Teamwork - A case study

Four students, Hal, Sue, Frank, and Bert are working together on a term project in a required senior-level chemical engineering class. The project will be worth 25% of the final grade, and lasts for the duration of the semester. Each of the students comes to the class with their own individual personalities and set of life experiences.

**Hal** likes learning, likes school, is outgoing, and is planning to go to graduate school after graduation. He’s the kind of guy you love to hate; he’s got high grades, is popular, and everything seems easy for him. Hal is definitely on the fast-track to great things. His expenses are paid by a full-ride academic scholarship, so he doesn’t need to work at a job while in school. His gpa is 3.9.

**Sue** is very active on campus, and likes to participate in as many organizations as possible. Sometimes she’s stretched pretty thin, and her classes aren’t always her top priority. Her parents are paying most of her school expenses, but she is working about 10 hours per week for pocket money. She’s an excellent organizer and manager, and always gets her homework done. After graduation, she plans to get a job in industry, where she hopes eventually to get a managerial position. Her gpa is 3.0.

**Frank** is an average student. He’s very bright, but his interests are often outside the classroom. Skiing, hiking, Frisbee, and church activities hold more interest for him than studying. He usually manages to get his homework done, often just before class, and somehow manages to do pretty well on exams. Frank’s education is being paid for by loans and work-study. He hasn’t yet thought too much about what he wants to do after graduation, but he’s sure he’ll take a few months in Europe before getting serious about looking for a job. His gpa is 2.8.

**Bert** is in a different category altogether. He’s been in school a while, calls himself a slacker, and claims to be interested primarily in partying. He rarely submits his homework and often misses class. He is currently enrolled in the design class in question for the second time, after failing the first time. Bert’s parents paid for the first 3 years of his education, but cut him off after his gpa fell below 2.0. Currently he is surviving on loans, and works 20+ hours per week off campus. Bert hasn’t yet considered what he plans to do after graduation, whenever that might be.
The setting is 3/4 of the way through the semester, and pressure is building. All 4 are busy with classes, job hunting, work, and life in general. Their professor, Dr. Spock, has assigned way too much work, as usual. Hal, Sue, and Frank are meeting in the computer lab:

**Hal:** Wow, that homework assignment due tomorrow really stumped me for a while. I was up until 2:30 this morning finishing it.

**Sue:** Oh please, I’m sure you got through it no problem. I started 4 days ago, but I keep getting stuck on the liquid-liquid extraction. Frank, did you get that part?

**Frank:** Yeah, right! Thanks for reminding me. I’ll look at it tonight.

**Sue:** Well, it looks like Bert is flaking out again, and isn’t going to show. How much longer do you want to wait for him?

**Hal:** That guy better start thinking about passing this class. Even with our help on the design project, he’s looking at a D at most. He got a 23 on our last exam!

**Frank:** Ya’ know, I’m kind of getting sick of helping him out. I’ve put more time into this class than I’d prefer, and I feel like we’re supporting a freeloader. It’s not like I don’t have anything better to do than to do his share in our project, too.

**Sue:** I hear you. I’m having a pretty tough time, keeping up in all my classes. The work that he did, was all wrong. I had to fix all the mass balances he came up with, and that was a week late!

**Hal:** The main thing is that we’ve got to get the project done. Frankly, his grade is his business. My grade is my business. If my work helps him, that’s no sweat off my back. Eventually, maybe he’ll learn something from the project. This project is fun. I don’t mind doing the extra work.

**Sue:** You’re way too generous, Hal. I’m with Frank. I’ve got plenty of things to do, other than carry his load. I think he doesn’t deserve a good grade on the project if he hasn’t done any work on it.
As a group, brainstorm about different strategies for coping with the “Bert” problem. List as many possibilities as you can think of. (10 minutes.) Be persistent: you should be able to come up with at least 20 ideas, not necessarily all good ideas.

As a group, come to a consensus about the top strategy. What recommendation would you make to Dr. Spock about Bert? Keep in mind that successful teamwork is graded part of this design project. Why is that strategy your group’s selection? (10 minutes)

Now, take the position of Dr. Spock. In addition to teaching chemical engineering, she is also trying to instill in her students some elements of teamwork. She knows that all groups everywhere have a Bert, to some extent. Her opinion is that you’ve got to deal with the circumstances, such as they are; changing the circumstances isn’t always possible. How should she react to this problem, after it is explained by the 3 active students?