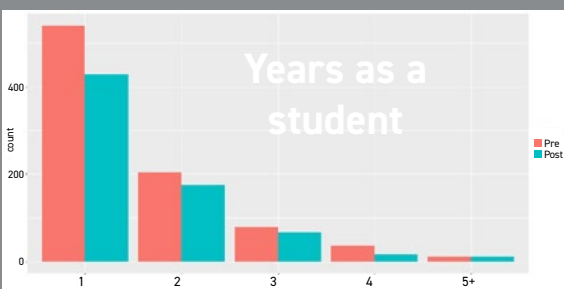
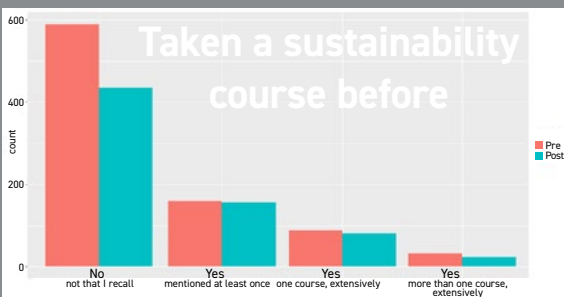
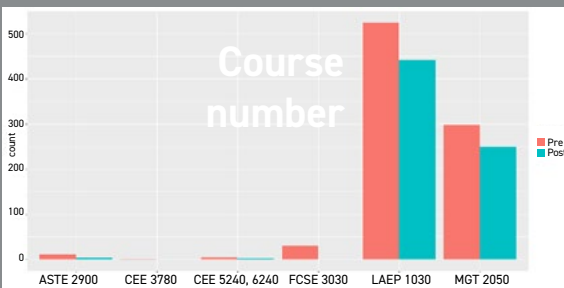
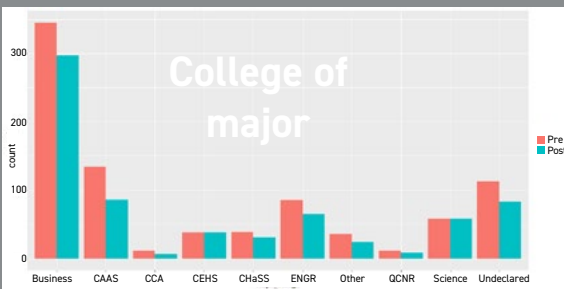


# Spring 2021 Sustainability

USU Students took the sustainability assessment as a part of a participating class. A total of 870 students with majors in every college participated in the pre-assessment in late January or early February, and 696 participated in the post-assessment in late April or early May 2021.

## Who took the pilot assessment?



# Utah State University Assessment Pilot

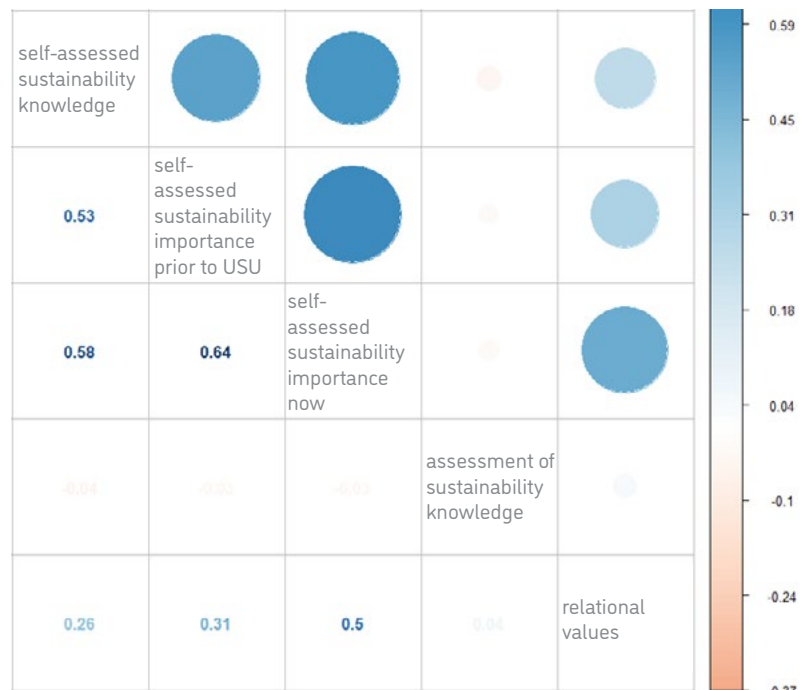
## What did the assessment measure?

