EDCP 331: PROJECT PLAN

Save the Bats!

DESCRIPTION OF CLASSROOM

A grade 1 / 2 class containing 24 students in total. There are several ELL students. One student is working on developing pro-social behaviour, and is allowed to sit out if she is not comfortable to partake in activities. The class enjoys music and art.

RATIONALE

The students chose to research how to help animals in a class vote before we began. This ensured that they were already interested in the learning. From there, we chose to focus on “ugly” animals

because it was a fun, humorous way to even further engage our students, and because it is an important issue to consider. Often times "cuter" animals get more help and attention than other animals in need. We then decided to hone in on bats because bats are under threat locally, and a bat house was something the students could help make in the amount of time given. Constructing the bat house activated the learning and connected students to the world outside of the school.

OVERALL OBJECTIVE

Our overall goal in teaching these lessons was to empower our students to recognize that they can actually help animals, and make a real difference in the world. This was accomplished because in the end, they constructed a real bat house, something that is actually very useful and can help save the lives of many bats in need of a safe home.

BIG IDEAS

Science – Grade 1

Living things have features and behaviours that help them survive in their environment

Social studies – Grade 1

We shape the local environment, and the local environment shapes who we are and how we live.

Social studies – Grade 2

We shape the local environment, and the local environment shapes who we are and how we live

CURRICULAR COMPETENCIES

Science for Grade 1 & 2

- Experience and interpret the local environment
- Consider some environmental consequences of their actions
- Generate and introduce new or refined ideas when problem solving

Social studies for Grade 1 & 2

- Recognize the causes and consequences of events, decisions, and developments in their lives (cause and consequence)
- Use Social Studies inquiry processes and skills to: ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions

CONTENT

Science for Grade 1

- Behavioural of animals in the local environment (hibernation)

Social Studies for Grade 1

- Relationship between a community and its environment

ASSESSMENT METHODS

Lesson 1 Assessment:

- Students are able to identify one fact they found in a book.
- Students act out extinction and endangered animals to show understanding of these terms.
- Assess students prior knowledge in beginning brainstorms.

Lesson 2 Assessment:

- Students will identify some needs of a bat through a poster (individual)
- Assess students during discussion while students work on bat house.

Lesson 3 Assessment:

- Students will play a game during which they answer questions as assessment (whole class)
- Assessment for learning through discussion and observation

EXPLICIT STRATEGIES

Enactivism

Our first lesson was designed to show students how to do the beginning steps of an inquiry. It serves as our groundwork before students will address how we can protect the local bat population. This lesson focused on local ugly animals in order to make the content relevant and meaningful. Students were social and active and had a chance to interact with each other during the lesson.

Our second and third lessons continued in an enactivist manner. Students made a bat house that will actually be hung in nature to house local bats, helping to save the local at-risk bat populations. This is something that will make a real impact on their community to help solve a problem (build bat houses).

Experiential

Games to strengthen understanding and community, building a bat house, going outside the classroom to find a good spot to hang the bat house.

Indirect instruction

Guided inquiry, problem solving in small groups, circle and pair share.

Interactive instruction

Problem solving, cooperative learning.

LESSON PLANS

LESSON 1: How can we help animals?

Subject: Science & Language Arts & Social Studies	Grade: 1/2
Theme: Protecting Animals	Date: Feb. 26th, 2016

In order to stick with class routines all groups will be doing a DPA a morning and a read aloud after recess. <u>Lesson Hook:</u> Last class we voted on what we want to learn about, and decided to think about how we can help animals. **Brainstorm- What animals need our protection? *Write down board.*** Some animals get more attention than others because they're cute and cuddly. Some animals are NOT cute OR cuddly, but still need our help. People might even say they're funny looking or scary-looking. What funny looking or scary-looking animals might need our help? ***Make list of "ugly" animals.*** *(Pre-assessment: What students KNOW).* ***Watch video:*** <u>http://youtu.be/ek9k4dUHym0</u> Ask: Think about why some ugly animals need our help. ***Read Grizzly Bear selection from book,* Animals Nobody Loves.** ***Discuss WHY grizzly bears or other animals need our help?*** (THINK PAIR SHARE) Share out as whole group. Write down ideas. Explain terms: at risk of being endangered, endangered, and extinct. When an endangered animal is an animal that is in danger of disappearing forever. Support with visuals and example. An extinct animal is one that already has disappeared forever. None of those animals are left in the world. Support with visuals and example. Ask: Can anyone think of an example of a creature or animal that has disappeared forever?	10 min 10 min 10 min
<u>Activity:</u> ***Play the EXTINCT or ENDANGERED game.*** Call out animal names and then they do an action to illustrate if they're endangered or extinct. (Have slide show with big pictures on the	5 min

