

Group Project (GP) Stages

GP Stage 1:

Week 1 – The first stage of the project was the brainstorming session during the first class meeting. After the instructor introduced the concept of the community-based projects and the SENCER philosophy, the class spent the remainder of the class time coming up with lists of possible topics for the projects. At the beginning of the brainstorming session, the topics suggested by the students were very broad in nature, such as the topic of “Education in Minnesota”. With some prodding by the instructor, the students were able to come up with much narrower subtopics, such as “The Amount of Public Money Spent on Early Childhood Education in Minnesota Compared to the National Average”. By the end of the first class meeting, students had compiled a list of approximately twenty topics.

For a few students it was difficult for them to come up with topics for which they had a personal interest. For example, there were a couple of male students who were disinterested in the concept of group project based on social issues. After finding out that one student was a fisherman and the other enjoyed baseball, the instructor suggested the topic of mercury levels in lakes and public financing of baseball stadiums. Both topics were chosen for group projects and led to good final reports. It was very important to make sure that the students were selecting topics that they had a strong interest in.

Week 2 – The instructor distributes the suggested topics from the brainstorming session and hands them out to the class. The topics have been narrowed down by the instructor based on the feasibility of completing the project during one semester and the data available on the topic. Students were then given a preference form for preferred topic and preferred group partners to complete and hand in by the next class period.

Week 4 – The project groups are formed by the instructor based on the preference sheets completed by the students. At the end of the class period, the groups meet for the first time and exchange contact information.

STAT 201 – Group Project Preference Sheet

Name: _____

On the lines below, list the project topics in order of your preference:

1. _____

2. _____

3. _____

4. _____

5. _____

List any student(s) in this class that you especially want to work with (make sure that their topic preferences match with yours):

Would you like to work:

- (a) by yourself
- (b) in a group of 2
- (c) in a group of 3
- (d) in a group of 4

GP Stage 2: *The second stage of the project was the proposal. The instructor distributes both the group project proposal instructions and the grading rubric for the proposal.*

Group Project Proposal Instructions

Stage 2: Due _____(put in due date here)_____

What you should be doing in this next week: Email your group members and find times and locations that you are available to meet for the remainder of the semester. Talk about the project title and narrow down the focus as much as you possibly can. Spend a few hours this week looking up resources on the internet and at the library. If you are having difficulty finding resources and data, email me and I will give you suggestions of web sites to consider. Talk amongst the group members about each person's responsibilities for the project. At the end of the semester, you will grade your peers on their contribution to the project and that will factor heavily into each person's final grade on the project. Remember, this project is 25% of your grade. If you do not participate, you will most likely not pass the course.

What is due on ___(put in due date here)_____?

The proposal should be a total of four pages, consisting of the following:

1. Cover sheet with project title, course title, members' names, and date.
2. A one-page (minimum) single spaced, 12 point, typed proposal for your project, stating:
 - The purpose/focus of the project.
 - The connection of the project to the community. Clearly state what community you are addressing in the project.
 - The set of mathematical and statistical skills (ones that you have already learned in this course and other courses) the project may require.
 - Each group members' responsibilities clearly defined. Note that each group member must have some responsibility to each stage of the project. This includes the proposal, data collection, rough draft, final report, oral presentation and action letter.
3. An annotated bibliography of some preliminary resources.
4. A glossary of terms (both statistical/mathematical terms and content specific terms) pertinent to your project.

Grading Rubric for Group Project Proposal

Four pages required:

- Cover page
- One page proposal
- Bibliography
- Glossary of terms

One page proposal requirements:

- A clear statement of the purpose/focus of the project
- The connection between the project and the community and which community the project addresses.
- The set of mathematical/statistical skills needed for the project.
- Each group member’s responsibilities for each stage of the project.

If all four pages are present and all four requirements are satisfied, the grade will be as follows:

- Excellent/Outstanding: 9 or 10 points
- Good/Substantial: 7 or 8 points
- Adequate: 5 or 6 points
- Fair/Minimal: 3 or 4 points
- Poor/Nonexistent: 1 or 2 points

For each page missing, subtract one point. For each requirement not met, subtract one point.

Overall Quality	Subtract one point for each page missing	Subtract one point for each requirement missing	Final number of points out of 10

GP Stage 3: During stage 3 of the group projects, students gathered data for their investigation and organized the data in tabular and/or graphical format. During week 8 of the semester, students gave 5 minute presentations to the class on the methods and references used to gather data for their projects. If a survey was conducted, a copy of the survey instrument was shared with the class. Each member of the group participated in this mini oral presentation and described their personal contribution to the project so far.

