Stream to Sea Intermediate

Antifreeze; Anti Fish

A short play that introduces students to the link between storm drains and natural water systems

Drama 5 Prescribed Learning Outcome(s) met and Curriculum Organizer(s)

It is expected that students will:

Curriculum Organizer: Exploration And Imagination

- Express ideas and emotions using verbal and non-verbal communication;
- Accept constructive feedback and incorporate it into a dramatic work;
- Demonstrate the ability to reflect on a dramatic work;
- Demonstrate individual responsibility within the group when developing dramatic work.

Curriculum Organizer: Drama Skills

- Demonstrate the ability to maintain focus within a drama structure;
- Interact in role;
- Use drama structures to develop stories that present problems and their possible solutions

Curriculum Organizer: Context

- Demonstrate how drama affects beliefs and attitudes;
- Apply audience skills appropriate to a variety of presentations.

Overview of Activity:

In this classroom activity, students will participate in the production of a play that highlights the direct linkage between storm drains and natural river, stream, or creek ecosystems. This open-ended dramatization features two young friends encountering a group of teenagers about to dispose of oil and antifreeze down a storm drain. Students will have the opportunity to explore the thoughts, feelings, and actions of their own and of others through dramatic interaction and reflection. Following the performance of the play students will develop their creative and critical thinking abilities during a debriefing and by improvising and discussing alternative endings to the skit.

Estimate of time required:

Number of lessons: 2 lessons
Each lesson requires: 30-45 minutes
Can be done: Anytime ☒ Fall ☒ Winter ☒ Spring ☒ Summer
Notes: 2 40-minute lessons; optional evening or afternoon performance

Natural Area Required: None - Indoor Activity ☐ Ocean OR ☐ Stream OR ☐ Estuary

Overview of Materials and Resources Required:

Material Available for downloading:

☒ Activity Description(s)
- "Antifreeze; Anti Fish"

☒ Student Handout(s)
- "People Search"

☒ Background Information
- "Introduction"

☒Discussion Questions
- "Questions"

☐Evaluation /Assessment Tool(s)
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Other Required or Suggested Material:
- "Fish in the Floodlights: Nine Short Plays About Salmon for Intermediate Grades" (1993). Fisheries and Oceans Canada.

Suggested Assessment Activities:
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Recommended Additional Resources and Optional Enrichment Activities:
(E.g. Web-sites, Teaching Guides, Student Reading, Videos/Audio-tapes, Posters and Brochures, Field Trips:
- Storm Drain Marking Program, Kit, and Video. Fisheries and Oceans Canada. Information at (604) 666-6614 or http://www-heb.pac.dfo-mpo.gc.ca/community/stormdrain_e.htm
- "Home Tips for Healthy Streams" brochure, Fisheries and Oceans Canada. Available at http://www-heb.pac.dfo-mpo.gc.ca/publications/publications_e.htm

Support may be Available.

Contact your local Stream to Sea Education Coordinator or Community Advisor.
www-heb.pac.dfo-mpo.gc.ca/community/contacts/ec_e.htm
or phone (604) 666-6614 to find out if an Education Coordinator in your area assists with this activity.

Written by: Joanne Day
Edited by: Elizabeth Leboe

Antifreeze; Anti Fish - Pre-Post Activities

Synopsis:

Two young friends encounter a group of teenagers washing and servicing their cars. The teens are probably unaware that they are practicing a potentially harmful activity in their method of disposing of oil and antifreeze.

This vignette (incomplete skit) provides for an open-ended enthi-reasoning activity. (What would you do if ...?)

Vocabulary:

antifreeze storm drain
Porsche

Suggested Cooperative Learning Strategy:

People Search. Located after the play.

Integration with "The Arts:"

Music

- To set the scene have one character enter before the other, whistling a tune. Have the second character enter whistling a different tune. (The tunes could be from Star Wars.)
- On tape have the sound of a "fast" car (Porsche) or have students simulate car traffic sounds - some far away, some nearby.

Art

- Illustrate the playbill.
- Make cardboard cut outs (life size) for major props (car, storm drain).

Drama

- Have students improvise an ending which provides some resolution.
- Students could practise speaking deliberately (for effect) and making dramatic facial and hand expressions.
- Readers' Theatre.
- After your class has completed the skit (and activities) use the script as a model to facilitate learning in a younger grade.

Integration with Other Subject Areas

Language Arts

- Questions about the skit, located after the play.
- A video (2 1/2 minutes) "Storm Drain Marking Rap" is available from Department of Fisheries & Oceans.

Science

- The Storm Drain Marking Program involves students in marking neighbourhood storm drains and informing the public about how to dispose of toxic substances. Contact your local Community Advisor (Federal Department of Fisheries & Oceans) to find out about getting a storm drain marking kit.

