Making Snow Days Count - Blizzard Bags for Gateway RSD

Rationale:

Over the last twelve years, our district has averaged 5.4 cancellations per year with the majority of these due to inclement weather (*see below). In one instance we lost the majority of school days in December due to an ice storm and the related damage to utilities and blocked roads. While the state mandates that students attend school for 180 days and 990 hours (High School) or 900 hours (Elementary Schools), the Department of Elementary and Secondary Education has allowed "Snow Bag" exceptions to the 180 day rule based upon the substitution of high quality work being accomplished during cancellations. The DESE also mandates that all school districts create a 185 day calendar by building in 5 days to accommodate cancellations due to weather or other incidents. The experience of students, parents, and staff members is that making instruction relevant, engaging students, and maintaining high levels of attendance on 'make-up' days due to earlier school cancellations is difficult at best. It's also important to note that at the high school level, our seniors graduate, as allowed by the DESE, well before the end of the 180 days; therefore any school cancellations shorten the school year for them even more, which impacts the instruction that occurs during the year.

*04-05 (5 snow days)	05/06 (5 snow days)	06-07 (2 snow days)
07-08 (5 snow days + 1 Power Outage)		08-09 (10 snow days)
09-10 (4 snow days)	10-11 (4 snow days)	11-12 (5 snow days)
12-13 (7 snow days)	13-14 (7 snow days)	14-15 (7 snow days)
15-16 (3 snow days)		

Additionally there is a potential cost savings to the district that is estimated to be **at least** \$5,000 per day based upon transportation and utility savings (we are not planning on any savings in staffing costs).

The intent of this program is to help ensure that students have 180 days of instruction where they are engaged in learning in ways that meet or exceed the state's requirements for "Structured Learning Time":

 Structured learning time shall mean time during which students are engaged in regularly scheduled instruction, learning activities, or learning assessments within the curriculum for study of the "core subjects" and "other subjects." In addition to classroom time where both teachers and students are present, structured learning

- time may include directed study, independent study, technology-assisted learning, presentations by persons other than teachers, school-to-work programs, and statewide student performance assessments.
- The February 13, 2015 Commissioner's Weekly Update included information with respect to missed school days including the current DESE policy. In this update the DESE noted "For this approach to count toward the student learning time requirements, school districts must ensure that such work is structured learning time, is substantial, and has appropriate oversight and teacher involvement. To the degree that learning outside of the school setting may rely upon parental involvement or access to technology, districts must also account for the widely varying circumstances in students' homes. Districts are encouraged to share their experiences as they experiment with different models so that all can learn about their effectiveness and develop examples of best practices."

Goals:

To develop a proposal to the DESE to allow Gateway to provide an alternative instruction process that is flexible yet meets or exceeds the DESE standard for structured learning time so that school days missed for inclement weather or other issues can be counted towards the required instructional time for the calendar year.

This requires several objectives and an understanding that this may look different at the elementary, MS, and HS levels.

- 1. To define what 'Blizzard Bags' are for Gateway:
 - a. A series of one time assignments to be completed and returned within a few days of the cancellation, **or**,
 - b. A series of linked assignments to be updated and reviewed immediately after a weather-related cancellation but part of an ongoing, longer term project that will need to be completed at a set day before the end of the school year or term
- 2. How to assess progress and completion of the assignment(s):
 - a. How to count towards attendance on an individual basis
 - b. Potential differentiation between grade levels
- 3. To address concerns related to implementation:
 - a. Community perceptions related to paying staff who are not in school
 - i. Keep in mind that staff must still prepare the lessons, review and assess the completed material, and provide support for those lessons
 - ii. We also have a number of early releases or late starts for which students have shortened days and teachers have shortened hours and that does not impact their salary
 - b. Student needs related to established school supports

