

Module 13.3 Completion Examples (4 pages only) (I have

combined the examples into one document but your report should only be 4 pages) Team # A Team Leader: Samuel W. Team Members: Susan, Samuel, and Jim Project Name and Number: # 2 Production of D-Glucuronic and D-Glucaric Acids Faculty Advisor: J K Teaching Assistant: Muriel Francis Industrial or Internal Consultant: Lois Kempler

A. Websites: Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful)

- 1. Stellar Website: 1
- 2. Collaboration Tool Box Website: 1
- 3. Communication Website: 1
- 4. Drop Box organization and utilization in the course: 2
- 5. Library Website: 1

Comments: Changes to the Collaboration Toolbox during the project could be confusing. The Webx was helpful but we had problems accessing, Dropbox in the beginning needs more structure and organization instructions. Stellar - the sections could be broken down even more so that when we write the reports, we can scroll through all the pages of the proposal outlines and progress report guidelines.

B. Oral Presentations:

 Ground Rule Oral Presentation System: Rate 1 -3 (1- implemented, 2somewhat implemented, 3- not implemented)
Changes made to systems during each rotation: We made incremental changes during the rotations but most of the change occurred after the first rotation.

2. CI Meetings support your implementation of your oral presentations ground rules? Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful) **2**

Oral Presentation Comments: - Ground Rules require us to present to faculty advisor and twice to the team. During Rotation 1 half the team was absent when S's presented at the CI meeting. In Rotation 3 the presenter did not have the slides ready for the CI Meeting. Although the rules states that all Instructors criticism should be incorporated into the final presentation, this was interpreted very loosely due to contradictory suggestions by the CI instructor's and faculty's feedback.

C. Writing Assignments:

Writing Ground Rules System: Rate 1 -3 (1- implemented, 2- somewhat implemented, 3- not implemented) **2**

How did the CI Meetings support your implementation of your writing ground rules? Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful) **1**

Writing Assignment Comments: Ground Rules not followed for writing Progress Report. Major problem was writing timeline deadlines not well defined. Due to individual member's confusion, report had many inconsistent sentences and grammatical errors. In rules, the leader is the final editor to check for inconsistencies. We received negative feedback from our advisor. For the Final Report Draft, the leader discussed with other team leaders how they write their reports to find out what works and what does not to create a timeline that is not overwhelming but still effective. A timeline was created and the sections that were given to each team member were changed in order for each team member to gain experience writing every aspect of a technical paper.

Literature Search: Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful) 2

Literature Search Comments: (75 words or less) We ultimately did not follow the system listed in our Ground Rules for the literature search process because the team lacked a clear understanding of what technical concepts we should be studying to support our project. If we had followed the rules, we would have wasted time looking up 8-12 articles that did not pertain to our project. We changed the rules to reflect what needed to be done.

Proposal

Final Report

Ground Rule System Implementation: Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful) 1

Comments: (100 words or less)

1. How did the CI Meetings support your implementation of your writing ground rules? Comments helped improve our individual writing levels through changes in the ground rules. S and J confused the content that belonged in the Introduction, background and significance sections. Once corrected CI instructor and advisor thought writing was better. CI instructor provided the team with a good idea of each team member's writing strengths so we could assign the sections of the progress report. CI meetings were a good place to clarify formatting since there were differences in the structure of the progress report and the proposal.

2. Were changes made to these systems as the team's behavior changed? Rules were optimistic when it came to time management issues therefore we changed the

rules every rotation to compensate for the time management issues we encountered. This method was flawed, because our progress report draft had many errors. The rules were changed to reflect a much more rigorous process. Members edited their own sections, then the team read through it again to ensure consistency. This extra read-through helped the flow of the report.

3. How did the knowledge from "Sharing Team Experiences" on how other teams planned and created their oral presentations help your team to collaborate more effectively during the second and third oral presentation? This was somewhat useful.

Rate how your team utilized the following reports and meetings to support your team's effectiveness. Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful)

- 1. Weekly Progress Reports 1
- 2. Agendas 1
- 3. Activity Lists **1**; not in the beginning it took time to use them properly.
- 4. Weekly Faculty and Team Meetings 1
- 5. Transition Meetings **2+** Helped us to bond as a team because we discussed issues in a neutral environment.

Comments: Explain how your faculty advisors discussed and utilized the Weekly Memorandum during your faculty meetings. Weekly reports were the meeting's focus and helped team summarize the main points from the week and to stay on task. Minutes taken were helpful in clarifying technical concepts explained in our faculty meetings. The activity lists were included in agendas giving direction to our actions, especially scheduling activities for lab. Prior to the activity lists inclusion, the labs were unstructured and time was wasted deciding what to do. Once the activity lists became a permanent part of our agendas, the lab sessions were more structured allowing us to accomplish more during each lab.