Social Studies

- Intermediate Salmonids in the Classroom, Unit III contains many activities involving urban streams and typical environmental issues.

For other salmon related information and activities (all subject areas) check with Salmonids in the Classroom (Primary and Intermediate). Available through BCTF Lesson Aids.

Antifreeze; Anti Fish

Setting

An urban street.

Characters

Jamie Carlson & Nicole Blanshard - Grade Eight students
Teenager #1 ,Teenager #2 , Teenager #3 - Grade Twelve students

Act I, Scene I

Enter Jamie from side. He is carrying a heavy load of books. Enter Nicole from opposite side, she is carrying a backpack.

Nicole: Jamie, wait up! It's me. (*Jamie stops)* Where have you been? I haven't seen you around.

Jamie: (*Smiling*) Yeah, Hi. I haven't seen you for ages.

Nicole: Well, I have been pretty busy, you know, with school and stuff.

Jamie: It's too bad we're not in any of the same classes anymore, we hardly ever get to hang out together like we used to.

Nicole: I miss that. Remember when we used to go to your house after school and play Star Wars? *(Jamie nods and laughs)* Or that time we got locked in your shed.

Jamie: That was your fault. If you hadn't slammed the door so hard ...

Nicole: Aren't you ever going to let me forget that?

Jamie: Well, I don't see you so often anymore, so I have to make up for it.

Silence. Both students become lost in memories.

Nicole: So, are you still playing hockey?

Jamie: Yes, our team is doing pretty well this year. *(His voice trails off and he looks over Nicole's shoulder, somewhere off the stage)*

Nicole: What is it?

Jamie: Look at that car over there!

Nicole turns around and looks.

Nicole: Wow! That's a Porsche - a Targa Porsche.

Jamie: I'm disappointed, Nicole. I thought you knew your cars. It's a Corvette. A 1982 Vette.

Nicole: (*Sarcastically*) Oh right, you're such a smart guy. *(Matter of fact)* It's a Porsche.

Jamie: You want to put some money behind that big mouth of yours?

Nicole: Yeah. You're on.

Both students walk closer for a better look. From offstage, three teenagers walk on.

Teenager #1: Well, it's all set now. Oil's changed, antifreeze is topped up, looks great and runs smooth.

Teenager #2: I wish my dad had bought me a car.

Teenager #3: (*Laughing*) Hey, I bet the ladies are really impressed by your bike.

Teenager #2: (*Angrily*) Why don't you shut up, it's not like you have a car.

Teenager #3: But I don't need one to pick up the chicks.

Teenager #2: Advances towards Teenager #3.

Teenager #1: Stop it, you two. Let's go downtown. *(Other two relax)* We just have to get rid of the old oil and antifreeze.

Teenager #3: Just dump the gunk down that drain right there.

Teenager #2: That's what my dad does. Hurry up, before the mall closes.

The Teenagers run off stage and return. Two of them carry buckets containing liquids. They walk towards the drain and are about to pour the contents into it.

Nicole: Stop!

All the teens, as well as Jamie, stare at her.

Nicole: Don't do that. Antifreeze and oil are for cars; not for fish.

The teenagers lower the buckets a little.

Teenager #1: *(In a superior tone)* We're not feeding fish, little girl. We're just getting rid of this stuff. That's what this drain is for.

People Search

Find someone who has seen a storm drain.	Find someone who has seen a “marked” storm drain.
Find someone who knows what to do with toxic substances such as oil, antifreeze, or paint.	Find someone who has read an article about the harmful effects of pollution on fish.

Introduction

The Salmonid Enhancement Program, (S.E.P.), which began in 1977, is a multi-million dollar Federal Provincial project designed to increase salmon stocks (as well as steelhead and cutthroat trout) in British Columbia. The S.E.P. program uses many techniques to rehabilitate salmonid habitat and to increase salmonid populations. Funds are allotted to inform and educate the public about the salmon resource, the reasons for its decline and the ways in which S.E.P. is attempting to improve productivity. The SEP program stresses, among its goals, the importance of involving the citizens of British Columbia, generally, and school children in particular, in meaningful and interactive ways with the valuable salmon resource.

The educational components of the S.E.P. program are varied and include: curriculum packages (Salmonids in the Classroom - Primary & Intermediate versions), field trip guides (Gently Down the Stream), classroom incubation programs, Storm Drain Marking Projects, videos, posters and supplementary support materials (puppets, stickers, fact sheets and games).

The development of curriculum materials is responsive and ongoing. All components have been developed and field tested in cooperation with practising educators and subsequently evaluated by the B.C. Ministry of Education. Local S.E.P. resource personnel actively provide support to all aspects of the salmonid program.

