Lesson Plan 7:

Using Data Collection to Create a Portrait of Your Town

Grades

6-8, 9-12, College 100 level

Description

Students are provided an outline of the Lynds’ topics and methods used in the best-selling Middletown. Students then research and collect data on their own city or region to develop a portrait of their location over the last century using methods similar to those of the Lynds. Different assignments are given to each student for information and data collection, interviewing, and collecting images and major events. Data collected will include information under each of the Lynds’ six major themes: getting a living, making a home, raising the young, using leisure time, practicing religion, and community life. Students then work together in small groups to develop their work for a joint publication in which they will have an editor, a publisher, and contributing authors for each chapter. Students will copy and bind their collective work for the publication.

Learning Objectives

By fully participating in this lesson, students will be able to:

(1) explain how the Lynds’ gathered information in Middletown;

(2) explain what the Lynds’ found in Middletown;

(3) plan a program of data-gathering in a community;

(4) gather information about a community; and

(5) organize and present this information in a clear and logical form.

Time Required

This lesson is expected to require approximately 20 hours of class time.

Materials and Resources

NOTE: You will need to have Adobe Acrobat installed on your computer to access the Student Worksheets. You may download Adobe Acrobat free of charge at http://www.adobe.com/products/acrobat/readstep.html.

For this lesson you will need:
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1. Computers connected to the internet for conducting research and to access “The First Measured Century” website.

2. Television, VCR, and videotape of the first hour of “The First Measured Century,” which can be purchased at http://www.shop.pbs.org, ordered by phone by calling 1-800-PLAY-PBS, or recorded during the broadcast:

   The First Measured Century Premieres on PBS Wednesday December 20th, 2000 from 8:30 to 11:30 PM Check your local listings at: http://www.pbs.org/whatson/index.html

Schools are permitted to tape The First Measured Century and use the program for educational purposes for one year following each PBS broadcast. Additional information about teacher taping rights can be found at PBS Teachersource: http://www.pbs.org/teachersource/copyright/copyright_trights.shtm

3. A copy of Robert and Helen Lynd’s 1929 bestseller, Middletown: A Study in Cultural Change. The book has never been out of print and is readily available in many school and community libraries or interlibrary loan.

4. Office supplies to support a data-gathering and organizing operation such as pads of paper, file folders, 3-ring binders and index cards.

5. Computers can be used to create documents, and even to discover some of the information about the community. But the emphasis is on the rationale, the logic, and the methods of data-gathering. It is perfectly acceptable to minimize the use of computers – the Lynds had no computers at all.

Teaching Strategy

Class Session 1

1. Prepare for this lesson by queuing “The First Measured Century” to the Middletown segment of the program. You will find this segment about 47 minutes into tape 1 where the Ford Model T comes on the screen.

2. Once the video is set to begin, lead a discussion with the students about the idea of gathering information about a community.
   - What sort of information is it possible to gather about your community?
   - Who would want such information?
   - Where would you get such information?
   - What if no one had ever gathered the information?
   - Could you gather it yourself? How?
   - What problems might you run into?

3. Watch the Middletown segment of the film, The First Measured Century and then watch the Middletown IV segment on tape 2 at around 1 hour and nine minutes where it begins "This is Muncie, Indiana...."
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Class Sessions 2 through 20

1. Go over the plan of the Middletown book (the table of contents). What are the topics? What did they find out?

2. Create a Project Team made of all the students. Help the students create a structure among themselves for the project. They need a division of labor and means of coordinating the project. Some of the different roles will be:
   - Project manager
   - Publication (named by the students) editor
   - Research director
   - Statistics expert
   - Authors
   - Publisher
   - Graphic artist
   - Layout

3. Assist the students in planning the project. Assign responsibilities and produce a project timeline for the steps of the project which may consist of:
   - Formulate new questions or reuse questions the Lynds use to base their study on.
   - Identify the basic theme of the publication
   - Design and conduct the investigation (you may use data already collected).
   - Analyze the findings.
   - Produce reports (or chapters) of textual information.
   - Produce graphs and charts of the data.

4. Support the students in developing the project, modifying the timeline and communicating regularly as a group. Keep all parts of the project well-organized and current versions in a central location for others’ access.

5. Track the versions until the project is complete. The layout and graphic artists may begin planning and designing the publication before final copy is provided.

6. Upon receipt of the final copy, the publishers will produce enough copies for the class and teacher to have copies.

Assessment Recommendations

1. Each student should participate fully in at least one role of the project and assist others in the project as a whole. Observe how well students communicate, resolve differences and work together to accomplish the project.

2. Assess students for organization, effort, and teamwork.

3. Assess students for how effort and achievement concerning their part in the project.
Extensions

A final presentation based on the publication may be made to other parts of the school or community to share what you’ve found about “your town.”

For a more full example of scientific inquiry, have students create their own set of questions for investigation.

Conduct personal interviews, perhaps in a retirement home to find out what your community was like in earlier years.

Adaptations

For younger groups of students scale down the amount of information collected and have each student prepare one page each on a different topic.

Relevant Standards

Standards for School Mathematics
From the National Council of Teachers of Mathematics (http://www.nctm.org)

Data Analysis and Probability

Instructional programs from prekindergarten through grade 12 should enable all students to—

• formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them;
• select and use appropriate statistical methods to analyze data;
• develop and evaluate inferences and predictions that are based on data;
• understand and apply basic concepts of probability.

Communication

Instructional programs from prekindergarten through grade 12 should enable all students to—

• organize and consolidate their mathematical thinking through communication;
• communicate their mathematical thinking coherently and clearly to peers, teachers, and others;
• analyze and evaluate the mathematical thinking and strategies of others;
• use the language of mathematics to express mathematical ideas precisely.

Connections

Instructional programs from prekindergarten through grade 12 should enable all students to—

• recognize and use connections among mathematical ideas;
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- understand how mathematical ideas interconnect and build on one another to produce a coherent whole;
- recognize and apply mathematics in contexts outside of mathematics.

Representation

Instructional programs from prekindergarten through grade 12 should enable all students to—

- create and use representations to organize, record, and communicate mathematical ideas;
- select, apply, and translate among mathematical representations to solve problems;
- use representations to model and interpret physical, social, and mathematical phenomena.

National Science Education Standards
From http://www.nap.edu/readingroom/books/nses

Science as Inquiry

CONTENT STANDARD A: As a result of activities in grades 5-8 and 9-12, all students should develop:

- Abilities necessary to do scientific inquiry
- Understandings about scientific inquiry