GP Stage 4: During stage 4 of the group projects, students wrote and submitted a rough draft of their final report. Students were given guidelines for the rough draft along with a grading rubric. The same guidelines were used for the final report of the project also.

Group Project Rough Draft and Final report Guidelines

The rough draft of your group project is due on ____ (put in due date here) _____. Rough drafts will be collected at the **beginning** of class on this date and no late papers will be accepted. Your rough draft should be exactly that, a rough draft of your final project. The final paper is expected to be between 4 and 8 typed pages long (this does not include graphs, tables, charts or any type of visuals). Your rough draft may not be as long but keep in mind what the length of the final paper must be.

Keep these requirements in mind when typing up your rough draft:

STYLE

1. Type your paper on 8 ½ x 11 inch white paper using a 12 point font.
2. Type double-spaced on one side of the paper.
3. Include one separate title page which includes the title of your project, course number and name, date, and names of group members.
4. Number pages consecutively. Do not number the title page. Treat the first page of the paper as page 2. Type the page number in the top right corner of the page.
5. Margins should be 1 ¼ inches for left, right, bottom and top margins on all pages.
6. At the beginning of each paragraph, indent five spaces. Do not add an additional line between paragraphs.
7. Direct quotations longer than four lines should be indented five spaces and must be single spaced.
8. “Plagiarism is using another person’s words or ideas and presenting them as your own without acknowledging the original source. This is a very serious offense and in many schools grounds for expulsion” (MSU Student Handbook). Make sure to properly acknowledge sources. The consequence of a plagiarized group project is a grade of “F” for the project for **all** group members.
9. Proofread and spell check your paper carefully before submitting it.
10. Always keep a copy of your paper.
11. Staple your paper in the upper left-hand corner.

CONTENT

Your basic task in the rough draft is to state the main purpose and subtopics of your project in an introductory paragraph, formulate the body of your paper in a logical order

with major points highlighted and support those major points with data, statistics and graphs. Documenting sources in the rough draft is required. The final paragraph should be the conclusion to the paper.

The rough draft of your group project should contain the following:

1. **Introductory Paragraph:** One good paragraph is sufficient as an introduction. The introductory paragraph should clearly state the purpose of the project and the main points that the paper will cover. This paragraph should be used only to state the main points; not to argue or support them. That should be covered in the body of the paper.
2. **Body of the Paper:** You should have at least one (but it may be more than one) separate paragraph for each of the major points and the supporting evidence of that point. The use of first (I, we, me) or second person (you, to refer to the reader) is not acceptable in this report. Each main topic should be summarized and there should be a logical lead in to the next paragraph.
3. **Conclusion:** This paragraph should be used to restate the purpose of your project and main points, and also to draw conclusions from the results of your data collection. Make it clear to the reader that you met your purpose of the paper.
4. **References and Bibliography.**

The grading of the rough draft will be based on the following items. Items that are checked indicate problem areas for which improvement *must* be made before the final paper is submitted.

Statement of Purpose: _____ Introduction: _____ Page Numbers: _____
 Spelling: _____ Punctuation: _____ Conclusion: _____
 Title Page: _____ Sources: _____ Plagiarism: _____
 Bibliography: _____ Grammar, mechanics, word usage: _____
 Mathematics/statistics: _____ Evidence to support conclusion: _____

The rough draft and the final paper will be graded using the following rubric:

Assessment Area	10	9	8	7	6	5	4	3	2	1
Quality of research										
Mechanics										
Focus/Organization										
Proper use of Mathematics/Statistics										
Use of statistical concepts from all four levels: basic, emerging, intermediate and advanced										
Proper conclusion based on evidence										
Total										

GP Stage 5: Students completed and submitted a final report of their group project to the instructor. The guidelines for the final report were the same as that of the rough draft. The final report rubric included an area for peer assessment.

Final Report Grading Rubric

The grading of the final report will be based on the following items. Items that are checked indicate areas for which improvement was not made after feedback from the instructor was given on the rough draft.

