



The Impact of Using Technology in the Science Classroom

By LeeAnn Stangeland



Background:

Froid junior high and high school has 49 students, and is located in Froid, MT. I teach all of the 7-12 grade science. My science room does not have a functioning lab, so I have been looking at ways of incorporating technology to promote engagement and achievement. I conducted my research on my 8th grade Earth Science Class that consists of 9 students.

Research Questions:

Main AR Question-

1. "What effects does using a variety of Internet applications in the classroom have on student engagement and achievement?"

Sub-Questions-

2. "What effects did using technology have on student assessment scores?", "How has the use of technology impacted my teaching?"

3. "What changes were seen in student attitudes towards learning and achievement while using technology?"

Methodology:

- Teach 3 Earth Science units without treatment
- Teach 3 Earth Science units with treatments
- **Treatments used:** Kahoot, Quizlet, Google Classroom, SIMS, and NOAA

Data Collection Methods: Instruments

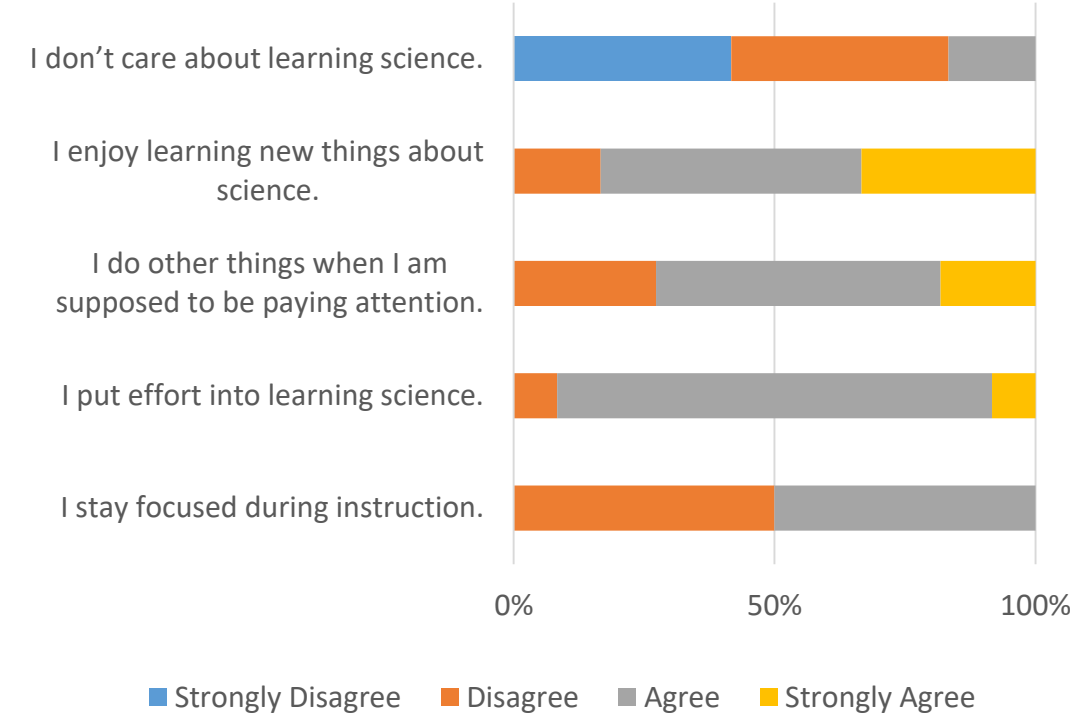
Research Questions	Student/Teacher Journals	Interviews	Pre and Post Tests	Student Work	Behavior Checklist	Surveys
1.			X	X	X	
2.	X	X	X	X	X	X
3.	X	X	X	X	X	X

Conclusion:

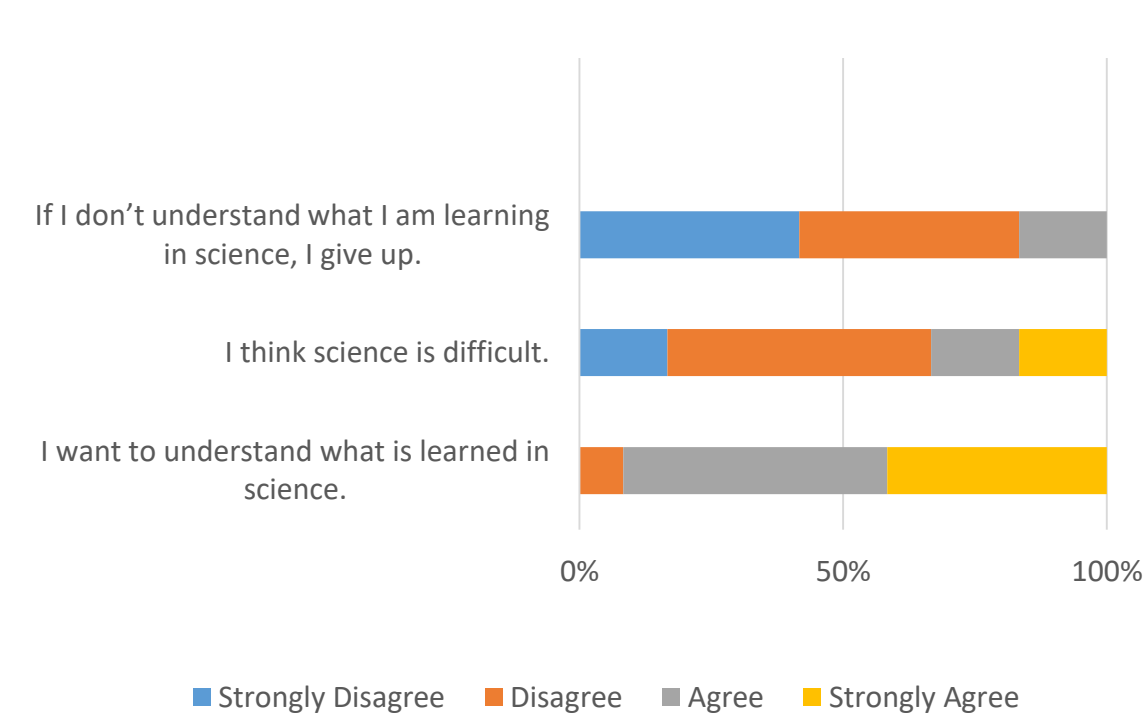
I conducted my survey and interview with a pilot class. The Likert data came from this class. In the Likert survey and Interview most students like science, and enjoy doing hands on activities. They also enjoy working in groups, as well as using technology. I am looking forward to using my treatments with my AR group soon, and analyzing my results with them.

Data Result of Likert Survey

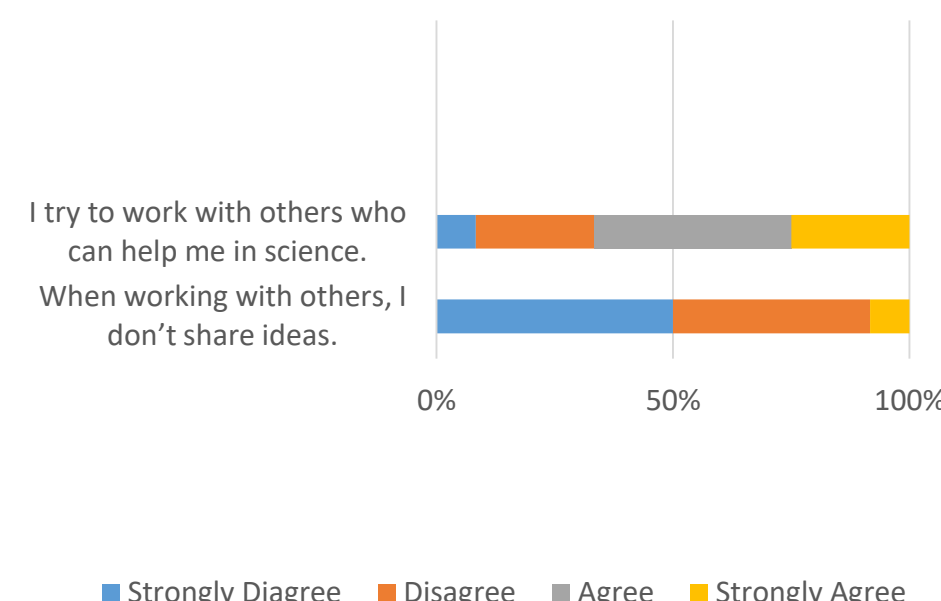
Attitude Towards Learning and Engagement



Confidence in Learning Science



Attitudes Towards Working with Others on Science



Attitudes Towards School/Science

