STEM Careers Infographic Project (SCIP)

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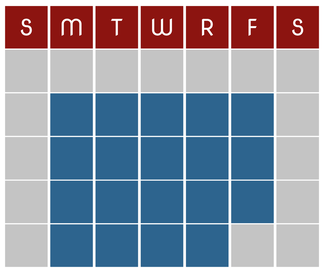
About SCIP



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.

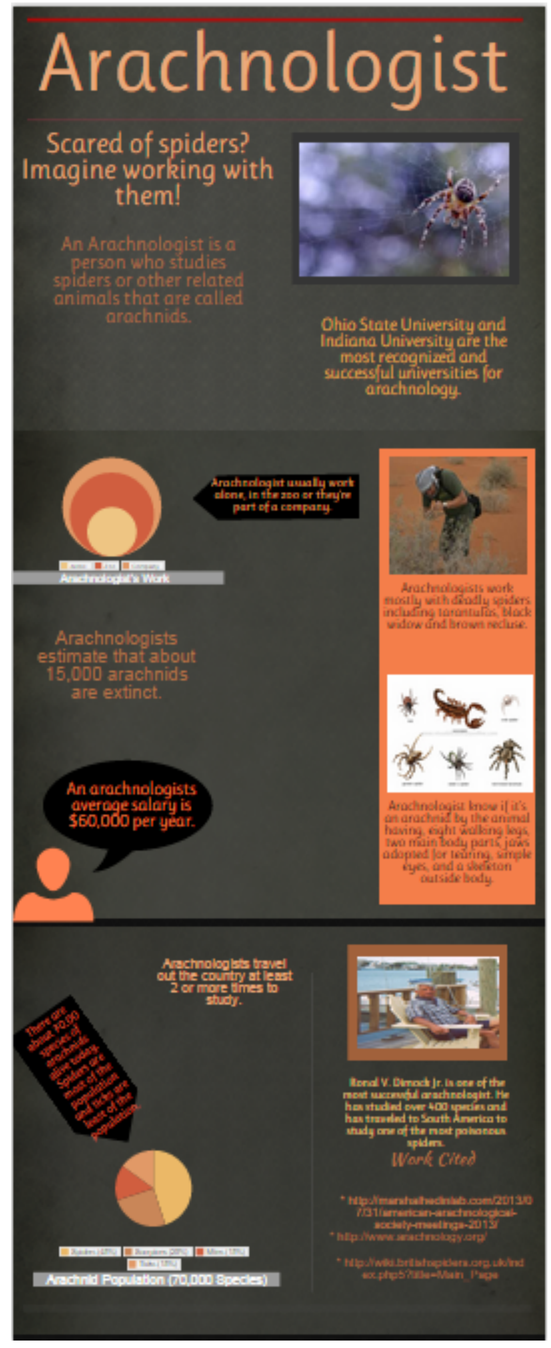
SCIP Goals

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

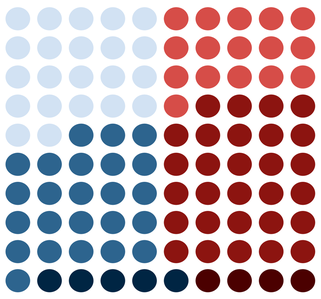
Active Learning
Support the students to research their career and create their infographic in the classroom

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



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

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

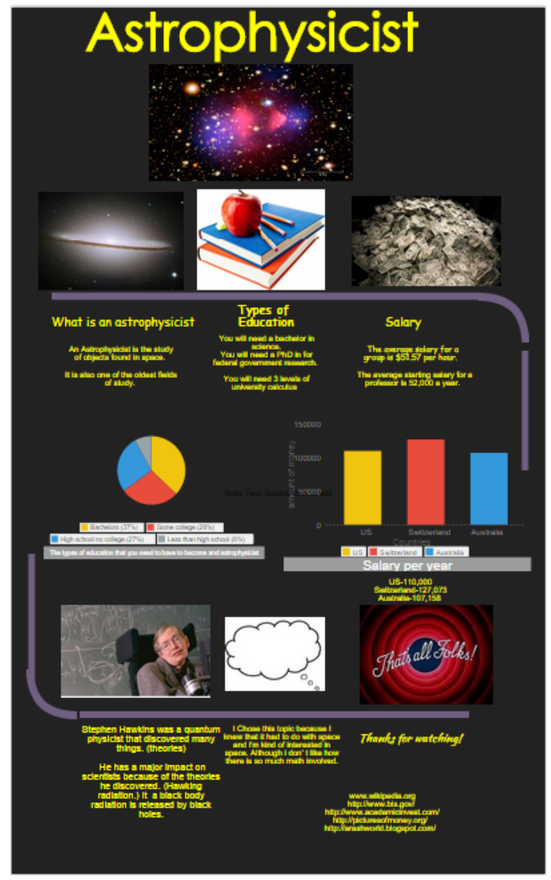
Less impactful to students who were interested in non-STEM careers, such as music or art

Taught technology literacy in a fresh way

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

A+

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



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.

Acknowledgments

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