D. Completion of Task and Team Functions: (250 words or less) Discuss the completion of the task and the team's functioning for Rotation #3 using the Weekly Progress reports as your guide. (Don't forget to describe how you implemented the former team leader's suggestions into the team culture.) Include the following in the discussion: Our team reached the accomplishment stage. The scope of the project has changed multiple times over the last few weeks, due to unanticipated obstacles and challenges that the team faced in lab, including the cracking of films, the poor insulation of the DMA apparatus, and the verification that underlying assumption for DMA analysis did not hold true in our experimental conditions. Therefore we changed the scope of the project accordingly to reflect these challenges and the remaining time left for lab work and data collection. Throughout all these challenges, the team has progressed from the synthesis stage into the accomplishment stage, and we are now finally in the completion stage of the

team life cycle. The previous leader suggested revising the ground rules but because the team was eager to begin collecting and analyzing data, we did not revise them. Some improvements to the rules should have been made: create a specific "Data Analysis" section that provided guidelines for how to approach the process of turning data points into meaningful findings. I overused my dominant conflict styles of "Avoiding" during this time by not addressing the issues surrounding data analysis and instead pushed forward the data collection. I now realize that this was a big mistake on my part, and will be sure to refrain from doing it again in any future projects that I work on.

Team Life Cycles Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful) 1. What were the impediments to the team in progressing through the team life cycles? 3 (275 words or less) Members asked questions and created ground rules. expectations, rotation roles, and a mission statement enabling us to move from the formation into the criticism stage, which occurred when the team finished the literature search and went into lab. In lab we ran into unanticipated issues and were frustrated that we had not anticipated the challenges. We discussed the mission and goals. One impediment was that the faculty advisors were also confused by the challenges that came about and were not able to provide direct guidance. We broke down goals into smaller milestones that were achievable. Our knowledge of one another's conflict styles helped push the team forward into the synthesis stage. After initial challenges were addressed, the team felt a renewed sense of optimism and a feeling of team identity. Members made a conscious effort to resolve problems and achieve harmony. These successes led the team into the Accomplishment stage, where the team was "greater than the sum of its parts" and a "can do" attitude was prevalent. Whenever a member completed an assigned task we would inquire about ways we could assist others. One impediment was the issues in data analysis. We were at a standstill when we realized that our method of data analysis was not producing useful results. Our faculty advisor brainstormed with us on how to move forward. Our team created new visual representations from the same data to prove our new conclusions and we successfully outlined a plan for future work, which achieved the initial goals.

Mission Statement Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful) **1** (50 words or less) **How did the team use the Mission Statement?** We referred to the statement to remind us of our overall goal. Our project began with a concept and it was difficult to imagine a concrete goal. As we progressed, it also helped remind us what our goals were, and motivated us to continue working despite temporary setbacks and discouragements.

Time Management (250 words or less)

1. How successful was the team at managing time? Rate 1 -3 (1-Excellent 2- Good 3-Fair)

2. What was effective?

3. What was ineffective?

S was very organized and helped the team to remain focused and turn in assignments on time. In lab we were less successful at managing time because the project goals were unclear clear and often we would not know what to do with our time. Once we understood the goals, we were much better at managing time. A Google Calendar kept track of deadlines and meeting times and was updated. Agendas became more detailed and directed, which greatly improved our ability to manage time at meetings. During the collaborative written assignments, the team included deadlines for our first draft to gather team comments, then deadlines for edits based on our CI instructor's comments, and finally deadlines for edits based on our faculty advisor's comments on the draft. The leaders also began writing more detailed activity lists, which made our lab sessions more productive. Especially during the last two weeks of lab, I strived to maximize the productivity by having multiple experiments occurring at the same time. The agendas for these lab sessions were decided upon a week in advance in order to properly time each experiment that would be beneficial for our final report. Due to the change in scope of our project, the final presentation was started late. Once it was established what our conclusions would be based on the data that had been collected, however, the final presentation proceeded very smoothly.

E. Team Culture: answer the following questions (use information from Weekly Progress Reports when appropriate):

Strengths and Weaknesses: (225 words or less)

1. Metamorphosis of Individual Weaknesses into Strengths

2. How did the team utilize each member's individual strengths to make the team more effective?

One main team weakness is communication. The contributing factor is the over use of the avoidance conflict styles. When conflicts arose, it was not immediately discussed, or if voiced, the member would avoid the confrontation. For instance, I felt J didn't contribute equally to the project, but when I tried to confront this issue, he avoided the problem, citing his busy schedule. Communication among other team members has improved. For instance, after talking to S about her tardiness it is apparent it is not a lack of dedication. A similar situation arose between S and J when I procrastinated on making his slides. I decided to mediate and listen to their perspectives. They reconciled, we had a team meeting and we were able to put together a cohesive and timely final presentation. To deal with individual weaknesses I changed the way I approached each member of the team during discussions. S is often hesitant to voice her opinions of her own accord, so I would ask her for advice and opinions. This approach worked and was very helpful when we were trying to explain trends observed in our data. I discovered, S is very resourceful and thorough in her work. As for J, his workload demised and he was no longer tardy. I has dedicated more time and effort.

