### EOSC 331:Mineral deposits - End of Term Survey Data

- Course began transformation in spring 2010
- An end of term survey was performed on the last day of class in 2009, 2010, and 2011
- Transformation included:
  - Reinforcing frameworks (Source/Transport/Trap; Deposits in space and time)
  - Learning goals for all classes and labs
  - In class activities
  - New lab format and activities
  - Refined Poster Project with "poster session"
  - Summative activity to reinforce frameworks

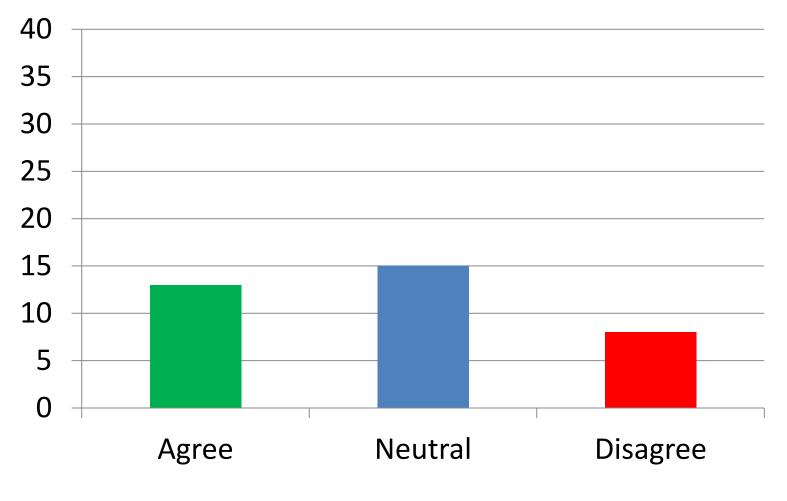
# Title: 3 years of improving student impressions of EOSC 331

Brett Gilley\*, Ken Hickey, and James Scoates

### Learning goals

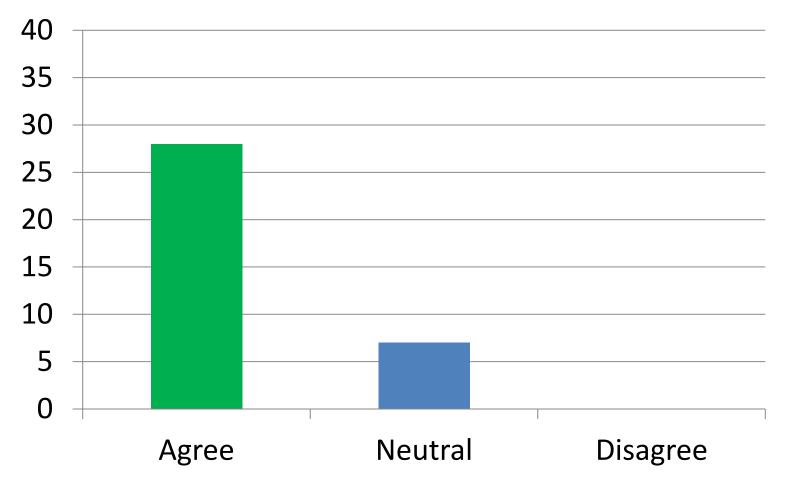
- Student response to learning goals was positive.
- Most saw benefit in lecture level goals used in class