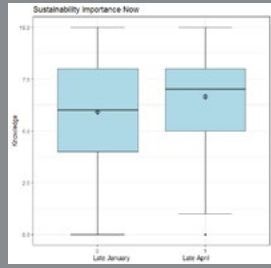
1. An 12-question Assessment of Sustainability Knowledge (ASK)
2. An 8-question assessment of students' relationship to nature (relational values)
3. Students' self-assessment of sustainability knowledge and the importance of sustainability to them

## Major Takeaways

- 1 Self-assessed sustainability knowledge and self-evaluation of sustainability importance significantly increased between pre- and post-assessments
- 2 The objective Assessment of Sustainability Knowledge and relational values did not meaningfully change between pre- and post-assessments.
- 3 The number of courses including sustainability a student had taken affected ASK scores, self-assessed sustainability knowledge, and self-assessed importance of sustainability.

The self-assessed response variables show moderate correlations. ASK scores had negligible relationships to the other variables.





## Were scores different between...

Course number? Unknown.

- More participants in more classes would help answer this question better.

College of major? Sometimes.

- Business students tended to assess their own sustainability knowledge lower.
- Engineering students scored better on ASK.
- QCNR students tended to rate the importance of sustainability higher and report higher relational values.
- More participants in colleges under represented in these data would help answer this question better.

Years as a student? Mostly no.

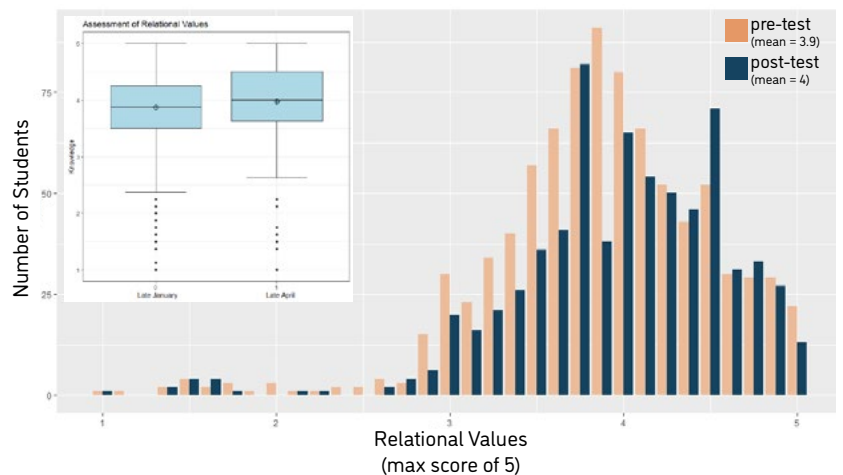
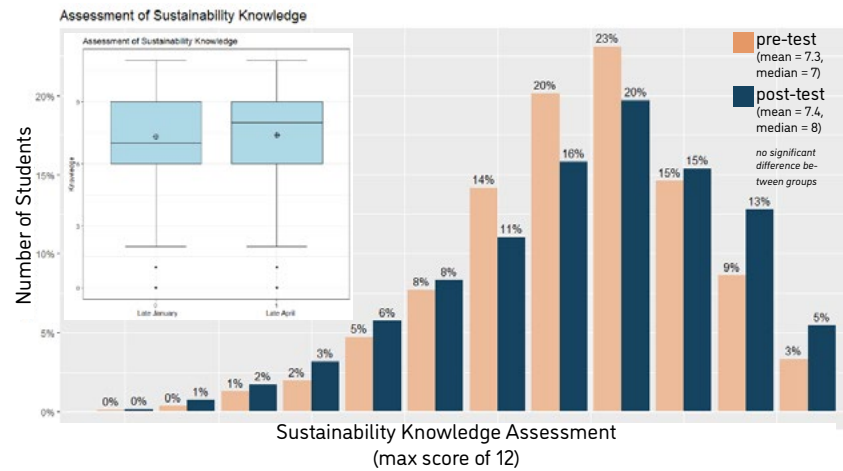
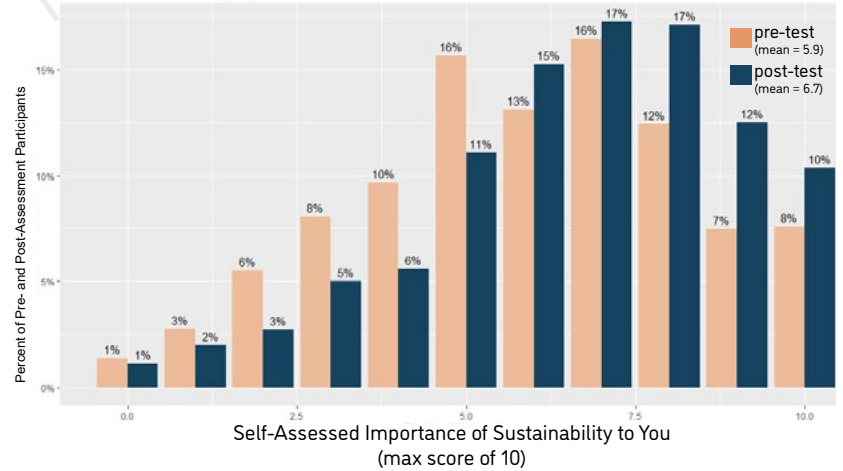
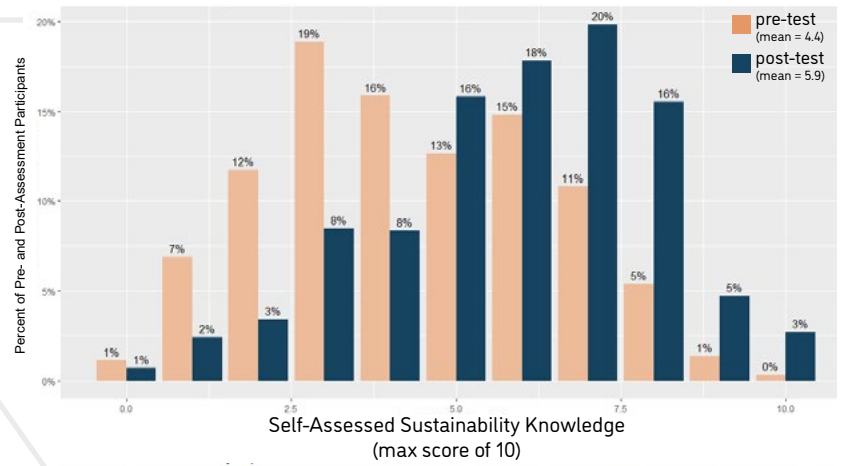
- Years as a student did not influence ASK score, self-assessed importance of sustainability, or self-assessed knowledge of sustainability when taking into account other variables, such as sustainability courses taken.