Rationale

There are many opportunities to integrate the study of salmon throughout all subject areas of the curriculum. Drama is a powerful teaching tool and offers yet another venue through which several aspects of the study of the salmon and its habitat can be explored. Through role dramas (Readers' Theatre, role playing, drama for understanding) students will learn to make connections between ideas and actions; between knowledge and experience. Drama has the power to "release tension, kindle emotions and stimulate the imagination". (Curriculum and Assessment Framework Guide, Ministry of Education, Fall 1992.)

The short scripted dramatic pieces offered in Fish in the Floodlights are intended to provide teachers with "launching pads" - ideas for initiating theme units involving such topics as *stewardship, resource use conflict, sustainable communities, ecological interdependence, human intervention in nature* and *First Nations involvement in fishing.*

The dramatizations have been written for students in the early-mid intermediate grades (4-6), however, in some instances it would be appropriate for intermediate students to put on performances for primary audiences.

The drama experience, both for the performers and the audience should be followed by *debriefing*. This will often lead to a different understanding, a change of attitude, a new perspective and a real appreciation of the complexities involved in various human/environmental interactions.

Definitions

Drama is a developmental process centered on the learner. It involves the spontaneous dramatic play of young children, and the games, characterizations and dramatizations arising from children's imagination and experience.

Theatre is an art form involving the presentation of dramatic literature to an audience. The theatre entertains and makes a statement. Communication between audience and performers is intended. Theatre is a unique venue in which the skills of actors, directors, designers and technicians are focussed toward an aesthetic ideal.

Curriculum Intentions

Through participation in the dramatizations in Fish in the Floodlights, the learner will have opportunities to develop creative and critical thinking abilities such as considering solutions from different points of view, and recognizing reactions, feelings and behaviour. Learners will also have opportunities to explore thoughts, feelings and actions of self and others through dramatic interaction and reflection.

Learning Outcomes

After being involved in one or more of the dramatizations (Fish in the Floodlights) the student should be able to:

- identify the main idea in a drama;
- maintain a role;
- interpret a character;
- describe what has occurred in the drama;
- discuss drama presentations using appropriate vocabulary;
- discuss mood, conflict, and presentation of a drama;
- discuss how the drama developed;
- present work to an appropriate audience
- reflect on own participation in a drama;
- analyse and discuss constructively the work of self and others;
- see others' point of view through drama;
- listen attentively to individual and group presentations;
- identify changes in attitudes or beliefs that result from the drama;
- respect others' interpretation;
- develop drama based on student information gathering.
- observe people in their different environments;
- observe and understand the changes people make in their environment;
- interpret the effects of the environment on people.

Teaching Strategies

There are many ways to use the scripts presented in Fish in the Floodlights. Detailed instructions for props (costumes, settings, and special effects) have deliberately been omitted so that students can be involved in the reading/staging process in an open-ended way. The same approach has been taken for casting - only the names of characters have been listed in order to allow students to "flesh" out the character.

It is hoped that the plays will, in some cases, merely act as catalysts for student improvisation, role drama, story telling and script writing. The dramatizations should stimulate discussion and provide opportunities for creative and critical thinking about the issues presented. Students should also be encouraged to critically respond to the dramatizations.

Teachers should be familiar with the background information (Appendix A). The material may be distributed to students. For further information/ activities related to the study of Pacific Salmon and their habitat check with BCTF Lesson Aids for Salmonids in the Classroom (Primary/Intermediate) materials.

1. Cooperative Learning Techniques

Several suggestions for Cooperative Learning Activities are provided. For each drama one particular technique has been used to illustrate how the idea could be developed.

Many drama elements are involved in a drama learning activity. The choice of which elements to combine and which to emphasize, as well as the selection of the most appropriate drama structure to utilize will depend on:

- the experience and training of the teacher;
- the learning outcome(s) being focussed upon;
- the age and prior experience of the students; and
- the material being used.

2. Integration with Other Subject Areas

For each drama piece in the package there are suggestions for art, music, language arts, social studies and science activities.

3. Readers' Theatre

Readers' Theatre is literature based oral reading which communicates a story through oral interpretation rather than through acting. A script is used, hence theatre. However, lines are read, not memorized. The story is read by readers who stand or sit in fixed position and address their lines directly to a listening audience.

Cooperative Approach:

(i) Divide class into groups, distribute scripts to groups.

(ii) Each group is responsible for a presentation.

