KENAN FELLOWS PROGRAM
FOR TEACHER LEADERSHIP

SCHOOL TO WORK

Amanda Clapp

📕 **SUBJECT/COURSE:** Science Literacy	⭐ **GRADE LEVEL:** 8	⏱ **DURATION:** 3-4 weeks

STANDARDS

- SCI: NGSS Science Practice 8. Obtaining, evaluating, and communicating information
- ISTE: Digital citizen, Knowledge constructor, Creative communicator
- W.8.5 Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

Key Vocabulary: STEM, career, collaboration, research, skill set, education, training

SUMMARY

Students will identify their dream jobs based on their current interests and meeting with professionals from the community. In a group, they will research the specific requirements for that job, demonstrate a project that would help prepare for that job, and interview someone currently doing that work. They will present their dream job in a student-run career fair for other students.

Success Skills: Critical thinking, Creativity, Collaboration, Communication, Information literacy, Media literacy, Technology literacy, Flexibility, Leadership, Initiative, Productivity, Social skills

DRIVING QUESTION

What do I need to learn in order to prepare for my dream job?

ENTRY EVENT

Students tour company and interview employees.

Key Student Questions:
- What careers are there?
- What different things can I do when I grow up?
- What skills do I need for the jobs?
- What education do I need for the jobs?

Formative Assessment:
- Develop Need-To Know Questions using padlet.com

PUBLIC PRODUCT

Students will present their dream job in a career fair setting for other students.

Personal: Dream job

Group: Information about that type of job, the training, and the education necessary. They will be presented visually and have a presentation component.

Rubric: STEMwork Project Rubric

RESOURCES

- – My Career Project – Language Arts Curriculum for Career Exploration
- – https://www.bls.gov/k12/content/teachers/pdf/choosing_a_career.pdf
- – What Is Your Ideal Dream Job? - Quiz
- – Career Clusters Activity
- – Unemployment rates and earnings by educational attainment : US Bureau of Labor Statistics
- – Explore Occupations and Careers
- – Interest Assessment Questions

PROJECT OVERVIEW

MILESTONES				
Students determine their career choices and sort into groups based on choices. Group building activity.	Student Research into the job.	Feedback from an expert and development of the product.	Finalization of product and preparation for presentations	Final presentation and reflection
Key Student Question	**Key Student Questions**	**Key Student Questions**	**Key Student Question**	**Key Student Question**
What are all the different choices?	Who can I ask about my career? How do we split the work?	Who does jobs like this? What do I need to do to be successful?	How will we present our information?	Did I communicate effectively?
Formative Assessment(s)	**Formative Assessment(s)**	**Formative Assessment(s)**	**Formative Assessment(s)**	**Formative Assessment(s)**
– Group contract – Notes on variety of presenters (Individual) – Dream Job Exploration poster and feedback using nowcomment.com	– Group task log completed to split work between group members – Presentation Plan started – Research completed – Mentor contacted	– Mentor interview – Project examples for students interested in the career	– Tuning protocol – Revisions based on feedback	– Product Rubric – Presentation Rubric – Audience Feedback

PROJECT CALENDAR

Day One:	– What do you want to "be" when you grow up? – Gallery Walk: Posters of people doing different work. – Students record Observations/Questions
Day Two:	– What work fits you best? – Online Career Test (16 personality types to help us understand where we might fit.)
Day Three:	– **Entry Event**: Visit partner company – Work with different departments, ask about training, personality, job preference, etc.
Day Four:	– What jobs are you interested in? – Visit NC Works website
Day Five:	– Meet group: Group can be students interested in related jobs – Research individual job posters – Group Contracts
Day Six:	– Individual Job posters – Contact interviewees
Day Seven:	– Feedback on posters – Contact interviewees
Day Eight:	– Interviews – Presentation prep
Day Nine:	– Presentation prep
Day 10:	– Presentation prep – Peer feedback and revisions
Day 11:	– Presentations: Peer feedback and revisions
Day 12:	– Job Fair presentations

NOTES

This unit provides a structure for a project-based unit that explores STEM-related jobs. As a project-based learning experience, the students create their own direction based on their interests, work collaboratively, interact with their community, and produce a public product. In this case, students begin the unit by exploring their career interests and by visiting a local manufacturing facility. As they focus on specific STEM-related skills, they form small groups of similar interests and contact a local person in that career. They combine their interviews with their mentor and the research they did on their "Dream Job" to make a group presentation about their cluster of careers to present to their school.

I used TekTone but you can connect with any local industry in your community.

