

## Chapter 4

### Assessment Tools

#### **Introductory Notes for Instructors**

In this Chapter we provide the various tools we developed for assessing the projects and describe how we use them. It contains the overall project grading rubric, an evaluation sheet for each of the four stages, two versions of a form to gather student response on group work, and an oral presentation evaluation sheet suitable for use by students or the instructor.

When the projects were first introduced, students were provided with a copy of the “Project Grading Rubric” (page 58) that would be used in evaluating final projects so that they would be fully aware of the requirements and desired attributes of the projects. The instructor’s final evaluation of the projects was carried out at the completion of the projects using the “Project Grading Rubric.”

At the end of each stage, students submitted their work on that project stage. Students were generally given full credit for stages 1-4 in the Project Grading Rubric (on page 58) provided their group satisfactorily met all requirements for those stages. However, instructors did review, comment, and provide suggestions for improvement on the work at the end of each stage. Students were encouraged to revise their work on a stage before turning in their final project and were reminded that the final evaluation of the project would consider the quality of work, as well as completeness. To aid in providing feedback at the end of each stage, we used the “Stage Evaluation” forms found on pages 59-62.

As one means of monitoring the contribution of students to their group project, we periodically (usually at the end of each stage) asked students to take 5 minutes to complete one of the “Student Response on Group Work” forms (pages 63-64). We found that this exercise served to give the instructor feedback on group dynamics and encouraged students to reflect on their own contribution. In completing these forms, students were generally honest and willing to give credit to others when credit was due. Several students commented at one stage or another that they felt they themselves had not contributed as much as they should have during that stage and resolved to work to make that up in the next stage. We mentioned earlier that a few students were allowed to work in pairs on projects. We note that it is more problematic to gather an honest evaluation from a single peer.

At the end of the semester, student groups gave presentations of their projects. Every member of the group was required to give part of the presentation and instructors used the “Oral Presentation Evaluation Sheet” (page 65) when evaluating the presentations. One instructor also had students fill out the “Oral Presentation Evaluation Sheet” and averaged the numerical ratings and had the students’ comments typed up for distribution to group members as another source of feedback.

## Project Grading Rubric

Project Title: \_\_\_\_\_ Student's Name: \_\_\_\_\_

Group Members: \_\_\_\_\_

Criteria	Max Points	Awarded Points
On time completion: All tasks for each stage <i>satisfactorily</i> completed on time earns 5 points for each stage. See rubrics for each individual stage for more details.		
Stage 1	5	
Stage 2	5	
Stage 3	5	
Stage 4	5	
Group work contribution:		
Teacher observed student contribution	10	
Peer assessment of student contribution	10	
Mechanics of the project:		
Sufficient background data, organization, representation, etc.*	10	
Use of appropriate mathematical or statistical tools*	10	
Drawing logical conclusions based on data*	10	
Written report:		
Organization/ neatness (logical, understandable and easy to follow)*	10	
Communicates mathematical ideas clearly*	10	
Correct spelling, grammar, acceptable rules of citations and writing composition (viz. ENGL 110)*	10	
Oral Presentation:		
Mechanics (professional dress, speak clearly and loudly, logical flow, etc.)*	10	
Demonstrates knowledge, able to answer questions, etc.*	10	
Effective use of visual aids (PowerPoint, Excel graphs, photos, transparencies, etc.)	10	
Civic Engagement: Evidence of action taken as a result of your findings	20	
<b>Total</b>	<b>150</b>	

\* Excellent/outstanding (9 or 10 points)  
 Good/substantial (evidence of substantial effort, slight problems in analysis 7 or 8 points);  
 Adequate (weak but evidence of some effort or comprehension 5 or 6 points);  
 Fair/minimal (minimal effort or comprehension 3 or 4 points);  
 Poor/nonexistent (lack of effort or comprehension 1 or 2 points);

## Stage 1 Evaluation

Project Group Topic: \_\_\_\_\_

Actual Due Date: \_\_\_\_\_ (Week 7)

Date Received:

\_\_\_\_\_

<b>Item</b>	<b>Excellent</b>	<b>Satisfactory</b>	<b>Needs Improvement</b>	<b>Missing</b>	<b>NA</b>	<b>Possible Points</b>	<b>Points Earned</b>
On Time						1	
Annotated Bibliography						1	
Paragraph Summary						1	
Glossary of Terms						1	
Photocopy of the Notes						1	
<b>TOTAL</b>						<b>5</b>	