#### 3) The *course* level learning goals help guide my studying (2009)

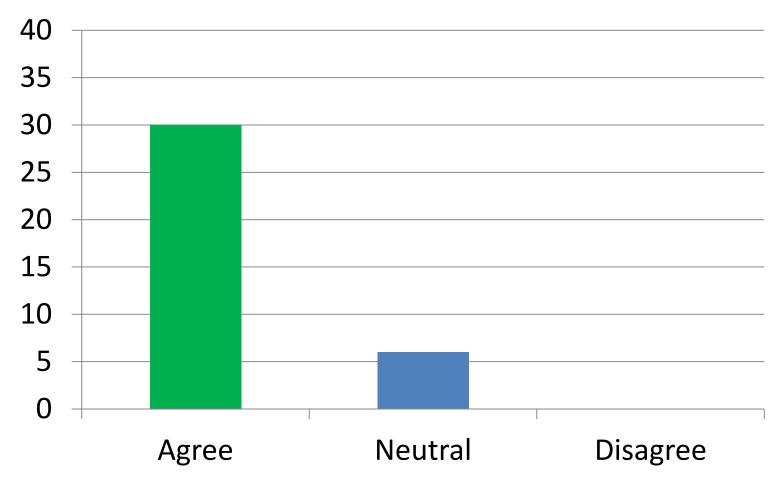


\*Lecture level goals not part of the 2009 course

#### 3)The course level learning goals helped to guide my studying (2010)



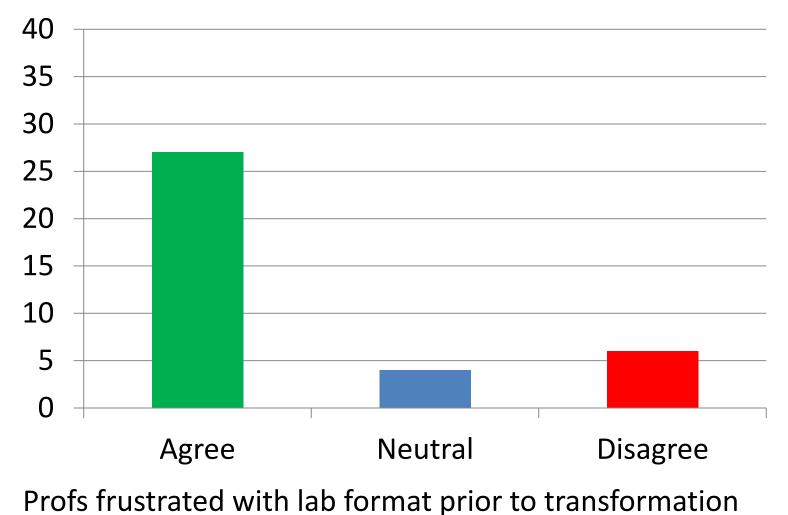
#### 4)The lecture level learning goals helped to guide my studying (2011)



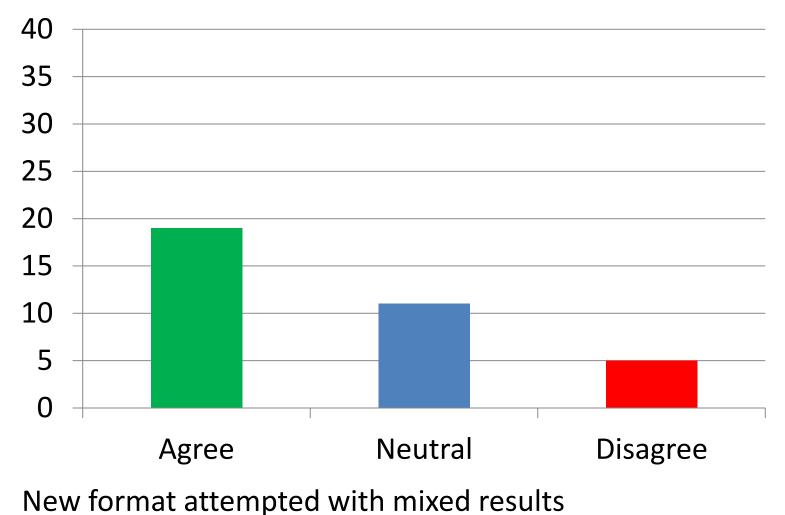
### Labs

- Student response to labs was complex
- First year of transformed labs (2010) had some difficulties
- Mostly corrected in 2011 offering
- "What part of the course is difficult, but rewarding? Why?" in 2011 ~40% of students included labs in their answer
  - "Identifying the different ore and alteration minerals in the lab was quite difficult, particularly at first, but I learnt so much form doing it and am now much more confident".
  - "The labs because when it came to the lab exam I realized how much I had learned."

