The Tales of the Dogs: Integrating Geography and Technology

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As elementary social science methods instructors, we observed a need in our student population for instructional methods that would engage students in the content, process, and values of geography instruction. Thus, our initial purpose was to create an instructional model that pre-service teachers could adapt and use in their future classrooms. Partnered with our instructional need was an understanding that map skills present a daunting challenge for our junior and senior level students. So, we created an activity, the Dog Tales Project—a student-centered project that encompasses a multi-disciplinary approach to learning mapping strategies, technological media literacy skills, and cross-curricular instruction—to meet our students’ needs as elementary classroom teachers.

In order to meet the design criteria of our project, we chose a hands-on approach by using three Beanie Baby dogs, which we housed in three backpacks. The dogs were named Pinta, Nina, and Santa Maria, to connect the concept of historical exploration and adventure. We began the project by giving each of our social science classes a backpack, including a small stuffed dog, a digital camera, a compass, an official’s signature verification card, and a Dog Log for recording miles traveled, geographic location, and latitude and longitude coordinates. Originally, our Dog Tales Project was developed as an instructional strategy to familiarize our students with geographical mapping skills, namely latitude and longitude instruction. However, the dogs and their adventures soon developed real-life connections. Other instructors even inquired about the dogs.

We introduced the project as a contest between three classes, and we set specific guidelines for participation. The dog that traveled the most miles over the course of the semester would be the “winner.” The official starting point was the address of our classroom center, the Wham Education Building. Students were responsible for “checking out” the dog on a sign-out sheet. They were to take the dog with them as they traveled to a historical landmark. At the destination, they were to take a digital image of the dog and the landmark, calculate miles using the mapquest internet site, and get a verification signature from an official at the site. This information was recorded on the Dog Log, which was given to the instructor when the dog was returned. Each class section had a United States map to record their dog’s travels. At that time, neither Shafer nor Stearns, the instructors, anticipated the level of engagement that the students would demonstrate. Not only did the students participate in the project, they essentially adopted the dogs. During the course of the semester, the dogs participated in many social activities (e.g., marriages, sports contests, graduation, honor days, fall holidays, field observation, field trips, civic meetings, and visits with family and friends).

Initially Shafer and Stearns planned to create a children’s book for each class that would highlight the dogs’ travels. However, as we investigated this culminating idea for the Dog Tales Project, the cost of creating such a book became a stumbling block. Then our department’s technology coordinator, Dr. Joe Kallo, suggested that students create a website by emailing geographic locations from the Dog Log and digital images. Integrating technology was a natural progression for the project.

Kallo created three separate sites using a format that would allow students to email the information. Our plan was to have Kallo serve as webmaster for the sites. However, once involved in the project, we took the technological integration a step further by involving our students in the web page construction. To accomplish this, a thumb drive (flash drive media stick) was added to the dogs’ backpacks. The three instructors also used the dog travels as a method to teach the use of Global Position System Sensor (GPS) Units, when they took their students on a walking field trip around the campus.

As students became more involved, the instructors observed students using...
Conflict resolution and social skills to organize the dogs’ travels. Students would negotiate with each other about who was traveling the farthest, whose turn it was to take the dog, or who they wanted the dog to meet. The dogs and their travels also became conversation starters outside of the classroom, and helped create a sense of community as outsiders inquired about the dogs’ activities and whereabouts. These discussions facilitated the integration of additional skills, such as math skills, language arts skills, conflict resolution, and social skills.

As the semester progressed, the instructors observed many changes in the dog project. Students emailed pictures of the dogs with special friends, made or purchased costumes for the dogs for the holidays, bought other companions and accessories for the dogs, and simulated life scenarios for the dogs. The students demonstrated a high level of engagement in the project. Class discussions highlighted events in the dogs’ lives, such as Nina’s wedding, Pinta’s graduation with honors, and Santa Maria’s visit with her hero, Pluto, at Disney World.

Above: Beanie Baby dogs Pinta (left), Nina (right rear), and Santa Maria (right front) are pictured here with accessories students provided for their travels.

Left: Pinta visits a pumpkin patch in Johnston City, Ill. Longitude: 37 degrees 49’ 14” N; Latitude: 88 degrees 55’ 39” W
Digital image site:

Log entry

Name(s):

Date __________________________________________________________________________________

Description of the site

_______________________________________________________________________________________

Verification signature ______________________________________________________________________

Miles traveled ___________________________________________________________________________

Transportation mode ______________________________________________________________________

Latitude and longitude coordinates  _________________________________________________________
Process
The project proved to be an ongoing collaboration. During the course of the semester, several adaptations were made to meet the students’ learning needs. We originally conceived the project as simply involving taking digital images and recording travel information. However, as the project continued and student engagement increased, we realized that a more sophisticated level of technology could be integrated. It soon became apparent that the students wanted a participatory role in the website development. Kallo visited each class and detailed instructional methods for creation and maintenance of the HTML pages. Since there were no computers in the classrooms, a flash drive memory stick was added to the dogs’ backpacks. This method seemed to work reasonably well.

Values
The classes held both an informal and formal assessment once the project was completed. All concurred that the project was a fun, practical way to learn a difficult concept. As an informal assessment technique, one instructor used the dog project as a way to assess the application of social studies content into her students’ thinking processes. Students were asked to write a one-page summary of how they would use the dog project in an elementary classroom. Overwhelmingly, our students thought the project could easily be adapted for elementary and middle school students. Even though there was one “official” winning class, all students received a “Top Dog Award” for their participation.

Geography concepts, latitude, longitude, and mileage, are usually introduced at the third grade level and reintroduced the following years in grades 4–8. Often these concepts are difficult ones for elementary students to grasp. Yet using an object, such as a Beanie Baby dog, to figure coordinates for geographic locations proved to be an effective means to engage learners. As students figured the geographic locations, they also began including facts about the location, which added the historical connection and civic education. Stories about the adventures of the dogs at the different sites connected the writing and speaking skills.

Both the instructors and the students felt that the Dog Tales Project was a valuable instructional strategy. It was a teaching tool that could fulfill the curriculum requirements for any elementary social studies class.

Recipe: Steps to Create a “Dog Tales Project”
• Assess your students’ needs, identify the skills you wish to teach
• Select a mascot (could be a school mascot, stuffed toy, etc.)
• Create a backpack to store supplies
• Name the mascot using a content connection
• Determine guidelines for the mascot’s travels, and list places that are “off limits”
• Develop Dog Log (see Figure 1)
• Introduce project to class
• Check backpack out to individual students using a sign-out sheet
• Upon return of backpack, record miles traveled
• Reflect upon the project and discuss the travels of the mascot
• Display project in a media enriched format (e.g. bulletin board, classroom display, website)

Reflection
When the final assessment was made of the project, both instructors felt some minor adaptations could improve the social science application of the project. In the future, the dogs will receive new names in order not to detract from previous students’ experiences. In the next semester, we are going to use the historical and geographic connection again. However, the names will reflect a more “world history” view, as the dogs now become known as the Three Musketeers. This decision was based upon comments from past students who indicated there were a number of world history content questions on their state test. We are also going to create a paper dog display. Each paper dog will have the Dog Log information on it and will be posted on a bulletin board. Students will also be asked to write short reflections about their processes in deciding where to take their dogs.

Notes

References

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