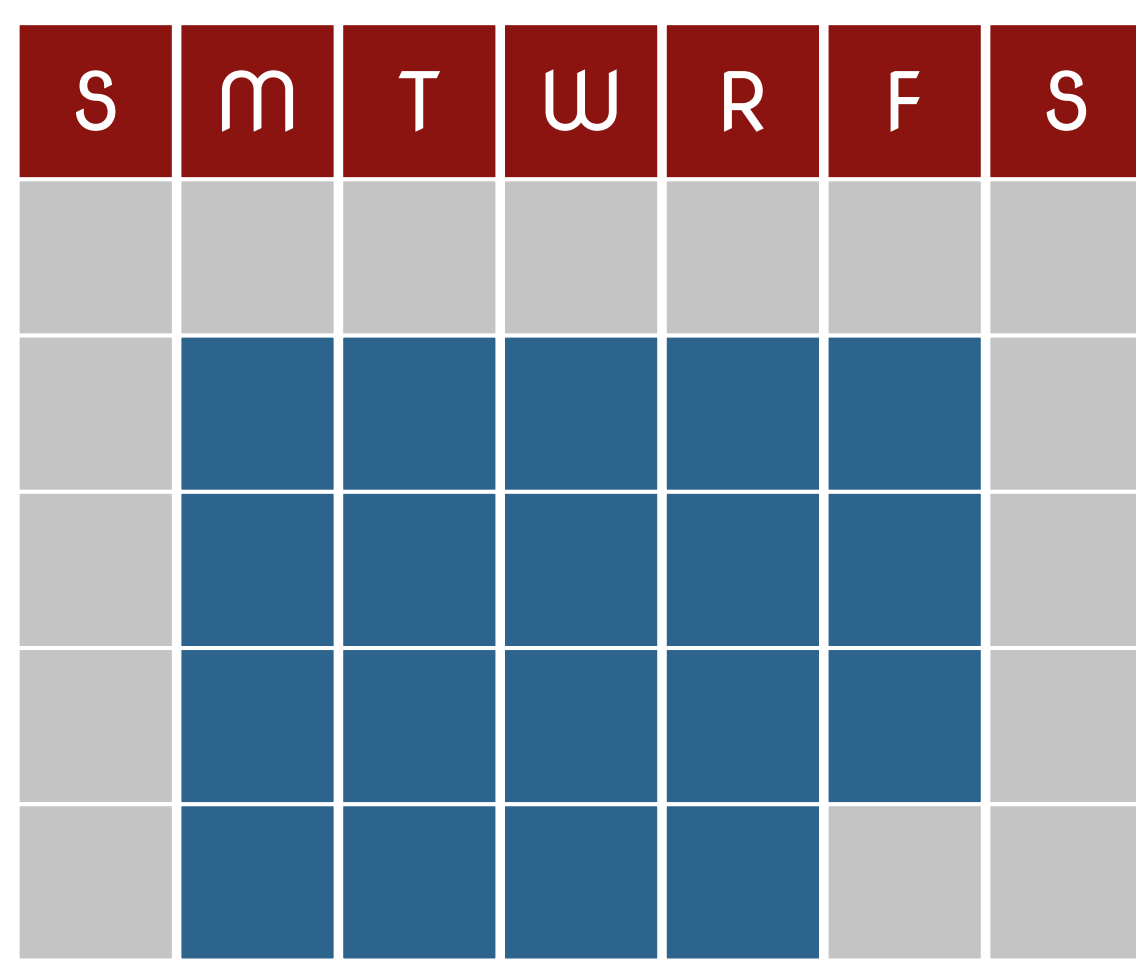


# STEM Careers Infographic Project (SCIP)

Brittany Ann Kos  
ATLAS Institute, University of Colorado Boulder



## About SCIP



SCIP was 4-Week project for 8th grade students. It was a self-guided project that taught students about different STEM careers. The students were required to **pick a STEM career**, **research** it in-depth, **create** an infographic about it, and **present** it to the class.

### Day 1

Infographics are introduced and the different levels of degrees are explained.

### Day 2

Students pick a career and start their research.

### Days 3-5

Students learn about organization and flow of information, typography and color theory, and data visualization.

Student start creating their infographics.