Group Work Contribution Observed:

Comments:

## Stage 2 Evaluation

Project Group Topic: \_\_\_\_\_

Actual Due Date: \_\_\_\_\_ (Week 10)

Date Received: \_\_\_\_\_

<b>Item</b>	<b>Possible Points</b>	<b>Points Earned</b>	<b>Additional Possible Upon Revision</b>
On Time	1		
Outline of Plan of Action	1		
Survey Instrument	2		
Sampling Method	1		
OR			
Case Study Description	2		
Supporting Documents	1		
<b>TOTAL</b>	<b>5</b>		

Comments:

### Stage 3 Evaluation

Project Group Topic: \_\_\_\_\_

Actual Due Date: \_\_\_\_\_ (Week 15)

Date Received: \_\_\_\_\_

Item	Excellent	Satisfactory	Needs Improvement	Missing	NA	Possible Points	Points Earned
On Time						1	
Revised Outline of Plan of Action, if appropriate						0 or 1	
Copy of all data collected, calculations performed, resulting graphics						2	
Paragraph summarizing what your group learned						1	
Statement of your conclusion						1	
<b>TOTAL</b>						<b>5 or 6</b>	

#### ITEMS TO CONSIDER

Questions for all groups doing a survey:

- Did you discuss or present evidence on how representative your sample is?
- Should your reader believe this survey? Why or why not?
- Double (triple) bar graphs show comparisons better than pie charts.
- Include copies (originals of your surveys).

Questions for case study group:

- How well did you document your case study?

Questions for all groups:

- Is your mathematics correct?
- Are all the mathematical calculations there?
- Is your mathematical language accurate?
- Is your writing repetitive? Does it make the same points over and over? There is no need for “fill”!
- Does your writing flow logically? Is it clear what point(s) you are making?
- Pay attention to proper use of apostrophes.
- Proof read (out loud) for typos and incorrect spellings that spell check cannot find. Ask a friend to read it and to be frank with you!!
- Consider what your planned response or action item will be for Stage 4. Clear it with your instructor by \_\_\_\_\_. **Suggestion:** Briefly describe it to her in writing or by email by \_\_\_\_\_.

## Stage 4 Evaluation

Project Group Topic: \_\_\_\_\_

Actual Due Date: \_\_\_\_\_ (Week 15)

Date Received: \_\_\_\_\_

<b>Item</b>	<b>Excellent</b>	<b>Satisfactory</b>	<b>Needs Improvement</b>	<b>Missing</b>	<b>NA</b>	<b>Possible Points</b>	<b>Points Earned</b>
On Time						1	
Report: Structure						1	
Writing						1	
Mathematics						1	
Response						1	
<b>TOTAL</b>						<b>5</b>	

Comments:

## Student Response on Group Work (version 1)

Name: \_\_\_\_\_

1. What project are you working on?
2. Who are your team members?
3. How many times have you met as a team during work on this Stage?
4. List at least one of your individual contributions (if any) towards the project.
5. In your opinion who on your team has contributed significantly more than the rest to your project so far?
6. In your opinion who on your team has contributed significantly less than the rest to your project so far?

## Student Response on Group Work (version 2)

Date: \_\_\_\_\_

Project Topic: \_\_\_\_\_

Your Name: \_\_\_\_\_

List the work you have done to date on the project (for example, I contributed to survey design; I wrote the annotated bibliography; etc.)

Names of Group Members	Percent of Contribution So Far
Yourself	

Any comments or concerns about how your group work is going:

Suggestions to the Instructor:

## Oral Presentation Evaluation Sheet

Group Topic:	Evaluator's Name:
Directions: Rate on a scale of 1 to 5, 5 being best. Add comments.	
Introduction Captures Attention	1 2 3 4 5
COMMENT:	
Logical Flow to Talk	1 2 3 4 5
COMMENT:	
Clear Explanations, Able to Answer Questions	1 2 3 4 5
COMMENT:	
Use of Audio Visual	1 2 3 4 5
COMMENT:	
Professional Demeanor	1 2 3 4 5
COMMENT:	
Civic Engagement Component	1 2 3 4 5
COMMENT:	