Mars Farm

**Lesson 3**: Teambuilding exercise

**Problem Statement:** Students must work together in teams to create a design a growing environment on Mars that will sustain three researchers for three years. In this lesson students share their personal reflections on their strengths and challenges while creating group norms pertinent to the successful completion of this project.

**Learning Objectives:**

The student will list and discuss challenging aspects as well as potential benefits to working with others on group projects.

**Lesson Standards (NGSS, CCSS, CTE):**

Note: Whereas there are no standards directly linked to this lesson, we feel that with this age group, a lesson to discuss group norms for this unit is a critical component to the smooth workings of the unit.

**Materials**

* Paper / Pencil
* Optional Team Contract

**Lesson Preparation**

* Students can either use notebook paper for this activity, or, if more structure is

needed, a simple template can be created for student to write their personal reflections.

**Time Required:** 45 minutes

**Grouping of Students for Instruction**

Same grouping structure as previous lessons.

**Procedure:**

**Understand The Problem:**

* Teacher leads class discussion on advantages and disadvantages to group work.
* Students self assess, and make a commitment to positive and productive group work.

**Lesson Components:**

* At this age, students most likely have already had both positive and negative

group work experiences. In a class meeting format, the teacher leads the discussion

for students to share their experiences and frustrations with each other. The style of this

conversation is flexible, and should be conducted in whatever way the class and

teacher are accustomed to. Teacher can incorporate pair-share, or turn and talk strategies

here to reflect classroom style.

* If time, the students can generate a list of group norms for successful and cooperative

group work situations. (This can be done in a whole class format or students can create

individual lists.)

* Students are then asked to reflect on their own personal nature. They privately write

what strengths they bring to a group setting and what norms they tend to struggle with.

(For example, “ I am an excellent leader, but I tend to struggle with organization”, or

“I can draw very detailed sketches, but I am not very independant on the computer.”

* The students then write a binding commitment to the group and the agreed upon

group norms. If class period time runs out, this can be assigned as a homework

assignment to be completed that evening.

* These commitments will be shared with the groups during the next lesson.
* As an option, groups can complete the attached Team Contract.

**Assessment:**

* Students successfully partake in the self assessment exercise, and write a

sincere commitment to do their best work with and for their group.

**Accommodations:**

* Whereas the assumption that the classroom has already established a safe

environment for students risking personal reflection, it should be noted that

this is more difficult for some students than others. Obviously, sensitivity

to student differences in this regard is needed.

* Teacher might want to model the self assessment for his or her students.
* Classrooms have microphones for hearing impaired.
* Teachers could also enlarge any documents under document camera.

References/Resources:

None needed for this lesson.