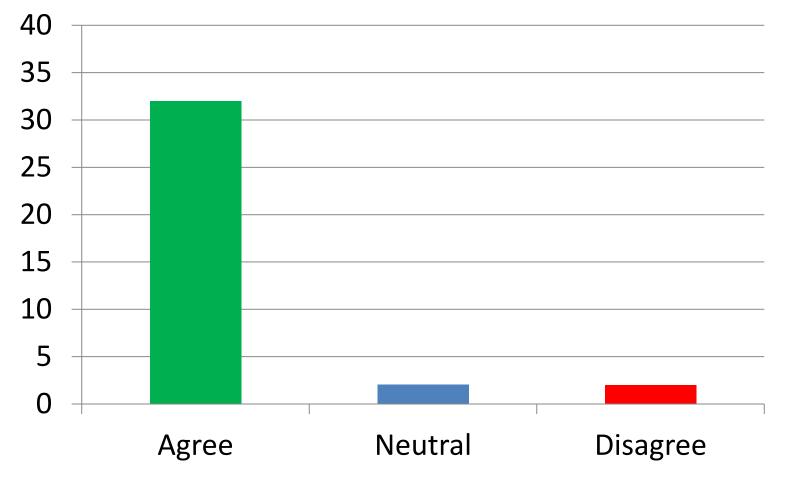
## 5) The lab format is useful to my learning (2009)



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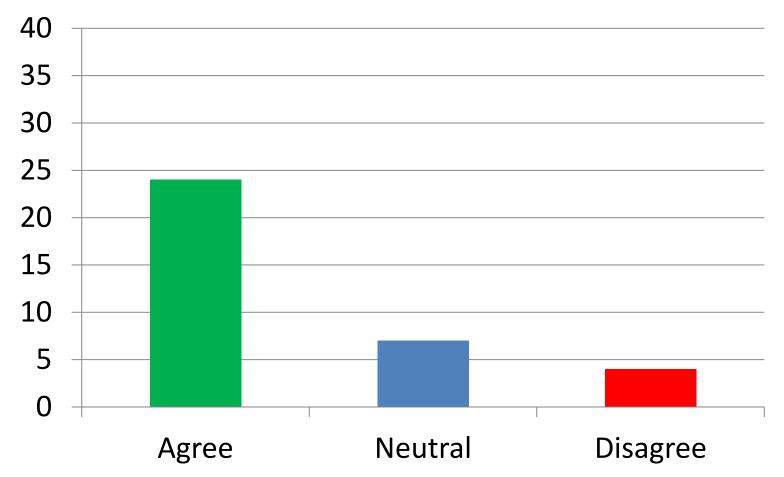


## 5)The lab format was useful to my learning (2011)



Minor changes to new format greatly reduce student frustration

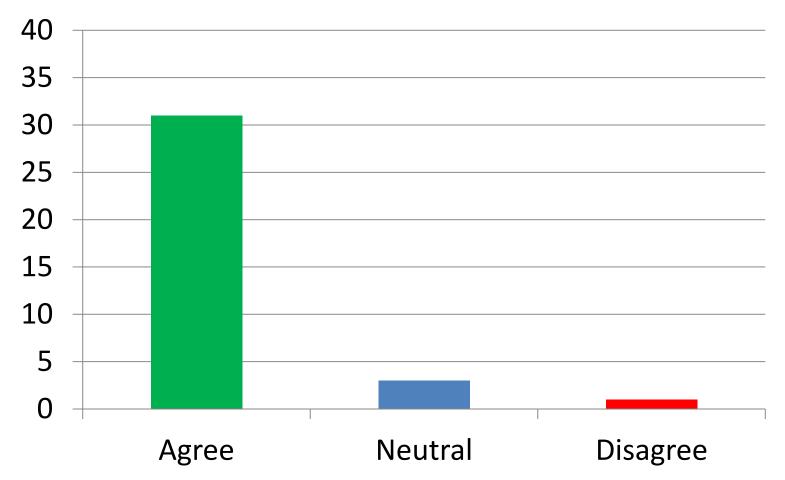
## 1) The overall format of the course is conducive to my learning (2009)



