

Final Report

Types of Learning Goals and their Tangible Applications

1-Project Description

The project was about understanding learning goals, the proper definition of the command terms surrounding the learning goals and how to assess these goals both teachers and students can maximize the best ways to achieve success in a lesson. As seen in our journal entries, the main crux of the project was achieved.

The main challenge to the project was organizing a time where we could all meet. We also had a group member at the end go out on stress leave so some of the final plans to create workshop materials fell through.

Please refer to Appendix 1 for journal entries.

2- Project Goals

Overall, we met our objectives with the project. We were able to go through various formative and summative assignments, demos, labs, and evaluations in order to determine the types of learning goals (acquisition, meaning making, transfer) within each.

This allowed us to better understanding how the learning goals help achieve the desired outcome in the gr.9 Science and Technology (ST) program as described in the progression of learning.

This project also helped to solidify the current materials given to students as well as identify the gaps in materials. We were able to do an overhaul on our use of command terms and select the appropriate command terms that matched our desired learning goals in a particular lesson, activity and/or evaluation.

3 – Project Outcomes

A deeper understanding, by both teachers and students, of learning goals, specific materials for gr.9 ST and the overarching learning goals will aid in a deeper understanding of concepts.

Understanding how both the science concepts and learning goals are assessed through specific marking grids/rubrics will help both students and teachers measure the deeper understanding of these goals.

All three teachers involved in this project have benefitted in that we all have a common goal through the learning goals and command terms. We will continue to collaborate in the future.

4 – Reinvestment

The results of the project have already been shared within the science department. The science department is constantly sharing ideas and pedagogical materials. We will be sharing the results with our PDIG next school year with the entire JRHS school community and the school board through the mentoring committee.

I have attached several samples of works in progress (quiz, test, lab activity) as examples. The command terms are bolded.

Appendix 1

Day 1

We looked up various learning goals (acquisition - learning information & skills, meaning making - building conceptual understanding and transfer of knowledge - in a familiar and unfamiliar setting). We had a discussion surrounding: What and how are learning goals incorporated into the materials and assessments we use and/or create? What is the implication for how we design instruction materials? What and how should we assess?

We also discussed in general a few command terms.

Afternoon: We looked at the most recent eye lab exam and the homework package given and started to evaluate the learning goals and command terms given. We reformatted the lab to reflect our learning of the day.

I was able to review the material surrounding learning goals and take a look at the categorized command terms that Rachelle and Melissa had done. I was then better able to look through the lab evaluations, lab rubrics and the tech homework package in order to give my feedback on the learning acquisitions targeted and the command terms given. I was able to reflect on my own desired learning outcomes versus the expectations set out by the government. Today allowed me to have a focus when selecting activities/labs and when developing future pedagogy.

Day 2

We categorized 40+ command terms into categories related to learning goals (acquisition, meaning making and transfer of knowledge). Some of the command terms lent themselves to more than one category. Melissa and I then discussed the learning goals for several lab evaluations. We then took several existing rubrics for labs and lab exams and dissected the current command terms. Melissa and I then divided and conquered to reformat the rubrics according to the learning goals for the lab evaluations and the categorized command terms.

I was able to day to forge ahead and look at the lab exam and the 3 lead up labs to the lab exam. Does the lab exam meet our learning goals? Which ones? Have we taught the students the proper command terms in the lab exam? Which ones need to be focused on? Are they the command terms that meet our learning outcome for the lab exam? Do our lead up labs adequately prepare our students for the learning goals? I was able to make several modifications to the material.

Day 3

Melissa and I looked at the use and lack of use of command terms in several of the gr.9 ST homework packages. We focused on the tech world homework package and the digestive system homework package. We edited the materials accordingly by adding, deleting and/or changing command terms while keeping the learning goals of these materials in mind. We were able to shift from quantity to quality of the selected questions in the homework packages. These packages now better reflect our desired learning goals for the students.

Day 4

Melissa and myself continued to work through other homework packages. This time focusing on the Earth& Space, the Cell and Nervous System units. We went through to cull questions that were repetitive or did not fit into our learning goals. Various questions with specific command terms were selected carefully with our learning goals in mind. Once again, our focus was on quality and not quantity of questions within the homework packages.

Day 5

Laura and I looked at the use of command terms in several of the gr.9 ST formative and summative evaluations. We focused on the upcoming respiratory quiz, test and mini-project. We edited the materials accordingly by adding, deleting and/or changing command terms while keeping the learning goals of these materials in mind. We focused on selecting quality questions and place an emphasize on developing a high quality challenge question in order to provide a transfer of knowledge in an unfamiliar setting. These evaluations now better reflect our desired learning goals for the students. We then backtracked to look at the digestive system unit and the some of the nervous system unit evaluations. We still have many left to improve and that will be an ongoing project for several years to come.

Day 6

Laura and I worked on revisiting Homework packages. We looked at the use or lack of use of command terms and which questions fit into our learning goals. We then culled questions accordingly. Laura and I focused on the Digestive System unit and the Excretory unit homework packages. I then revisited in the afternoon our quizzes and tests in this unit to see how the command terms in the packages lined up with the command terms in the evaluations.

Rachelle and I worked on revisiting homework packages. We looked at the use or lack of use of command terms and which questions fit into our learning goals. We then culled questions accordingly. We focused on the digestive system and excretory system units.