-style-type: none"> Seeks to reach a consensus for all decisions. Uses appropriate conflict resolution skills as necessary. 	
Interdependence			
<ul style="list-style-type: none"> Rarely builds solutions or decisions from ideas of other team members. 	<ul style="list-style-type: none"> Sometimes builds solutions or decisions from ideas of other team members. Gives some thought to similarities and differences of members' ideas. 	<ul style="list-style-type: none"> Frequently builds solutions or makes decisions synthesizing ideas from all team members 	
Flexibility			
<ul style="list-style-type: none"> Has difficulty considering all other's ideas, synthesizing, or compromising 	<ul style="list-style-type: none"> Generally considers all ideas, sometimes seeks to synthesize, and sometimes makes compromises. 	<ul style="list-style-type: none"> Carefully and respectfully considers all ideas, seeks to synthesize, and compromises when needed. Works to be part of the solution, not part of the problem. 	
Comments:			Overall