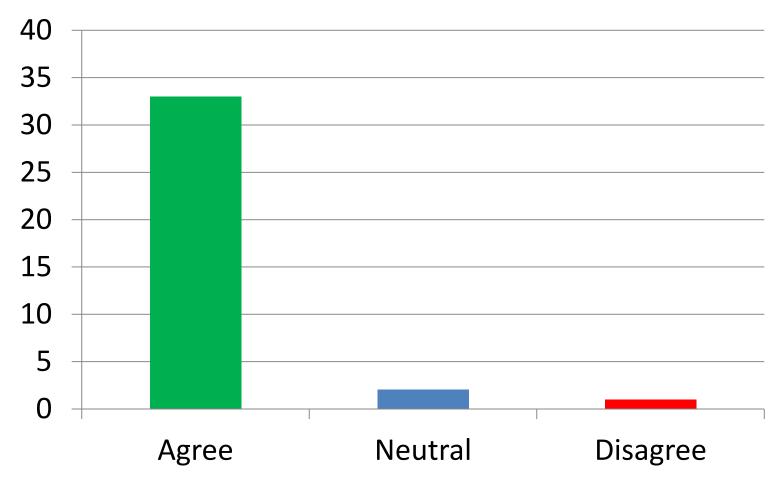
### **Overall Course Format**

- Students were happy with the course format before the transformation
- Post transformation their satisfaction increased

## 1) The overall format of the course is conducive to my learning (2010)



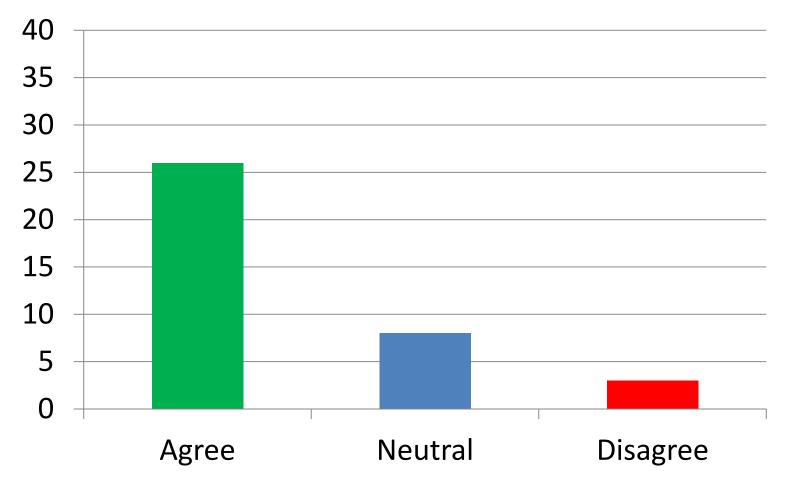
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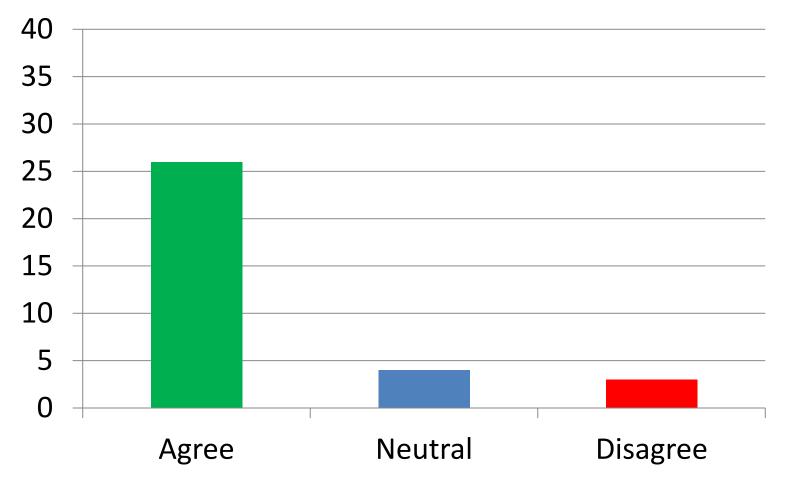
### Poster Project

 Again students found the poster project useful, but post transformation their approval increased