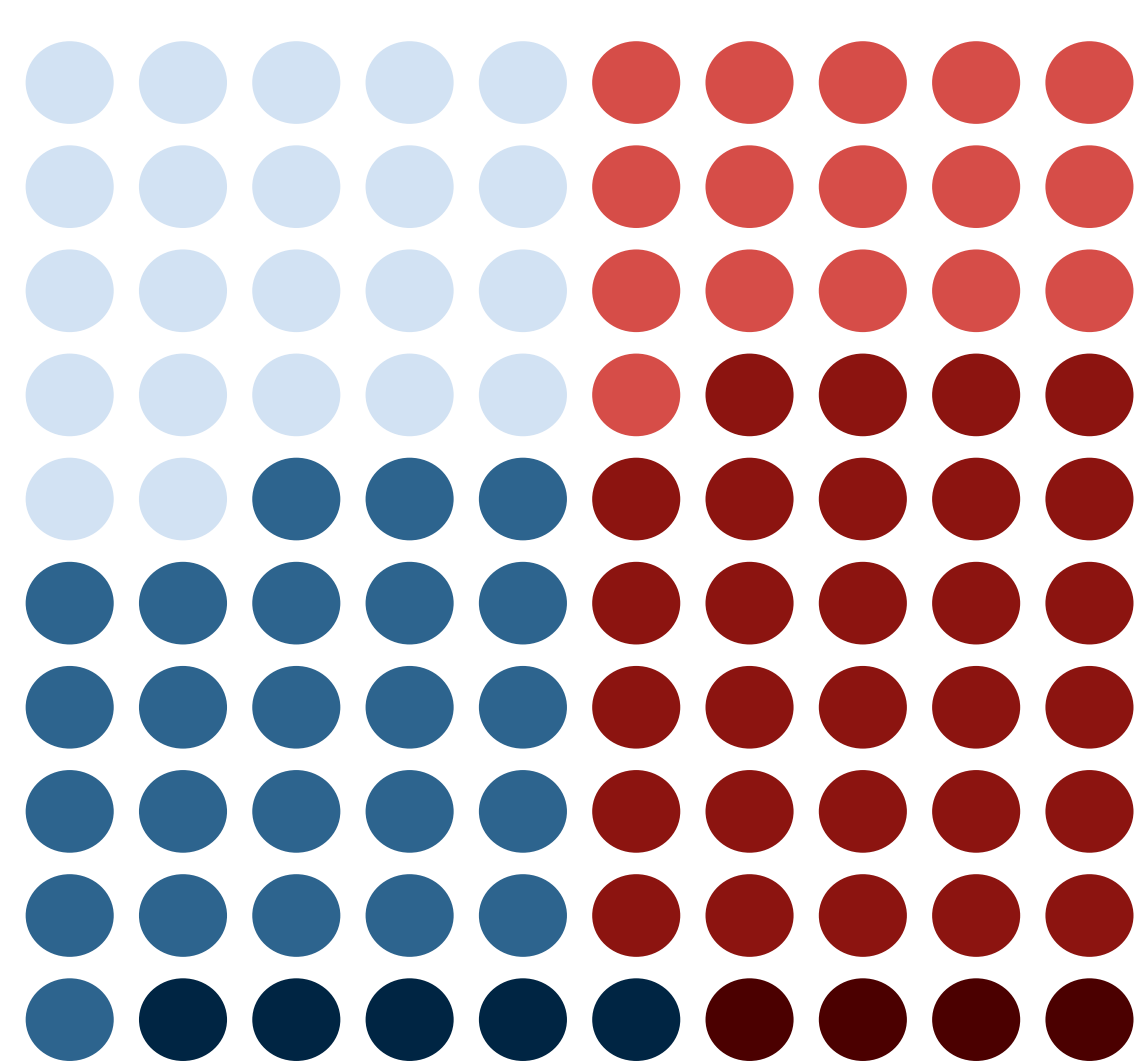
### Days 6-8

Students continue working. Students peer review each other's infographics.

### Day 9

Students present their infographics to the class.

## Importance



**78%** of the students who participated in SCIP are considered minorities in the STEM fields

- White Males and Females
- Hispanic/Latino(a) Males and Females
- Other Ethnicities Males and Females

- A large proportion of the students had **little exposure to STEM careers** culturally or at home
- Many students **do not have access to technology** at home
- Students at this age are **not aware of their career and college options**

SCIP addressed each of these problems in a manner that provided students with relevant and practical information

## Abstract

STEM education has been a primary focus in the St. Vrain Valley School District (SVVSD), in Longmont Colorado; however, it can become a challenge for teachers to explore different STEM career opportunities with their students because of their lack of expertise or the student's wide range of interests. As a solution, we created the "the STEM Careers Infograph Project" (SCIP). This project allowed for students to explore their own STEM interests, while simultaneously learning data visualization, digital literacy, and research skills. We piloted the project in the spring of 2014, with six 8th grade science classes, which estimated about 180 students. The project was incredibly successful; we received positive reactions from a majority of the students and in most cases, an extreme level of interest in doing similar projects in the future. We will be repeating this project in the spring of 2015, with a few adaptations and a formal evaluation scheme.