smart board of the animals we call out). ***If not enough time, only go through 5 of the slides.*** ***Student browse Ugly Animal resources. Pick their favourite. Draw a picture of it. Note one idea of what they can do to help the animal. *If not enough time, just have students browse books and find a favourite.***	13 min
<u>Lesson Closure:</u> Tell students that next class we're going to find a way to help bats. Over the next 2 weeks come up with an idea of how we can help bats.	2 min
<u>Key Vocabulary:</u> Extinction, endangered	
<u>Materials:</u> Animal books, visuals for smart-board, recycled paper for activity.	
<u>Assessment:</u> -Students are able to identify one fact they found in a book. -Students act out extinction and endangered animals to show understanding of these terms. -Assess students prior knowledge in beginning brainstorms.	
<u>Extensions/Adaptations:</u> Note why animal is endangered. If they can't come up with any ideas of how to help the animal, have them note basic facts about the animal. ELL: Rather than writing a note on their chosen animal, they can show teacher an interesting fact that they noticed in the resource.	
<u>Reflections and Notes for next time:</u> If we had more time with this unit, we would do a true inquiry, in which students each noted questions that they had about the animal they chose in this lesson, and then next class we would find answers to those questions. They would investigate chosen animals in small groups over a longer period of time, with adequate scaffolding.	

LESSON 2: How can we help bats?

Subject: Science & Language Arts & Social Studies	Grade: 1/2	By: Carrie Craddock and Daniella Chai
Theme: How Can We Help Bats?	Date: March 11th, 2016	Total time: 50mins

Materials: - *2 bat houses (1 model, 1 incomplete)* - *Tools to complete bat house* - *Colourful construction paper for posters (25 sheets)* - *Markers* - *Bat resource books* - *Ipad and speaker* - *Example "house warming" posters* - *Large class poster "How can we help animals?"*	
Objective: Students understand how they can help bats, the intricacies of bat houses, and bat needs.	
In order to stick with class routines all groups will be doing a DPA a	10 mins
Lesson Hook: Students watch a video on iPads introducing bats, why bats are important, and why bat houses are important. http://youtu.be/lVIpW25r9uY	6 mins
Activities: Introduce the poster activity. Daniella facilitates poster activity with whole group, while Carrie takes small groups of 4 students out (3 groups, 10 mins each) to teach them about the bat house and get them to help build it. **Activity A with Carrie:** Build a bat house. Students screw in screws to construct bat house. Carrie asks them questions about the house, and teaches them about the purpose behind details of its design (hibernation, why grooves are there, how many bats can fit inside…). **Activity B with Daniella:** Making "house warming" posters.	34 mins

(Building on the last lesson, in which students learned to find interesting facts in resource books). Using books provided, students gather information on bats, and what bats **need** to survive (food, climate, etc.). Students make "house warming" posters for the bats, to be shared in the hallway as a symbol of welcome and celebration of the new school bat house. Posters include words and images, (students who struggle with writing can include more images than words). Students are told to include at least one **bat need** on their poster (shown how to do this from the example posters). Daniella helps students find facts, making sure to support students who may need help with language. -Model the example posters. -Model how to find information, and explain what type of information to look for. -Explain what to do, where the posters will be displayed, and why they are useful. -Student work time.	
<u>Assessment:</u> -Students have identified at least one bat need on their poster. -During discussion while students work on bat house.	
<u>Adaptations:</u> -Students with lower language skills include more visuals on their posters, and Daniella assists them with reading, or they work with another student who can assist their reading needs.	
<u>Extensions:</u> -Once posters are complete, if there is more time, students can add ideas/questions/decorations to a large class poster on "how can we help animals?", bringing together everything they've learned, and giving them an outlet for further thinking.	

LESSON 3: How can we help bats?

Subject: Science & Language Arts & Social Studies
Grade: 1/2
Theme: How Can We Help Bats?
Date: March 11th 2016

Lesson Hook

Bats & Flies group game 5 min+

• Students will play a game similar to octopus tag

• Bats need to fly across the given boundaries to catch flies

• Someone is it and when they tag bats they are giving them a house

• Once bats find a house they stay in the same spot and try to tag other bats to join them in their house

Activity

Continue 10 min

• Students will take time to finish up their posters

Sharing 10 min

• Students will share their posters that were created in lesson 2 and identify the bat need that they highlighted

• If students are not comfortable we will make adaptations

• Instructors will collect posters to keep safe

Bat journey 10 min

• Tell students we will be going on a journey to find the right place for our bat house.

• Instructors will take turns asks questions to the students about bats. Questions are listed below. Each question will have two possible answers. Each instructor will hold one visual that represents each answer. Students will go to the instructor they believe has the right answer.

• After we find out the answer we will come together. We will share more information when needed and give the next step in our journey.

• Ensure that students know this activity is not about getting answers right, it is about following the clues.