- c. Equity within professional staff (i.e., classroom teachers vs. guidance/adjustment counselors, nurses, and specialized support staff (PT/OT)
 - The principals have developed some potential items for professional staff that are not teaching. These include doing some of the preparation work for transitioning students between grades, updating computerized databases, reviewing files, and other professional activities
- d. Equity between professional and paraprofessional staff
 - i. We're also working on developing items for the paraprofessionals to complete such as operational protocols for different positions
- 4. To develop a means of measuring the success of implementing "Blizzard Bags"
 - a. Students work done, numbers completing work, differences between student groups and grade levels
 - b. Professional staff difficulty of implementing, success in meeting 'Structured Learning Time' definition, amount of work, impact on instruction and curriculum, suggested changes for the future
 - c. Paraprofessional staff Tasks accomplished, degree of difficulty and time involved, ideas for the future
 - d. Families difficulty of implementation, suggestions for improvements
 - e. To determine actual cost savings of the implementation
- 5. To modify program based upon input from students, staff and families specifically to look at:
 - a. How each type of work was successful (one time curriculum work vs. long term projects)
 - b. If this program should be limited in the number of days of school cancellations
 - c. To address any specific concerns from any group
 - d. To share collected data with school committee, public, and DESE
 - e. To help determine if the number of 'Blizzard Bag' days should be limited and when they should start
 - For this year we're anticipating starting the 'Blizzard Bag' model on the first day school is cancelled and would seek up to 6 days of having Blizzard Bags count towards the required 180 days of instruction.

Defining Blizzard Bags

"Blizzard Bags" refers to a practice of assigning work to students to make up days in which school is cancelled for reasons such as inclement weather. This has occurred in several states (Massachusetts, Minnesota, New Hampshire, Ohio) and under different operational models. As a K-12 system broken into elementary, middle, and high schools, we are looking to create a model that is flexible within the district, within schools, and even within grades as long as the instructional activities meet the DESE definition of structured learning time. Depending on the model chosen by individual staff members or groups, due dates for

assignment completion, assessment of assignments, and a determination of credit may vary but must all be developed as part of the 'Blizzard Bag' assignment.

Our hope is that these learning activities will not only meet the 'structured learning time' test but will also be educationally relevant and at least as engaging as additional school days tacked on the calendar in mid to late June. We are also exploring ways to leverage the technology that both the schools and our communities provides to extend learning while being cognizant of the lack of broadband in many of the areas within our district.

Any proposal will require school committee and the Department of Elementary and Secondary Education approval. In addition, there may be working condition considerations in regards to school staff.

Process

The leadership team has been exploring various means to more fully engage students throughout the year, has looked at ways to reduce costs while maintaining student services and staff, to more effectively use existing technology, and to leverage the professional expertise of our staff. The potential of Blizzard Bags to address each of these areas seemed evident and we established a potential timeline to implement this during the 2016-2017 school year and provided stipends to enable staff members to help with the planning and implementation process. On September 20, information regarding the Leadership Team's plan to put together a "Blizzard Bag" proposal (to submit to DESE this fall) was shared district-wide with the help of 4 teachers who applied to take on the role of facilitating its development. This has also been shared with School Committee, and has their initial support. There have been some great ideas and some concerns expressed, but we believe the potential benefits outweigh the potential drawbacks (and that some of these drawbacks can be resolved by how we implement), and are moving forward with the development of this proposal.

Time was provided for all staff to discuss the idea of Blizzard Bags and begin working on the potential implementation. The following was provided as a starting point for development of instructional activities:

Options include (but are not limited to, as you may get an idea for another in the links below):

- A series of one day lessons/activities that reinforce prior material, provide enrichment opportunities, pre-teach or assess prior knowledge for upcoming material, etc.
 - (The elementary level chose this approach, and has developed a series of these linked to standards for each content area, based on where they expect to be in the curriculum between December and February.)
 - Options for accommodating students with limited access/support at home:
 - Make available ahead of time digitally and/or on paper