## SCIP Goals



**Career Preparation**  
Inform students about unique, interesting, and attainable STEM careers



**Active Learning**  
Support the students to research their career and create their infographic in the classroom



**Peer Instruction**  
Provide the students with tools to teach each other about the different STEM careers

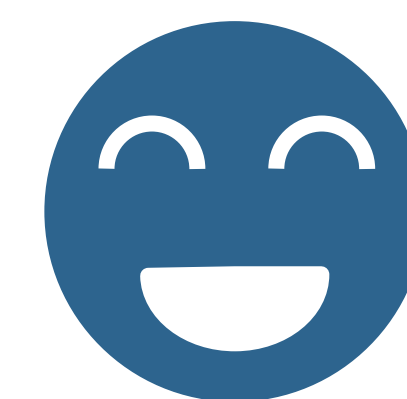


**Have Fun**  
Encourage the students to be creative with their infographics and explore their STEM interests

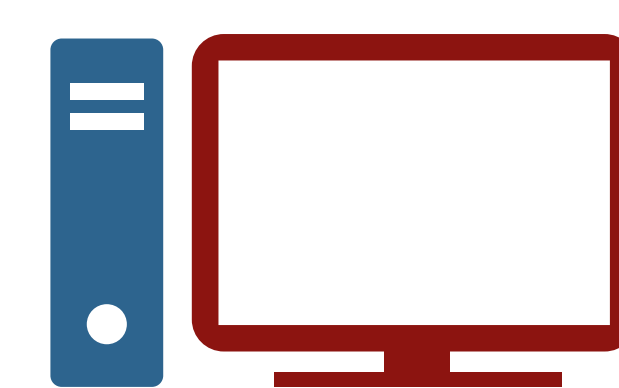
## Findings



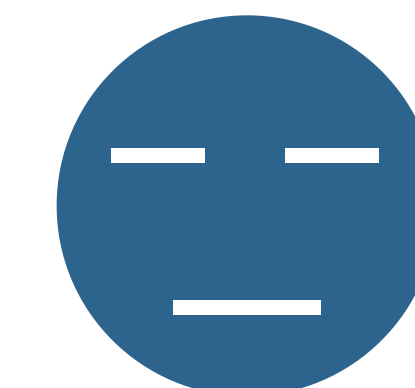
Made students think about their future and the possibility of a STEM career



Fostered interest in students who were already curious about STEM careers



Taught technology literacy in a fresh way



Less impactful to students who were interested in non-STEM careers, such as music or art



There were some software frustrations and a mild learning curve for students



Overall, it was a successful project! We had tons of positive feedback; students enjoyed creating infographics, had fun, and learned some new facts about STEM careers

## Acknowledgments

The author would like to thank the National Science Foundation for supporting the work in this poster under Grant No. 0841423.

The author would also like to thank Liz Sims of St. Vrain Valley School District for volunteering her class as the testing ground for SCIP and her generous and unwavering support in executing the project.

**Arachnologist**

Scared of spiders? Imagine working with them!

An Arachnologist is a person who studies spiders or other related animals that are called arachnids.

Ohio State University and Indiana University are the most recognized and successful universities for arachnology.

Arachnologists usually work alone, in the zoo or they're part of a company.

Arachnologists work mostly with deadly spiders including tarantulas, black widow and brown recluse.

Arachnologists estimate that about 15,000 arachnids are extinct.

An arachnologist's average salary is \$60,000 per year.

Arachnologists travel out the country at least 2 or more times to study.

There are a large number of spiders in the world. Some are very poisonous and some are very helpful to the population.

Ronald V. Dvorak Jr. is one of the most successful arachnologists. He has studied over 400 species and has traveled to South America to study one of the most poisonous spiders.

**Work Cited**

- \* <http://marshfieldinstitute.com/2013/07/31/american-arachnological-society-awards-2013/>
- \* <http://www.arachnology.com/>
- \* <http://wiki.biolab.org/wiki/Arachnology>

Arachnid Population (70,000 Species)

**Astrophysicist**

What is an astrophysicist? An Astrophysicist is the study of objects found in space. It is also one of the oldest fields of study.

Types of Education You will need a bachelor to continue. You will need a PhD to be able to perform research. You will need 3 levels of university education.

Salary The average salary for a group is \$95.27 per hour. The average starting salary for a professor is \$9,000 a year.

US: 110,000 South Africa: 227,073 Australia: 107,008

Stephen Hawking was a quantum physicist that discovered many things. (Theories)

He has a major impact on scientists because of the theories he discovered. (Thinking) (Theories) It is a black hole radiation is caused by black holes.

I chose this topic because I knew that I had to do with space and I am interested in space. Although I don't like how there is so much math involved.

Thanks for watching!

www.ub.edu  
http://www.ub.edu  
http://www.ub.edu  
http://www.ub.edu  
http://www.ub.edu