

## OVERVIEW

The purpose of the following lesson plan is to use storytelling to build stronger community relations within our classroom and make stronger connections within my students' families. Students will have the opportunity to explore various cultural perspectives about astronomy and be involved in various activities that incorporate storytelling, story making and billboard creation.

## OBJECTIVES

The following lesson plan will investigate the following outcomes from the Astronomy unit found in the grade 9 science curriculum. Outcome three: **S1-4-03** Investigate how various cultures used knowledge of the position and motion of visible celestial objects for navigation. *Example: Aboriginal ceremonies, linked to seasonal star positions.* Next outcome number seven: **S1-4-07** Compare and contrast scientific and cultural perspectives on the origin and evolution of the universe, lastly we will also be investigating various cultural aspects of the mythology of some of the most popular star constellations.

My goal for the first outcome is to show my students how the motion and position of celestial objects play a special role in the aboriginal culture and how important it is to their culture and traditions.

My goal for the second outcome is to show my students that although the most accepted scientific view on the origin of the universe is the big bang theory, there are many other beliefs that exist from different cultures around the world. I'd like them to see that there is not a wrong or right perspective we should be able to appreciate and respect all versions of the story. Also maybe by sharing our cultural beliefs about the origin of the universe we will find a common thread throughout all our stories and realize that we are not as different as we seem.

For the last outcome I would like my students to have the opportunity to examine different myths about the constellation that were given to them and have them tell stories about their myth to the other students who had the same constellation. This will help in giving those students who share the same constellation a common ground and having a shared experience.

## **RATIONALE**

In the past I've struggled to teach this section of the astronomy unit. I couldn't find creative and interesting ways of covering these topics. I wanted to have a lesson that was interesting; yet educational and also having the students engaged and active participants. After attending the Storytelling for Peace and Renewing Community course over the summer, I finally realized what I could do to make my lessons more appealing. Incorporate storytelling!

I learned that storytelling can be used for peace building or community building. By sharing stories, the storyteller captures the listeners' imagination and allows the listener to create vivid images in their minds. The listener feels that they have experienced what the storyteller has told them, therefore creating a common bond between the two. By having this "shared" experience the once "strangers" are now bonded by a common experience. This is the type of experience I would like my students to have. I'd like for them to realize that even though we are from different cultures, by sharing our cultural stories with each other, we are letting others get to know us a little better, and maybe as a result of this we can become a closer community.

I also believe that by integrating the students' cultural perspective and having the student create their own myths; students are going to take more ownership of the project and may become more engaged in the assignment. By giving them the opportunity to learn more about their identity will make them feel more knowledgeable about their cultural identity and heritage.

## **THE PLAN**

To begin this unit I would like to create a community Astronomy billboard, where all the students "create a class wide mural or bulletin board." (Sapon-Shevin, 1999). Students would be asked to contribute a picture or words that describe the word astronomy. All ideas and contributions would be accepted and valued. I would emphasize that this is OUR billboard, hopefully giving students pride and ownership of the billboard. I feel it gives the students an opportunity to "see how they all fit in and contribute. (Sapon-Shevin, 1999) I think that this exercise would make all the students feel like they are part of the "team" and make them feel accepted because they all got to contribute and be part of the experience.

To introduce the topic of how various cultures used knowledge of the position and motion of visible celestial objects for navigation, I would invite an elder from the aboriginal community come in and tell us stories about astronomy and the importance of astronomy to the aboriginal culture. I would have him/her explain the importance of visible celestial objects for navigation, and have the elder explain how star position was used for

navigation. Also how the aboriginals used other celestial objects like the moon to perform traditional rituals and the significance of this. For example some aboriginal tribes perform the “sun dance” the first full moon in June or July. I would love to time it so that maybe I could take my class to one of these rituals, so that they can experience it first hand.

I feel that having an aboriginal elder come in and speak about the stories he/she has heard or having them share the stories that have been passed down from generation to generation would be a very effective way of presenting this information. Instead of just providing notes or having me telling them, they are hearing the stories directly from someone who knows the culture and has experienced the rituals and traditional ceremonies. By having the elder share their stories with us the listener becomes an “active” participant, they create vivid images in their minds of the story being told. The listener becomes involved in the story, often taking on the various characters and feeling as if they have just experienced or “lived” the story. “Story telling is a direct interpersonal interaction, and can generate and sustain person-to-person relationships in immediate and dynamic ways.” (Senehi, 2002).