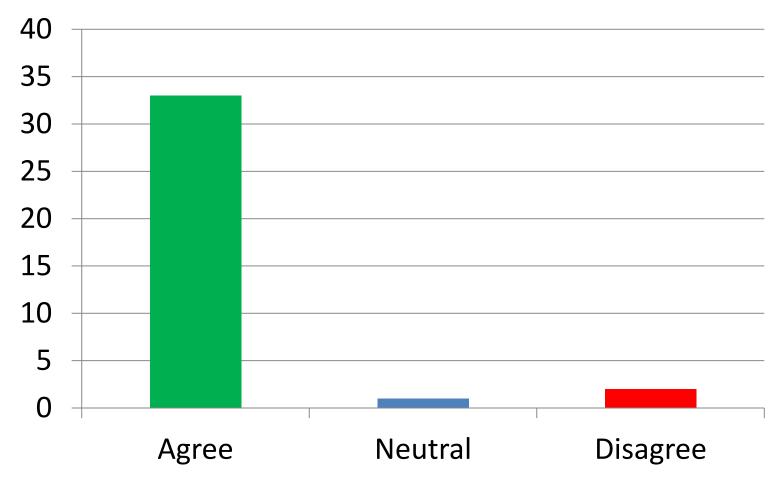
#### 6) The poster project was a useful to my learning (2009)



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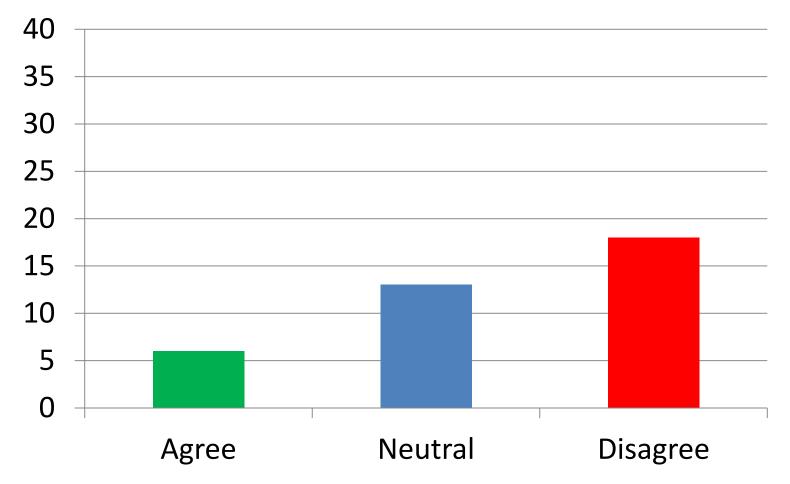
## 6)The poster project was useful to my learning (2011)



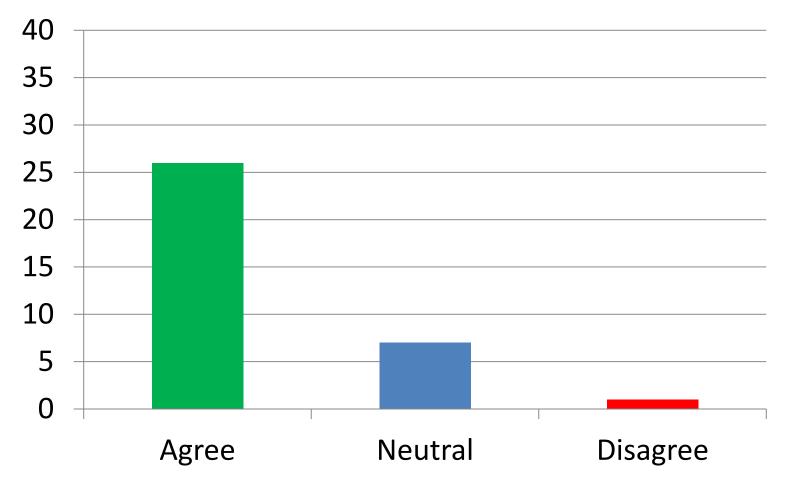
### Midterm

- Prior to the transformation students were frustrated with the midterm exam
- After aligning exam to learning goals student satisfaction increased, though there are some issues with the current year's format.

