### Project Title: Travel history on map

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**Class:** St. George CMAP 2017

| Project Description | In this project, the students will need to create a local animal habitat map using ARCGIS online, and show these online maps to the fourth grade students to teach them the Utah environment and animal habitat, and how these different animals adapt to different environments.  

The following information should be included in the map:  
1) The students need to survey three different environmental types of Utah: Desert, Forests, and Wetland, and add the places they surveyed on Arcgis online.  
2) The students also need to observe and collect the data of the animals appearing in these above different Utah environments. They need to use Google to find the characteristic of these animals.  
3) Each place should also attach several photos and text descriptions THROUGH the attribute table of the map. |
| Community Issue or Problem Selected -How project evolved? | Fourth grade students are learning Utah environment and Habitat. Through this project, the college students could create useful information to help fourth grade teachers engage their students. |
| Community Partner(s) | Elementary school principal, fourth grade teachers |
| Project Objectives | Through this project, the students should be able to  
1) use ArcGIS online to create a map layer to show the different Utah environments and the animals living in these environments.  
2) add both image and text information to the map using the attribute table of the map  
3) present the project to community members (4th grade teachers and students) to benefit both of them. |
| Utah Core Standards/Objectives | Fourth grade:  
Standard 5/Objective 2  
Describe the common plants and animals and found in Utah environments and how these organisms have adapted to the environment in which they live. |
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<td>Essential Question(s)</td>
<td>Where did you go? Why are these places different? Why are animals in different places?</td>
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| Assessments (rubrics, scoring guides) | Environment map (20 Points)  
Animals location map (20 Points)  
Google animal pictures and information (20 Points)  
Edit the attribute table to include text information (10 Points)  
Prepare a google slide for presentation (10 Points)  
Presentation (20 Points) |
| Project Products | Arcgis online map which shows where these different Utah environments are and what kind of animals are observed. The photos or images of both the environments and animals should be attached to the map. |
| Project Timeline (include a step by step Procedures) | 1) Field trip and aerial photography interpretation to add the places of both environments and animals to the Arcgis online map. Use GPS unit to identify the places where different animals are observed.  
2) Use google to find the picture and characteristic information of these animals.  
3) Present the online map to fourth grade students and teachers. |
| Resources Needed | Computer with internet connection  
Arcgis Online Public Account  
Google map |
| Skills Required | Basic skill of Windows (create folders, upload pictures, edit)  
|                 | Following field trip safety rule |
| Project Team Member Roles | Teacher(s): Instruction, information  
|                       | Students: Communication, researching, critical thinking, collaboration, and presentation  
|                       | Partner(s): appreciation, evaluation, and suggestions |
| Celebration/Presentation | The presentations will be given to 4th grade teachers and students. |
| Project Evaluation | Both the teacher and the fourth grade teacher will give evaluation and suggestions to the projects.  
|                   | A quiz given to the fourth grade students after the presentation could also be used to evaluate how effective this project helps their learning. |
| Project Bibliography | Arcgis Online Help  
|                     | Google |
| Plans for Future CMaP Activities | Personal history travel story map.  
|                             | Crime type and location map. |

Optional:  
- Lesson Plans  
- Student Artifacts  
- Publicity