Pre-Calculus Trigonometry Project

Introduction:
It is the year 2037. You graduated from RHS in 2018. You received your undergraduate work while advancing your career. You continued your post graduate work. You have made it! You have become your life’s dream and are now a “pillar” of the community. Yes, after traveling the globe, you and your colleagues from high school have settled into the perfect job. You have been preparing for your 25th class reunion and your mind is on the big night. Are you going to be successful enough? Are you going to be skinny enough or have enough hair? Then, the letter arrives.

Task:
The RHS Math Department needs your help. The school board has proposed that trigonometry be removed from the curriculum. The faculty has asked you to make a presentation to the board on November 21, 2037 that will convince the board to drop their proposal. It is now your turn to repay the community for the great start that you received at RHS. You agree to help the department since trig was your favorite math course.

Process:
In order to complete this project, you will research the history, application, and needs for trigonometry. After you have completed your research, you will prepare a presentation for the school board. The math department has requested the following:

- A 5 – 10 minute oral presentation to the board. Your presentation must consist of a PowerPoint presentation along with any other visual aids you find necessary. Since you have become a pillar of the community you are to dress and act as your profession requires.
- A 1 page letter of introduction, on your own personal letter head, that explains why you are returning to Rolesville High School. Remember, you have become very successful and the personal letter head and letter should represent you 25 years from now.
- A 5 page history of trig (who, when, where, and why).
- A 1 page summary explaining why trigonometry should be kept in the curriculum.
- A list of at least 5 modern day applications of trigonometry. This list should also explain how each is an application of trigonometry. (1/2 page per application)
- A visual aid emphasizing one of the modern day applications (charts, poster, slides, movie, etc.).
• Include documentation of all resources following the MLA style. Your presentation should include at least 5 different sources of information. Please list the documentation on a separate paper.

• The board has requested that you compile a packet for your presentation that is to be presented in a folder of some type. These packets need to be ready the morning of the presentation so that members of the board will be prepared for your presentation.
  o 1 copy of a complete packet that includes all materials:
    ▪ Cover page
    ▪ Letter of introduction
    ▪ History of trigonometry
    ▪ List of modern applications
    ▪ Documentation
    ▪ Handouts version of PowerPoint presentation
    ▪ Group evaluation and project reflections

**Important Information:**

• Your resources may include sites from the internet, textbooks, an encyclopedia (only one source may be from the encyclopedia), magazines, and periodicals, or personal interviews.

• This is a serious task, please treat it as such.

• Although this is a team effort, please make sure that each team member participates and contributes equally.

• All submitted documents must be typed in 12 pt Times New Roman and double-spaced.

**Due Date: Tuesday, March 6th**
Evaluation:

Your project will be evaluated according to the following rubric:

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<th>Possible Points</th>
<th>Actual Points</th>
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<tr>
<td>Letter of Introduction</td>
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<tr>
<td>Importance Summary</td>
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<td>Documentation</td>
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<td>Presentation</td>
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<td>History</td>
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<td>Applications</td>
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<td>Grammar</td>
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<td>Visual Aid</td>
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<td>Project Reflection</td>
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<td><strong>Total Points</strong></td>
<td><strong>150</strong></td>
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Trigonometry Project Reflections – Must be completed by each student.

1. What was your overall impression of this project? What did you like, dislike?
2. What difficulties, if any, did you encounter while completing this project?
3. Describe any aspect(s) of the project that were unclear to you and/or could be improved.
4. If you were a teacher who assigned this project to your class, what would you do different? the same?
5. Describe the process that you and your group members followed while completing the project.
6. In your professional opinion, did all group members equally contribute to the completion of this project? Explain.
7. What grade would you give your group for this project? Explain. (use the rubric listed on the project handout)