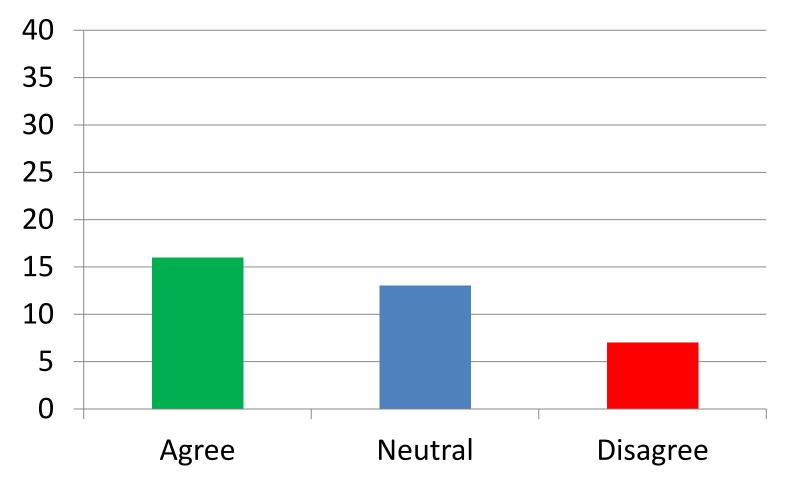
## 7) The midterm exam format and evaluation was fair (2009)



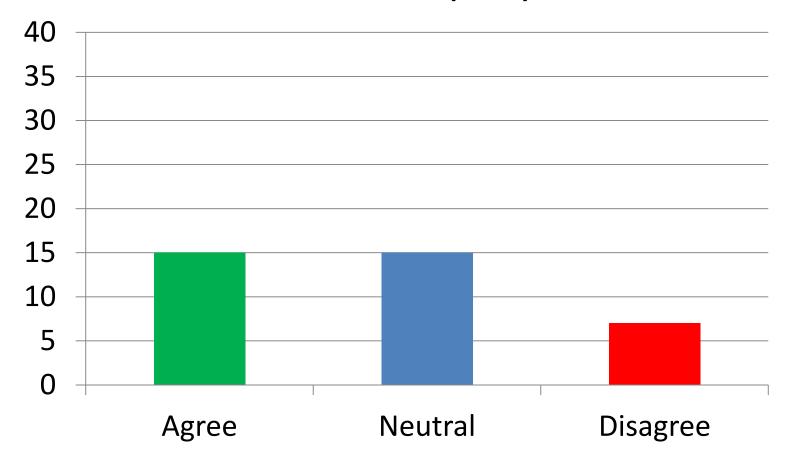
#### 8)The lecture quiz format and evaluation was fair (2010)



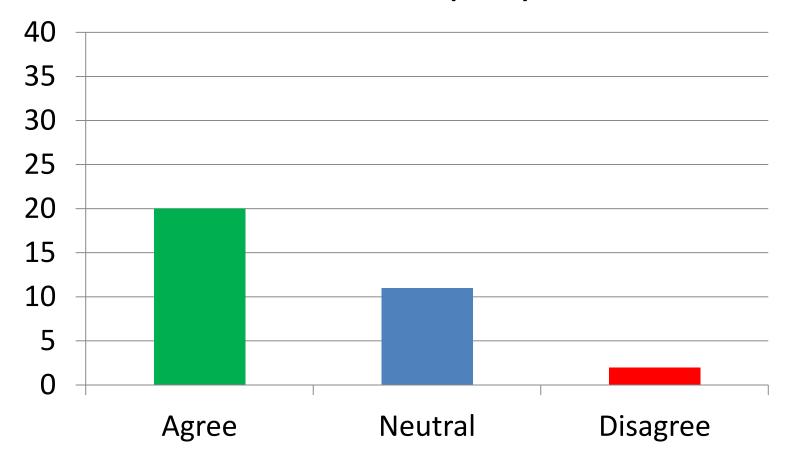
#### 10)The lecture midterm format and evaluation was fair (2011)



# 9) The grade breakdown encouraged me to concentrate on the most important aspects of the course (2009)



#### 11)The grade breakdown encouraged me to concentrate on the most important aspects of the course (2010)



#### 13)The grade breakdown encouraged me to concentrate on the most important aspects of the course (2011)

