GRADE 9/10 LABATORY ASSESSMENT TOOL

DWIGHT ROBINSON (/USERS/DWIGHT-ROBINSON)

The Focus:

I worked with Victoria Pike, a fellow science teacher at my school for this project to increase the number of classes for the project.

We designed tools to allow teachers to assess science strand A expectations A1.4 and A1.5, which deal with the students ability to demonstrate safe and appropriate scientific investigation skills. These expectations are common to all science classes, but we previously did not formally assess them separate from other expectations. Criteria included easy to use tools to not distract the teacher from the ongoing lab and to make the tools transferable between courses. We focussed more strongly on using observations as assessment.

Tools created included: (see sample on next page)

- “Safe Laboratory Practices - Teacher Observation Table”, both as a paper template and a google document

- “Safe Laboratory Practices - Student Self-Evaluation”. both as a paper and a google form.

Key Learnings

We pioneered the tools in a grade academic 9 “Atoms, Elements, and the Periodic Table” unit and a grade 10 academic and applied “Tissues, Organs, and Systems unit” and came to the following conclusions:

- The tools worked best when the teacher focused on completing them for only part of the class during a single lesson’s activity. Hence several lab activities are required to assess all students.

- Providing students with a paper copy of the self-evaluation seemed to work better in students completing the self-evaluation than having them complete the form digitally online. The completion rate and amount of comments given was higher in the paper copy. However, the summary of students responses provided by the google form for the student self assessment was useful in informing teacher practice.

- The tools did inform us well for report comments and learning skills compared to our previous practices.

- Knowing that we were assessing them, along with the student portion, helped inform students of appropriate laboratory conduct. Their first experiences with the tools, especially in grade 9, is best kept as assessment for learning and formative.

(mailto subject out this (https://www.facebook.com/sharer.php?u=https://connex.stao.ca/classroom-catalyst/grade-910-labatory-assessment-tool) (https://twitter.com/intent/tweet?text=https://connex.stao.ca/classroom-catalyst/grade-910-labatory-assessment-tool) (https://plus.google.com/share?url=https://connex.stao.ca/classroom-catalyst/grade-910-labatory-assessment-tool)

RESOURCES

- The paper copy we provided to students: (https://docs.google.com/a/gapps.yrdsb.ca/document/d/1MCP6kwYg-QeLjzKtoaGJcjGi7HlHUf1mY61lQ5l4Lcw/edit)
- The paper form we used to record teacher observations: (https://docs.google.com/a/gapps.yrdsb.ca/document/d/1t1RcMG5jSX0W3CyaGyef77xI_vM_hZUldiMuMTStv9k/edit)
- The Google Form we used to collect student reponses: (https://docs.google.com/a/gapps.yrdsb.ca/forms/d/1m0mredAa_Ue4Qedm3CgN8LRdCf6HzFbPgLowELniL-I/edit)
- A sample class response to the google form (names removed): (https://docs.google.com/a/gapps.yrdsb.ca/spreadsheets/d/1IwEXw7MYeMIDLoSX4qIO_abZfXP8w8Qocx1-6PhCfcw/edit)

ELEMENT

- Technology Enabled Learning (/expert-elements/technology-enabled-learning)

(/classroom-catalysts) **RETURN TO CATALYSTS (/classroom-catalysts)**

STAO/APSO WEBSITE (http://stao.ca/cms/)
SEARCH (/search)
PRIVACY POLICY (/privacy-policy)
TERMS OF USE (/terms-of-use)
CONTACT (/contact)

FACEBOOK (https://www.facebook.com/STAOAPSO?fref=ts)
TWITTER (https://twitter.com/staoapso)
GOOGLE+ (https://plus.google.com/u/0/+ScienceTeachersAssociationofOntarioDresden/about)
INSTAGRAM (https://instagram.com/staoapso/)