Sustainability courses taken? Yes!

- Students who had taken more than one other course in which sustainability was discussed extensively had higher ASK scores and assessed their sustainability knowledge higher.
- Students who had not taken a course that mentioned sustainability rated the importance of sustainability and their knowledge of sustainability lower.

Who has taken sustainability classes?

- Students who have been at USU 5+ years, consider sustainability important, and have higher ASK scores are more likely to have taken a sustainability class.

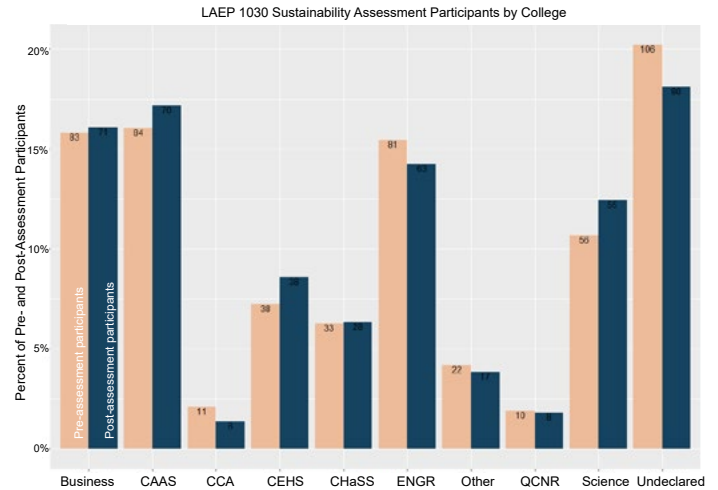


# LAEP Results

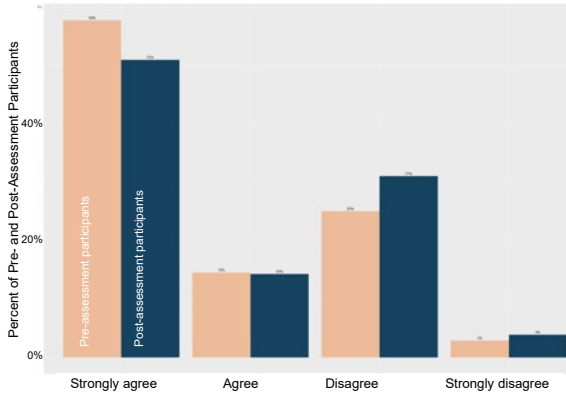
A total of 524 students completed the pre-assessment, and 442 students completed the post-assessment from LAEP 1030. More males than females completed the survey.

