The Importance of Math in Real Life: An Oral History Activity for Middle School Students

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Action Plan for Interviewing (API)
Oct. 2009 Teacher’s Workshop
Cal U Teaching with Primary Sources
Instructors: Mr. N. Roberts / Dr. D. Lonich
I. PENNSYLVANIA STATE TEACHING STANDARDS

Reading, Writing, Speaking, and Listening
A.1.4.8.B Use of Primary and Secondary Resources
B.2.7.8.D Compare and Contrast results from observations

II. INQUIRY-BASED LEARNING MODEL (IBLM)

This oral history interview activity is guided by the following five-step IBLM:

A. **Ask:** Students will select a secondary math teacher (grades 7 through 12) or a college math professor, and inquire what the importance of math is to them in real life.

B. **Investigate:** The requirements needed to become a secondary math teacher or to hold a specific position in a math-related field will be explored.

C. **Create:** Students will develop interview questions based on investigation about math in real life (i.e. “Why do I need to know math.”)

D. **Discuss:** Findings based on the investigation and on the oral history interview will be discussed either in small groups or as a class or a combination of both.

E. **Reflect:** Students will provide an oral or written report on what they have discovered and learned about math in real life.

§ III. DESCRIPTIVE WALK-THROUGH OF MY ACTIVITY

The following oral history assignment (shown on the following page) is designed to provide students with input as to (1) why math is important to learn as eighth grade students, but more importantly, (2) why knowledge of math skills is critical to attaining success throughout their lives. The next two pages comprise the directions for the student assignment.
Mr. Molesky

**Topic:** Math Interview with a high school or college math educator.

**Goal:** The purpose of this assignment is for students to discover the importance of Mathematics, not only at the current point in their lives, but to understand the significance it will have throughout their lifetime. The student should recognize the integral part that math plays in obtaining different types of careers.

**Directions:** Student will select an interviewee. It is recommended that the student select a familiar educator or one that he/she may have in future classes. With appropriate and prior approval, the student must establish a mutually agreed upon date, interview location, and time for the interview to be held. Student(s) will inform the interviewee of the purpose of the interview and the topics to be discussed.

The interview is to be one-on-one and face-to-face. Prior to the interview, the student must organize his/her thoughts and list all questions necessary to gather the required data. Students are required to investigate the interviewee’s background by inquiring about job title, requirements for the position, and job responsibilities.
Interview: Students must incorporate no less than ten (10) questions in the interview. Questions must pertain to and be relevant to attaining the goal of this lesson. A sample of suggested questions follows:

1. Why did you choose to become a math educator?
2. Where and when did you graduate from high school?
3. What secondary institution(s) did you attend?
4. What degree(s)/major(s) do you hold?
5. Can you please explain the responsibilities of your position?
6. What do you see as important in the study of mathematics?
7. Why is the study of mathematics relevant to securing a successful career?
8. Why do you think math is meaningful to me as an eighth grader in middle school?
9. Do you believe that a fundamental understanding of mathematics is essential in being successful in life? Why?

Upon completion of the interview, the student should express their appreciation to the interviewee by properly thanking them in person and with a follow-up electronic or hardcopy thank you.
§ IV. MY ASSESSMENT TOOL

Assessment will be determined by the student’s adherence to Guidelines to Written and Oral Presentations (attached) and the score received according to the Assessment Rubric (also attached).

Students are to give an oral presentation and provide a three to four page written report containing data compiled from the interview. More importantly, the student must demonstrate that he/she has a firm grasp of the major concept/goal of this activity. Students will be able to relate the importance of math in his/her life—currently and in the future. All pertinent information is to be included in both presentations. Information should include, but is not limited to the following:

1. Interviewee’s name
2. Date, time, and place of interview
3. Questions asked and responses given

Reports are to be finalized with a summary of the student’s personal impressions, specifically stating what they have learned in respect to “why math is important to me…” Discussion and reflections will follow after all reports have been presented.
## Student Guidelines for Written and Oral Presentation

### Writing Strategies
- Create a multi-paragraph expository composition.
- Organize a topic, important ideas, or events in sequence or chronological order.
- Include specifics and transitional expressions that connect one paragraph to another in a clear line of thought.
- Conclude with a paragraph that summarizes important ideas and details.

### Listening and Speaking Strategies
- Pose questions that seek information not already known.
- Be aware and assess a speaker’s verbal and nonverbal messages, and perspectives.
- Have a distinct point of view for an oral presentation; establish an organizational structure and keep focus on the main topic of discussion.
- Support spoken ideas with evidence and examples for clarification.
- Use appropriate verbal cues, gestures, and facial expressions to engage the listeners.

### Writing Applications
- Create an interview report about an important idea, issue, or event.
- Deliver an informative presentation about an important idea, issue, or event.
- Frame questions that direct the investigation.
- Establish a controlling idea or topic.
- Develop the topic with simple facts, details, examples, and explanations.
Assessment Rubric

Student’s written report will be assessed using the guidelines of the following Rubric.

<table>
<thead>
<tr>
<th></th>
<th>4 Excellent</th>
<th>3 Good</th>
<th>2 Fair</th>
<th>1 Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas &amp; Content</strong></td>
<td>The student’s response is informative and contains interesting details, most of which explain and support the main idea.</td>
<td>The student creates a solid and informative piece, including details that support the main idea.</td>
<td>The student’s writing is vague; it may include details that have no clear relation to the main idea.</td>
<td>The student’s piece is not an example of informative writing; the piece may ramble with no support of the main idea or connections made between ideas.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>The student creates a cohesive, clear piece with a solid introduction, body, and conclusion; transitional words aid the reader to move easily through the writing.</td>
<td>The student’s piece uses a well-planned, organizational structure, with an appropriate conclusion based on interview findings; most transitions are fluid.</td>
<td>The response does not present the information clearly. It does not draw a conclusion based on the facts; transitions are weak.</td>
<td>No apparent organization structure is evident in the student’s piece.</td>
</tr>
<tr>
<td><strong>Depth of Development</strong></td>
<td>The student uses precise words that explain to express complex ideas in a relevant way.</td>
<td>The student explains the topic using a variety of words to present information in an interesting way.</td>
<td>The student presents information in a predictable way; may overuse some words and/or expressions.</td>
<td>The student uses words that do not fit or are vague; ideas are not expressed in an interesting way.</td>
</tr>
<tr>
<td><strong>Conventions</strong></td>
<td>The student is skilled in most writing conventions; little editing is needed.</td>
<td>Most writing conventions are used correctly; some editing is needed.</td>
<td>The student makes frequent errors in spelling, punctuation, capitalization, and usage; extensive editing is needed.</td>
<td>The student makes repeated errors in spelling, punctuation, capitalization, and usage; mistakes seriously interfere with the readability of the text.</td>
</tr>
</tbody>
</table>

**0:** The writing piece is either non existent or fails to respond to the writing task. Topic is not addressed or student simply paraphrases the responses. The writing may be illegible or incoherent.