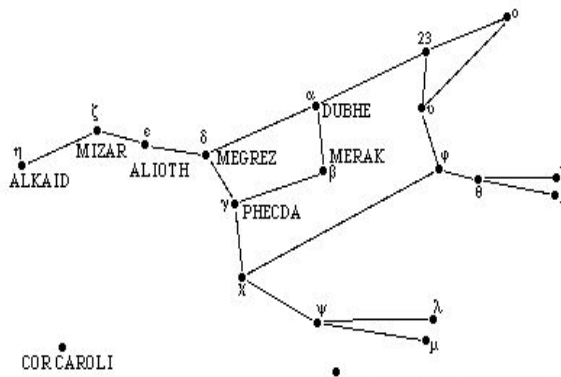
In our next lesson, we would begin to explore different cultural perspectives of the origin and evolution of the universe. I would have my students ask a family member; parents, grandparents, etc. of their own cultural perspective on the origin and evolution of the universe. If the students’ family member(s) are not aware of their cultural perspective on this matter, I would have the student research their cultures mythology.

I would begin by sharing my cultures story of the origins and evolution of earth, to show them that I am also part of the class and wanting to share a piece of my self with them. I would have the student share their stories with the class and with their families; therefore creating bonds and connections with each other. I feel that storytelling is a great bonding experience for all; it is a way to spend time with family and friends and get to know each other a little better. It is a great way to share information and to gain information too. By doing this the storyteller is allowing the audience gets to know him/her a little more and therefore creating a shared and mutual experience.

By sharing their stories, they will also become aware of the variation in different cultural mythologies. We can discuss and examine if there are any common themes or threads among some of the cultural stories and investigate why there are similarities. We can talk about tolerance and respecting of other view points , and how even though we may not agree with a different view point, it is okay to disagree, but we should respect others points of view.

Our next activity would be where I would provide students with a star chart; like the diagram below but without constellation figures marked on it (lines not connected). I would have 3 different star charts and distribute them to the students. The assignment would be to invent their own constellations, by looking for patterns in the stars in the chart given to them. First they would try to create a pattern in with the dots given, and then give their constellation a name. They would then create a myth to go with their new constellation. Student will not be aware that I have actually given them a star chart for a real constellation.

#### For example of a star chart.



The students' activity would be to create a GIANT Storybook with illustrations of their constellations myth and then to share their stories with the other members of the class. They would have to include the name of their constellation, how it got its name, the meaning behind the name and the story behind the constellation. I feel that this would be a creative assignment where the students would have the opportunity to showcase their creativity by creating their own stories and then sharing it with others.

Once they've all had the opportunity to share their created myths about their created constellations. I would proceed to tell them, that the 3 star charts that were handed out were of actual constellations; Ursa Major, Orion and Cassiopeia. I would then tell them the Greek mythology version of those three constellations.

Once my story telling is completed, their final assignment would be that each person who received the star chart for Ursa Major/Orion/Cassiopeia would have to choose a different culture for example: Roman, Polynesian, Nordic, North American Aboriginal, Chinese, etc.) And find that cultures myth behind their constellation and share it with the other students who also had that same constellation. I thought that it may be interesting to see other cultural perspectives on a constellation that the student wrote about.

I'm extremely excited about carrying out this lesson plan. I'm looking forward to hearing the stories that will come out of this and seeing what my student and possibly their families will learn about their cultures. I'm also looking forward in seeing if I'm going to see a noticeable difference in their level of engagement towards these assignments as compared to how I use to teach this unit.

**REFERENCES:**

Sapon-Shevin, Mara. 1999. *Because We Can Change the World: A Practical Guide to Building Cooperative, Inclusive Classroom Communities*. Needham Heights, MA: Allyn and Bacon.

Senehi, Jessica. 2002. "Constructive Storytelling: A Peace Process." *Journal of Peace and Conflict Studies* 9(2): 41-63.