- | | |
|---------------------------------------|---------------------|
| Statement of Purpose: _____ | Introduction: _____ |
| Page Numbers: _____ | Spelling: _____ |
| Punctuation: _____ | Conclusion: _____ |
| Title Page: _____ | Sources: _____ |
| Plagiarism: _____ | Bibliography: _____ |
| Grammar, mechanics, word usage: _____ | Statistics: _____ |
| Evidence to support conclusion: _____ | |

The final paper will be graded using the following rubric:

Assessment Area	10	9	8	7	6	5	4	3	2	1
Quality of research										
Focus/Organization										
Mechanics(Introduction, Body, Conclusion, References)										
Proper use of Mathematics/Statistics										
Use of statistical concepts from all four levels: basic, emerging, intermediate and advanced										
Proper conclusion based on evidence										
Participation as assessed by your group										
Total										

Final Self & Peer Assessment on Community-based Project

Directions: Honestly assess yourself and your teammates in terms of participation in this group project according to the criteria listed below. Your assessment is confidential with the instructor, but it will be used to evaluate each team member's contributions to the process and quality of the overall project.

YOUR NAME

Very Much ← → Very Little

The degree to which I completed my share of tasks by agreed upon deadlines	5	4	3	2	1
The degree to which I contributed to the final paper and action letter.	5	4	3	2	1
The degree to which I contributed to the presentation stage of the project.	5	4	3	2	1
The degree to which I contributed to the rough draft stage of the project	5	4	3	2	1
The degree to which I contributed to the data collection stage of the project.	5	4	3	2	1
The degree to which I contributed to the proposal stage of the project.	5	4	3	2	1

Name for Member #1

Very Much ← → Very Little

The degree to which he/she completed his/her share of tasks by agreed upon deadlines	5	4	3	2	1
The degree to which he/she contributed to the final paper and action letter.	5	4	3	2	1
The degree to which he/she contributed to the presentation stage of the project.	5	4	3	2	1
The degree to which he/she contributed to the rough draft stage of the project	5	4	3	2	1
The degree to which he/she contributed to the data collection stage of the project.	5	4	3	2	1
The degree to which he/she contributed to the proposal stage of the project.	5	4	3	2	1

Name for Member #2

Very Much ← → Very Little

The degree to which he/she completed his/her share of tasks by agreed upon deadlines	5	4	3	2	1
The degree to which he/she contributed to the final paper and action letter.	5	4	3	2	1
The degree to which he/she contributed to the presentation stage of the project.	5	4	3	2	1
The degree to which he/she contributed to the rough draft stage of the project	5	4	3	2	1
The degree to which he/she contributed to the data collection stage of the project.	5	4	3	2	1
The degree to which he/she contributed to the proposal stage of the project.	5	4	3	2	1

GP Stage 6: The final stage of the group project was a 15 minute PowerPoint presentation (including 5 minutes for questions). The presentation was evaluated by the students' peers in the class using the following presentation rubric.

Presentation Rubric

Project Title:

		Evaluating Group Presentations				
		1	2	3	4	Total
Organization	Audience cannot understand presentation because there is no sequence of information.	Audience has difficulty following presentation because group jumps around.	Group occasionally uses statistics at the most basic level.	Group uses statistics at the basic level and at the emerging level and explains the meanings of their results clearly.	Group presents information in logical, interesting sequence which audience can follow.	
Statistics	Group has little or no statistics in the presentation.	Group occasionally uses statistics at the most basic level.	Group is uncomfortable with information and is able to answer only rudimentary questions.	Group is at ease with expected answers to all questions, but fails to elaborate.	Group uses statistics at the basic, emerging, and intermediate levels. One extra point is given for using statistics at the advanced level (5 points).	
Subject Knowledge	Group does not have grasp of information; group cannot answer questions about subject.	Group is uncomfortable with information and is able to answer only rudimentary questions.	Group occasionally uses graphics that rarely support text and presentation.	Group's graphics relate to text and presentation.	Group demonstrates full knowledge by answering all class questions with explanations and elaboration.	
Graphics	Group uses superfluous graphics or no graphics	Group occasionally uses graphics that rarely support text and presentation.	Presentation has three misspellings and/or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Group's graphics explain and reinforce screen text and presentation.	
Mechanics	Presentation has four or more spelling errors and/or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Conclusion somewhat followed from the information presented	Conclusion followed directly from the information presented	Presentation has no misspellings or grammatical errors.	
Conclusion	Conclusion did not follow from the information presented	Conclusion somewhat followed from the information presented	Conclusion followed directly from the information presented	Conclusion followed directly from the information presented	Conclusion followed directly from the information and a clear idea for future work was presented	
					Total Points:	