ABOUT THE AUTHOR

Amanda Clapp is a 2019-20 Kenan Fellow. She teaches at The Catamount School, which part of Western Carolina University and Jackson County Schools. Her fellowship is supported by a grant from the Appalachian Resource Commission, and she completed her internship at TekTone.

Group Task Organizer

Task	Individual or Group?	Who is doing it?	Where are the notes?	Due date
TekTone Notes	Indiv			
Poster research	Group			
Poster creation	Group			
Poster feedback	Individual			
Mentor Contact				
Mentor Interview questions				
Presentation visual				
Presentation script				
Presentation handout				
Feedback				
Reflection				

Site Visit Notes (Entry Event)

Person: Job: Ideas: Questions:	Person: Job: Ideas: Questions:	Person: Job: Ideas: Questions:
Person: Job: Ideas: Questions:	Person: Job: Ideas: Questions:	Person: Job: Ideas: Questions:

Reflection

I used to think…	But now I think…

Dream Job Exploration (Milestone 2)

Overview: Create a Poster to describe the different jobs that you like.

Introduction:

1. What are some jobs you're interested in?

Not sure? Good. It's time to explore.

2. What are some things you're good at?

3. Take some quizzes.
    a. My Career Project – Language Arts Curriculum for Career Exploration
    b. What Is Your Ideal Dream Job? - Quiz
    c. Career Clusters Activity

What results did you get that really fit your interests?

Research:
Which of the jobs listed above sound interesting? Choose between 2 and 5 to research a little more.

	Job interest 1	Job Interest 2	Job Interest 3
Job Description			
Required Skills			
Required Education/Training			

Communicate:
Create an infographic to share your research.
- Choose from http://piktochart.com, http://venngage.com, or http://canva.com
- Your infographic must include: the job description, skills, and education for each of your jobs and at least one picture.
- Follow classroom procedures for sharing with teachers.
- Post your infographic on NowComment and invite the members of your group.

Provide Feedback:

On NowComment, comment on your group members' infographics.

Possible responses could start with…

- I like how you….
- I hadn't thought about….
- Have you considered….

Reflect:

Efficiency	Learning	Collaboration
I was/ wasn't able to work efficiently on the project without help because…..	I learned/didn't learn about things I was interested in…	I was able to work with others because…
Some examples are….	Some examples are….	Some examples are…

Mentor Contact and Interview Log (Milestone 3)

Name	Contact Information	Dates Contacted	Notes

Interview date and time:

Will it be phone/virtual/ in person?

Interview Questions: Interview Answers/Ideas

Presentation Plan (Milestone 4)

Important Information
- ❏ Salary:
- ❏ Training:
- ❏ Opportunity for improvement:
- ❏ Job description:
- ❏ Risks:
- ❏ Opportunities in Western NC:
- ❏ Other information:

Visual Sketch:

Handout Plan (½ page):

Script/ Talking Points:

STEMWork Project Rubric

	Feedback *Feedback to help the team improve.*	At Standard	Feedback *If the product exceeds expectations, how does it do so?*
I can use tools to determine a job or career I am interested in.		❏ I have used >2 sources to determine my interests in terms of careers. ❏ I have created a list of possible jobs ❏ I have narrowed my list of possible jobs based on my interests.	
I can use technology, interviews, and written sources to determine the skills needed for a job.		❏ I have used >2 websites to learn about the details of my chosen job. ❏ I have used >2 websites to learn about the skills and education necessary for my chosen job ❏ I have interviewed people in my chosen job to learn more about what they do and how they go there.	
I can communicate my research with others, sharing the job details and the skills needed for it.		❏ I have developed a visual to display the facts about my job and the skills necessary to do it. ❏ I have identified local companies or institutions where my job is available ❏ I have developed a presentation that incorporates the visual and more to explain the STEM skills, requirements, and responsibilities for my chosen job.	

STEMWork Collaboration Rubric

	Feedback *Feedback to help the team improve.*	At Standard	Feedback *If the product exceeds expectations, how does it do so?*
I can set and follow ground rules in a team.		❏ I have worked with my team to establish roles based on our strengths and interests ❏ I have signed, discussed, and followed the team contract ❏ I have followed the expectations in the team	
I can plan collaboratively, communicating with my team about progress.		❏ I have worked with my team to assign roles and develop a timeline for our work. ❏ I have communicated my progress on a project with my team ❏ I have helped problem solve and assign new roles as needed.	
I can work with my team to develop a balanced presentation		❏ I have participated in the presentation planning. ❏ I have a section of the presentation that is fair, so everyone talks, listens, and asks questions in my group.	