• If weather is rainy we will do most of this in the undercover area

End of the journey 5 min

• Our final destination will be where we propose to hang the bat house.

• Students will each have a chance to sign their first name or initials on the back of the house. A grid will be set up to ensure there is room for everyone.

• The other students can ask questions or share

Lesson Closure Come together 10 min

- All 4 instructors will come together for a wrap up activity

Key Vocabulary

Nocturnal, echolocation

Materials

Visuals, bat house, posters from earlier lesson, silver sharpie for signing name, list of groups of students

Assessment options for the future

• Students will complete bat journey that answers questions along the way.

• * students that will need further instruction

• If this were to be a replicated we would have an assessment in the last 10 minutes where students write an exit slip where they write or draw and explain what they have learned about bats

Extension: We can hang the house if time permits.

Adaptations: Visuals will be provided to assist ELL students

In future: Students can verbally share what they have learned about bats

Questions on the journey

*Please note that the blanks and underlined numbers are present so we can adapt the journey once we arrive early on Friday

*Some descriptions are subjective and will be modelled first

*If you would like to look at the visuals please let me know as I can easily send them

1. How do bats hang? Do they hand out like humans or hang upside down? Walk in a group of two of three towards the playground

2. Are bats birds or mammals?à Flap your wings and take 3 leaps towards _____

3. Bat's need food. Do the bats we built a house for eat fruit or insects like flies? You are a grasshopper and hop 10 times towards _____

4. Are bats blind? Use your eyes to find _____ and take 6 steps towards it.

5. Do bats look for food in the day or in the night? Quietly sneak 12 steps to your _____

6. How do bats see at night? Do they use their eyes or echolocation à Squeal while you walk forward for 20 seconds

7. What do BC bats do in the winter? Do they fly south or hibernate? Walk like you are really heavy like a bear until you arrive at the _____

RESOURCE CRITIQUE

Name	**Description**	**Where can you get it?**	**Cautions**	**Strengths**
Ugly Animal Video: Ugly Animals (Song A Day #1616) by Jonathan Mann	This is an engaging, simple song about how ugly animals are cute that is accompanied by pictures.	Online (youtube) http://youtu.be/ek9k4dUHym0	Preface with what "ugly" means in this context and how the word should/should not be used. Have students sing along with song to make it even more engaging.	The video is a good length for maintaining engagement and fitting into the lesson. The song is catchy and highlights how to term ugly is used in this context (that some animals can be both "funny-looking" or "scary" and "cute" at the same time).
Ugly Animal Books	A selection of 15 age-appropriate books on a variety	UBC Education Library	Show students how to scan books for information.	These books have images, are colourful, cover a range of reading

	of endangered or at-risk "ugly" animals.		Give extra support to students who are still learning to read. Have a variety of reading levels in the selection of books. All books should have a good amount of images and be engaging to children.	levels, and include a variety of animals, so that each student can find a book that is engaging to them personally.
<u>Bat Books:</u> - Scholastic's The magic school bus going batty : a book about bats / [based on the episode from the animated TV series produced by Scholastic Productions, Inc. ... ; TV script written by Ronnie Krauss, Brian Meehl, and George Arthur Bloom]. - Screech! : a book about bats / by Melvin and Gilda Berger.	A selection of age-appropriate books on bats, covering why they are important, why they are under threat, and how students can help them.	UBC Education Library	Teach students how to find select information in the books without reading from start to finish. Give support to students who are still developing their reading skills.	The books are image heavy, colourful, and engaging for grade 1/2 students. Books are age appropriate, and support the lessons well.

- Shadows of night : the hidden world of the little brown bat / Barbara Bash. -Endangered bats / Bobbie Kalman & Kristina Lundblad. - Bats / Gail Gibbons. - Hello, bumblebee bat / Darrin Lunde ; illustrated by Patricia J. Wynne. - Bats / written by Adrienne Mason ; illustrated by Nancy Gray Ogle. - Welcome to the world of bats / Diane Swanson.				
<u>Helping Bats Video:</u> *Batman v Superman: Dawn of Justice – Help Save the Bats.* (Zack Snyder, Ben Affleck, and Amy Adams tell us why it's important to save the bats.)	A brief video (featuring the cast/crew of the latest *Batman* movie) describing why bats are important, why bats	Online http://youtu.be/lVIpW25r9uY	Read out the text in the video for students, as some cannot read that quickly or at all.	The video has a Batman theme which engages students' interest. It directly relates to the content of the lessons. The video is a good length,

	are under threat, and how we can help bats, including how to make a bat house and why bat houses are valuable.			(about 5 minutes), and holds students interest throughout.
Single Chamber Bat Box Design Plan	Instructions guiding the user to construct a single chamber bat house.	Online www.bcbats.can	It is a difficult task to build a bat house, and requires some skill and commitment, or enlisting extra help.	This resource was clear and easy to follow.