Students from majors in every college responded. Low numbers from the Caine College and QCNR make college-specific results for those colleges unreliable.

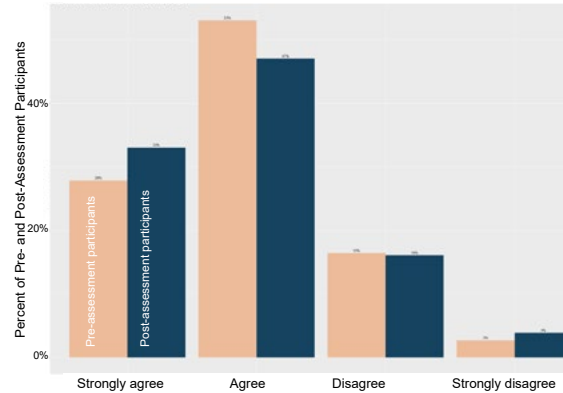
	Pre-assessment	Post-assessment
Female	185	163
Male	331	271
Transgender or gender not listed	8	8



I believe my actions have an influence on global warming and climate change.

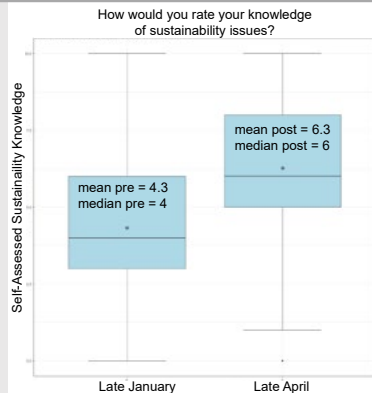


Human beings are responsible for global warming and climate change.



Students answered two questions related to self-efficacy. The results did not substantially and significantly change between pre- and post-assessments.

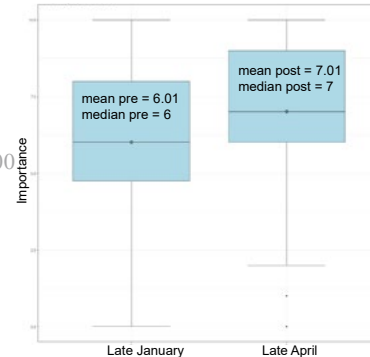
Students rated their own knowledge of sustainability and the importance of sustainability from 0 to 10. Self-assessed sustainability knowledge and importance of sustainability significantly increased over the course of the semester.



Wilcoxon rank sum test with continuity correction

p-value < 2.2e-16  
95% CI: -2.00, -2.00

How important is sustainability to you now?



Wilcoxon rank sum test with continuity correction

p-value < 3.59e-11  
95% CI: -1.00, -1.00

Students also completed a 12-question assessment and answered eight questions on relational values of human relationships to nature. Although the p-values for a change in median/distribution were significant, the changes were too small to be substantial. Accumulated changes may become more substantial for students who take multiple sustainability-related courses.

## Assessment of Sustainability Knowledge Scores (0-12)

mean pretest = 7.36  
median pretest = 8

mean posttest = 7.58  
median posttest = 8

### Wilcoxon rank sum test with continuity correction

p-value = 0.02  
95% CI: -1.00, -0.00

## Relational Values (1-5)

mean pretest = 3.91

mean posttest = 4.06

### Wilcoxon rank sum test with continuity correction

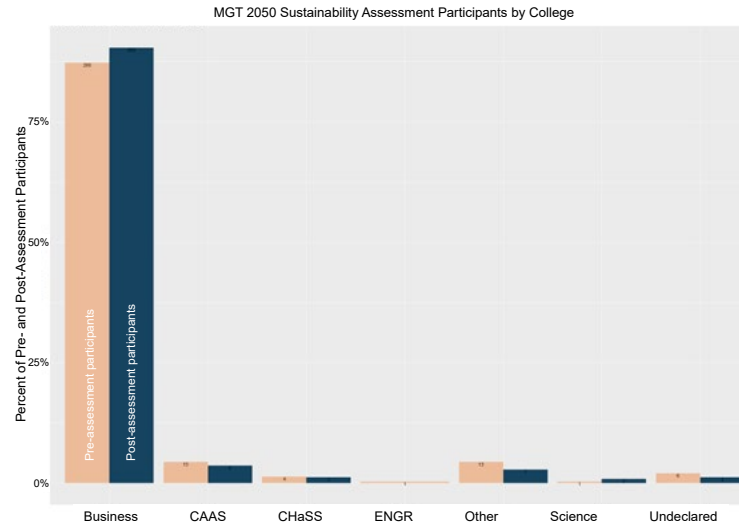
p-value = 5.05e-05  
95% CI: -0.25, -0.12

# MGT 2050 Results

A total of 298 students completed the pre-assessment, and 249 students completed the post-assessment from MGT 2050. More males than females completed the survey.

