## DYO Data Reflection: Sixth Grade Science

According to the data collected from DYO#1, overall the student's ability to make good observations and meaningful inferences is below the expected 65% achieving mastery. Considering that it was the first diagnostic given at the beginning of sixth grade, the results are not that alarming in that this is the first year that many of the students have been exposed to "real science" in their academic careers. What stands out as most informative from the data that was collected was that on the whole students in the sixth grade demonstrated a greater comfort with making inferences than making general observations, typically a more rigorous skill to master. As a result of DYO#1 the general plan is to redistribute students in future projects and assignments based on their strengths with a particular skill. For example, future collaboration between students will include an emphasis on three areas of concern brought to light by DYO#1: Articulation of observations, ability to make meaningful inferences, and visual representation and expression. Based on the DYO data, student will be assigned to skills-based learning groups where they will focus on the development of the particular skill in which they need to improve upon. The overarching goal is to redirect student thinking and performance to the areas where skills require further development. In all future projects and assignments, students who struggle with making good observations will engage in differentiated activities that will encourage them to use the "language of observation" more effectively in the work that they do. Students who are challenged by the skill of making meaningful inferences will engage in tailored activities that will require them to think beyond the content they are presented with. Students who have difficulty expressing themselves graphically will be assigned project-based tasks to develop their ability to think and create visually. Ideally this plan will not only allow students to build upon the skill or skills that they have already mastered, but also allow them the opportunity to focus their attention on the skills that still require further development.