

GUIDELINES FOR THE GROUP PRESENTATIONS

As we discussed in class last week, reading and discussing *Rising Above the Gathering Storm* (RAGS) will occupy a significant place in the course this term. The document addresses some very real issues that all of us will face as Americans and especially so as educators. By reading and discussing this document, we will also become familiar with some of the literature that is cited in many discussions about the role and future of education, especially STEM Ed, in the United States.

The entire document consists of 9 chapters and an executive summary. I have asked all students to read the executive summary and will ask that all students read the section on method (this is a very short section). Starting on Wednesday, 10 February (or the 4th week of the semester), a portion of class will be dedicated to a group-led discussion of one chapter of RAGS. Each group of six students will lead two discussions throughout the semester.

Presentations

By next week (3 Feb.) I would like to know which group you will be in, and in class next week we will determine which groups will do each of the first four chapters to be discussed in class; in a few weeks we will make the assignments for the second set of four chapters.

Each night (starting 10 Feb.) one group will have responsibility for leading the discussion that evening. They will have read the chapter thoroughly, become expert on it, and make a presentation to the class summarizing the key elements of that chapter.

Each presentation should have the following features:

- Summary of key elements of the chapter
- Explanation and discussion of any ideas/results/recommendations that the group (or individual members of the group) found particularly interesting or surprising.
- A series of questions designed to motivate class discussion of the issues raised in the chapter, especially how these issues might impact your futures as educators.

Presentations may include other features, but I recommend including at least the points mentioned above.

I anticipate that each presentation will take 25-30 mins of class time.

Grading

As noted before, 25% of your grade will be based on these in class presentations. This portion of your grade will be determined according to:

- 40% of this grade (or 10% of your total grade) will be your group's grade; this will be the grade I assign to the group in aggregate for the quality of the two presentations made during the course of the semester; each presentation will receive a grade and I will discuss each presentation with the group. In assigning this portion of your grade, I will focus on the clarity of your group's presentation, your group's ability to distill the most important ideas of the chapter and the questions you use to motivate class discussion.
- 40% of the presentation grade (or 10% of your total grade) will be assigned to you by the five other members of the group. After each group presentation (and due to me the following Wed.), individual members will submit a grade for each of the other five members of your group along with a brief explanation describing your reasoning.

You will have 25 points to assign in total to the other five members of your group; how you apportion these 25 points is up to you, but you will need to submit the short explanatory description mentioned above. If one or more members of the group did exceptionally good work, this should be reflected in those members receiving a higher than average score; if one or more members of the group did not pull their weight, this should also be reflected in a lower than average score.

Determining a student's grade from these student assigned scores: Each week, I will receive five student assigned scores for each student. I will take these five scores and average them. I will then take this average and divide by 5, since 5 must be the average score of all the students in the group. Once I have this number, I will multiply it by the grade I gave to the group for that presentation, and that will be the student assigned grade for you for that evening. Here's an example of how it works:

Suppose Ben (there are no Ben's in the class, so this is safe) gets the following scores from his five group mates:

3, 4, 5, 6, 6

His average is 4.8; this is $4.8/5 = 0.96$ of the average score of all the students in his group. If I gave the group a 90 for their presentation, Ben's student assigned score for the presentation would be $0.96 \times 90 = 86.4$

Suppose now Max (no Max's still safe) gets scores from his group mates of:

7,8,8,9,9

His average is 8.2 (indicating all his group mates thought he did a superlative job!). I then take $8.2/5 = 1.64$. Suppose I gave the group a 75 for their presentation, Max's score for this portion of the work would be $1.64 \times 75 = 123!$

Some important notes about this:

ALL STUDENT ASSIGNED GRADES WILL BE KEPT STRICTLY CONFIDENTIAL; UNLESS YOU DISCUSS YOUR GRADING WITH YOUR COLLEAGUES, NO STUDENT WILL KNOW HOW ANYONE ELSE ASSIGNED GRADES.

Each student will make out his/her own set of grades and I strongly advise not discussing your grades with anyone else.

Keep in mind that the grade you will receive for this portion of the assignment is based on five individual scores, so that no one will be able to determine how any particular student assessed their work.

The purpose of having student assigned grades is to ensure that all students contribute to the success of the group.

- The final component of your presentation grade (20% of the presentation grade or 5% of your total grade) will be based on your classroom participation when other groups are presenting. I do not expect every student to ask a question or make a comment each week, but over the course of the term I do expect each student to participate meaningfully during other groups' presentations. In assigning this portion of your grade, I will consider how well you have contributed to and motivated further classroom discussion.

Schedule of presentations

Feb. 10—A Disturbing Mosaic

Feb. 17—Why are science and technology critical to America's prosperity in the 21st Century?

Feb. 24—No presentation, first hour exam

Mar. 3—How is America doing now in science and technology?

Mar. 17—What actions should America take in K-12 science and math...?

Mar. 24-- What actions should America take in science and engineering research...?

Mar. 31—What actions should America take in science and engineering higher ed...?

Apr. 7—What actions should America take in economic and technology policy...?

Apr. 14—no presentation, second hour exam

Apr. 21—What might life in the United States be like if its not competitive in science and technology?

Apr. 28—No group presentation; general discussion of entire document.