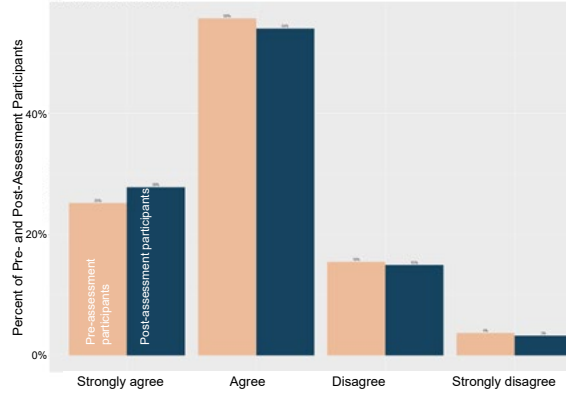
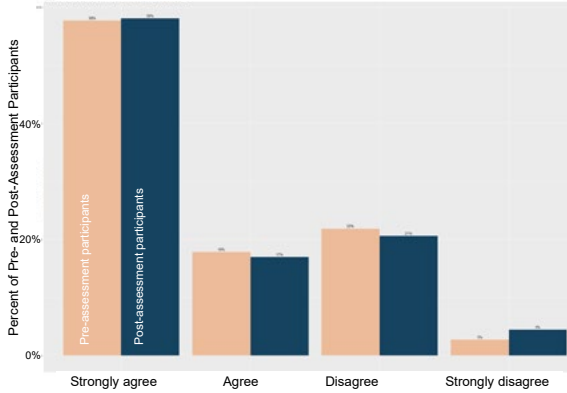
Students from majors in five colleges responded. The majority had majors in the Huntsman School of Business.

	Pre-assessment	Post-assessment
Female	111	88
Male	184	156
Transgender or gender not listed	3	5



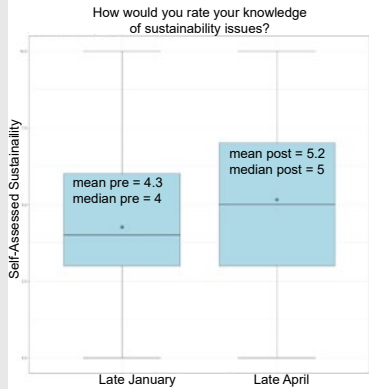
I believe my actions have an influence on global warming and climate change.

Human beings are responsible for global warming and climate change.

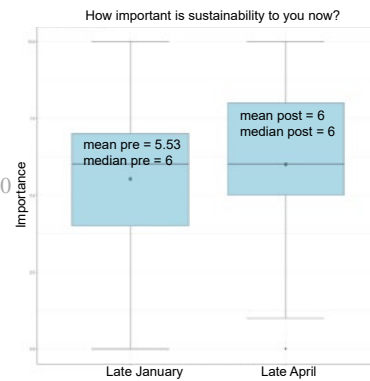


Students answered two questions related to self-efficacy. The results did not substantially and significantly change between pre- and post-assessments.

Students rated their own knowledge of sustainability and the importance of sustainability from 0 to 10. Self-assessed sustainability knowledge significantly increased. The distribution of the importance of sustainability changed significantly but not substantially over the course of the semester.



Wilcoxon rank sum test with continuity correction  
p-value < 1.57e-06  
95% CI: -1.00, -1.00



Wilcoxon rank sum test with continuity correction  
p-value 0.01  
95% CI: -1.00, -0.00

Students also completed a 12-question assessment and answered eight questions on relational values of human relationships to nature. The p-values for a change in distribution were not significant.

## Assessment of Sustainability Knowledge Scores (0-12)

mean pretest = 7.14  
median pretest = 7

mean posttest = 7.03  
median posttest = 7

## Wilcoxon rank sum test with continuity correction

p-value = 0.68  
95% CI: 0.00, 0.00

## Relational Values (1-5)

mean pretest = 3.80

mean posttest = 3.88

## Wilcoxon rank sum test with continuity correction

p-value = 0.33  
95% CI: -0.13, 0.00