(iii) Group members are responsible for:

- assigning parts
- preparing a rehearsal schedule
- rehearsing
- selecting, designing and creating stage props or costume pieces
- stage movements (may be taken directly from script version, or created by the group)
- involvement from every individual to make a group effort
- present drama
- debrief assessment - mark down what was successful, mark down what was not successful, report to group
- build on this experience with the next experience.

See Appendix B for Evaluation/Assessment for Readers' Theatre.

4. Storytelling

After using one of the scripts (Cooperative Readers' Theatre) you may wish to extend the reading experience into a storytelling activity. The students should be quite familiar with the story line before you move from reading the script to storytelling.

After the script has been read:

(i) discuss the story and the main idea(s).

(ii) outline the story's sequence. This can be done by Story Webbing or Clustering, Storyboarding (pictures), Story Mapping.

(iii) summarize the story using Who, What, When, Where, How of the plot. The summary statement should include all the important story points.

(iv) in cooperative groups have the students retell parts or all of the story. The tellings may be videotaped (costumes, puppets, masks, props, signs may all be used).

5. Creative Drama

After the students are familiar with the scripts (Readers' Theatre) you may wish to have them *improvise*. There are many improvisation activities:

- interview (T.V. Talk Show style) one of the characters in the script
- working in pairs, one partner creates a model of one of the script characters (clay, papier mache, cardboard) when the model/statues are tapped they move and speak in character
- create a pre-post scene (something that might have happened just before or immediately after the actual story action)
- pictionary or charades may be played using characters, objects or themes from the script

6. Playbuilding

After reading/presenting the scripts in Fish in the Floodlights you may wish to involve students in scripting (and presenting) their own dramas. During playbuilding students may "become" actors, directors, playwrights. Topics (peer pressure, suicide, environment, fantasies, heroes, love, the future, the past) can be generated by discussing some of the themes encountered during the Readers' Theatre process, or through songs, photos, stories, maps, T.V., and personal experience.

Students should be encouraged to "develop" the roles more fully by adding or substituting dialogue that they feel more comfortable using.

7. Presentation of Plays

- Have groups perform their plays for their classmates. *Playbill outlines are supplied with each play; Have the students complete them with information and illustrations, then post them throughout the school.*
- Invite parents to the classroom to enjoy the students' plays
- Have an evening of drama - invite parents, grandparents and friends!
- Invite another class (i.e. the same or a different grade level) to be part of the audience. This invitation also could be a rehearsal audience in preparation for a parent night.
- Invite the Principal and Secretary to these presentations.
- Invite the Principal, District Superintendent and School Trustee(s).
- Work through the plays for the singular purpose of developing an understanding of issues (non-performance).
- Workshop characters, personalize dialogue, recreate dramas.

The Storm Drain Marking Program

Storm Drain Marking is a conservation and education project. It is designed to enhance community awareness about the link between neighbourhood drainage and the health of fish populations in local streams.

Many people do not realize that storm drains often flow directly into streams. In areas where natural streams have been routed into underground culverts, they may not even know a stream exists! Storm drain water is completely untreated, so if someone pours fertilizer, pesticide, herbicide, used engine oil, or antifreeze down the drain, the poison can kill the fish and other organisms that live in the stream.

Children are the front line of Storm Drain Marking. They paint a yellow fish symbol beside drains as a reminder, and distribute information brochures door-to-door. In the process, they learn about fish habitat, the sewer system, and the effectiveness of community action.

The Storm Drain Marking Program is a joint project of Fisheries and Oceans Canada, The B.C. Ministry of Environment, and the B.C. Conservation Foundation. If your group or organization would like more information about the Program and the Kit, please contact:

Fisheries and Oceans Canada
Stewardship and Community Involvement
Suite 200 - 401 Burrard Street
Vancouver, B.C. V6C 3S4

http://www.pac.dfo-mpo.gc.ca
Telephone: (604) 666-6614
e-mail: dayj@pac.dfo-mpo.gc.ca

Questions

1. What do you think Nicole was so outraged about?

2. List all the ways that Nicole might use to convince the boys not to put their pollutants down the water drain. Choose the one solution that you think would be most workable and give 4 reasons (criteria) for your choice.

3. Research storm drains in your neighbourhood.

   (a) Brainstorm what you want to know about them.

   (b) List sources for information.

   (c) Prepare a telephone interview for the contact person in your community.

   (Remember your introduction and questions.)

4. What does 'toxic' mean? List several toxic products.

5. Which of the products (oil, antifreeze, soapy water) would be most harmful to fish? Explain your answer.

6. How could the boys have gotten rid of the waste products? What would be the safest way to get rid of each of the products?

7. Have you ever seen "marked" storm drains? What did the markings look like? Why do you think the storm drains were marked?

8. Act out an ending for the scenario with Jamie and Nicole.