Expectations: (350 words or less)

1. Did each team member meet their personal expectations that they listed at the beginning of the class?

2. Did the team meet faculty advisor's expectations? Had discussions to reiterate our expectations in the project. We discussed the differing levels of interest and passion when it came to implementing the project. Communication was strong in the criticism stage, but the leader actively improved communication in the accomplishment stage. After our last lab session, we talked about what we have accomplished and what we had hoped to accomplish

 ${\bf S}$ – Expectations were met. Always fully understood the team's intentions and plans before moving forward. He completed written reports and the oral presentations on time and provided feedback to other teammates' written sections and oral presentations. While leader, the team progressed through unanticipated obstacles, which met his expectation of leading the team into a positive direction and attending to important issues

 ${f S}$ – met personal expectations. She prioritized the work but there were a few meetings missed due to other commitments. Great job at encouraging a positive environment – always found a way to get us laughing and to lift up our spirits by telling us to think about all our achievements when we ran into unanticipated challenges. Honest in admitting shortcomings, including the time she accidentally deleted the file of collected data, and was willing to put in additional work by staying late in lab to make up for the lost run.

Jim – met most personal expectations. Always consulted calendar before taking on any work to ensure that would only commit what was capable of accomplishing. Made sure to reach out to faculty and TAs both in person and via email whenever I had any questions to address my points of confusion. I was able to stay organized and keep track of the assignments through use of the Activity Lists, and I also kept the end goal and mission of the project in mind. I did not meet my expectation of attending all scheduled meetings on time at the beginning of the semester due to conflicts with job interviews and a Varsity swim meet. However, I made sure to stay in communication with the team so that I could stay aware of my delegated tasks and stay up to date on discussions.

TKI Conflict Management (175 words or less) Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful)

1. How did each individual team member use their knowledge of their TKI conflict styles to manage conflicts?

2. What styles did each member over or underuse?

3. When you used the most effective style how did that help you manage the conflict?

4. How did the team implement this knowledge to help your team function more effectively?

There was a conflict over different working styles and expectations. S was very punctual and was first to submit her section. J and I placed the quality of our report above the need to accomplish our tasks on time and turned in our sections later than our deadline. I prioritize work quality and dislike repeated mistakes and delays. When report was compiled, S's sections were not up to the standard the team had set. I felt very frustrated. In addition, there were grammatical errors similar to those that she had made in the progress report draft. A better plan would have been to re-outline the team expectations before writing the final report and making it the responsibility of each member to uphold the quality of the writing.

This might also have included listing resources that team members could use, such as our CI instructor, to help them produce high quality writing.

Role Rotation (500 words or less)

1. How effective was the role rotation for the team? Rate 1 -3 (1-Excellent 2- Good 3- Fair)

2. Did the roles the team members choose at the time they chose them effective for the whole team in effectively managing the project? Rate 1 -3 (1-Excellent 2- Good 3- Fair)

3. What other leadership training would have helped your team?

4. Was the leadership training given effective? Rate 1 -3 (1- useful, 2- somewhat useful, 3- not useful)

The role rotation was a great way to challenge members to face their weaknesses. The role rotations that we decided on at the beginning of the semester proved to be very effective. S did an excellent job getting the project set up and motivating the others. It made sense for him to kick-start the semester because of his technical expertise from his internships. He was able to get caught up on the project faster than the others. The team needed someone who could explain the concepts. He was also great at boosting the morale. His schedule was free throughout this portion of the semester, but towards the end his work picked up and it made sense that he transitioned into the Recorder role.

During S's leadership in the second rotation she had transitioned from Recorder and was comfortable with writing detailed agendas and being timely with the activity lists. She used a supporting situational leadership style effectively. As we settled into our individual tasks in lab, the support style enabled us to become experts in the areas that we worked most in. She facilitated great discussions and asked for ideas from the rest of the team before coming to a decision.

In the third rotation, because each team member's strengths were well-established, it was easier for me to delegate the tasks without worrying about the quality of the work produced. Sometimes I felt the need to direct members when confused, such as when the direction of our project was called into question. In this case, I used a combination of the coaching and directing.

In general, the roles that were chosen for each team member in those respective rotations were fitting for our various schedules. I was out of town due to interviews during the first rotation. During the second rotation S was taking ICE, felt his workload in that class sharply increase, he was first leader. Lastly, due to my ability to see the long-term goal, I was the last leader and brought the team towards our final goal.

How did the knowledge from "Sharing Team Experiences" on how other teams write collaboratively help your team continue to be more effective? (Rate) 2

H. Suggestions for improving the course: State the problems you had and give definitive solutions.

Problem: Not the entire project management curriculum is relevant to all the teams, and some teams could use more project management activities, while other teams could have spent more time working on projects in lab if their team dynamic was working well.

Solution: Develop a tailorable project management curriculum that includes different tiers of activities that can be selected and carried out based on the dynamic of a specific team.

Problem: Different faculty had wildly different expectations of students, which affected different teams' experiences in the course.

Solution: Try to normalize faculty expectations of students before the semester starts.

Problem: Lectures were very long in general at the beginning of the course. By the later lectures in the day, people had a lot of trouble paying attention. **Solution:** Spread out lectures over more days

Problem: General CI section lectures (i.e. proposals in general, progress reports in general) were not as useful as when we went over specific aspects of writing (abstracts, captions) or when we did workshops on our presentations **Solution:** Have more specific communication sections that are more of a workshop format rather than lectures