- Make deadline flexible enough to allow students to complete at a later date (with use of school technology if needed). This will also allow them to get help from teachers if needed.
- A long-term project with multiple integrals of depth/completion depending on how many snow days we have
 - Possibly something you did in the past that you are not able to work into the curriculum with our 7 period schedule.
 - This could be a project you plan to do in the spring, that students could get started on with prior reading, research, etc.
- Review the links below or others you may find to see what schools across the country have done in your content area/grade level for ideas

http://www.wadsworth.k12.oh.us/district/content-page/blizzard-bags-grades-9-12

http://www.kearsarge.org/blizzard-bags

http://libguides.infohio.org/blizzardbags2014nine-twelve

http://www.westcler.k12.oh.us/districtNewsArticle.aspx?artID=901

http://www.massillonschools.org/BlizzardBags.aspx

https://bpsblizzardbags.wordpress.com/ (best for MS)

Our staff have developed some exciting instructional activities and have begun to share those with the leadership team.

Current Examples

Grade K

Math: Graphing/Data

CCSS.MATH.CONTENT.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

Color and count the shapes in this graphing activity.

-ELA: Reading Comprehension: Nonfiction

-Open Response- "The Story of a Snowflake." Have someone read the story to you and answer the questions.

K.RI. With prompting and support, ask and answer questions about keydetails in a text.

Grade 1

-Math: Graphing/Data

CC.1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the number of data points, how many more or less are in one category than in another.

Print out the piggy graph pages to practice creating a graph on your own. Then answer the following questions: Which shape was there the most of? Which shape was there the least of? How many fewer squares than circles are there? How many shapes where there in all? If you added one more to your favorite shape, how many would there be then?

Now I want you to create your own graph around the house. Ask the people at home what their favorite season is and record your results. What can you say about the information you graphed? Which season was the most popular? Which season was the least popular?

-Writing: Narrative

W.1.2 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order and provide some sense of closure

Do you remember when we wrote our small moments? I want you to write me a story about being home on a snow day. You need to include a beginning with characters, setting and feelings, a middle with or without a problem and an ending with or without a solution. Make it exciting! Add talking, sounds and many details. Add to your picture too. Remember when you're done you've just begun. Add to the words, pictures or start a new piece.

Please use three pieces of any kind of paper you have at home.

-Science/Social Studies: Snow/Weather

Objective: Students will be able to show their knowledge of solids, liquids or gases. Students will be given a worksheet that has a list of objects that are solids, liquids or gases. They will need to sort them and glue into the correct categories. The next day in class they will have to explain why they chose the categories they did.

Standard: 1.MD.C.4

2nd Grade

-Writing: Expository writing about snow

Objective: Students will be able to inform the reader about a topic they know about or something they know how to do.

Students will choose to write either **what they know about snow** or instructions for **how to build a snowman**.

Standards:

-Science/Social Studies: Citizenship

Students will be asked the following question: What members of your community (school and town) are or were involved in this snowday? Who took part in deciding to have school cancelled and who helped clean up the snow to make the roads safer? After answering these questions, students will be asked to write a thank you note to one of these community members.

On a map, students will then outline the borders of their town community, state, and country.

Standard: G2.2

3rd Grade

-Math: Word Problems

Objective: Students will be able to solve multi-step word problems.

Description: Students will be given a worksheet where they will need to problem solve to complete two step word problems using all four operations. They will need to determine which operations to use to answer the questions.

Standard: CC.3.OA.8

-ELA: Reading Comprehension: Nonfiction

Objective: Students will read a nonfiction passage titled "Ice City" and answer comprehension questions.

Description: Students will read a passage about a city of ice. They will answer 5 comprehension questions about their reading.

Standard: RI.3.3, RI.3.1

Grade 4

-Science/Social Studies: Snow/Weather

Standards: 4-ESS2.1

Objective: Students will be able to explain the three types of weathering and their effect on

the Earth's surface.

Description: Students will read the passages about weathering and complete the worksheet

on types of weathering.

-Math: Word Problems

Standard: 4.OA.A.1

Objective: Students will be able to solve word problems using the four operations.

Description: Students will answer word problems with a "winter" theme.

CCSS.MATH.CONTENT.4.OA.A.1

-ELA: Reading Comprehension: Nonfiction

Standards: 4.RI.1

Objective: Students will be able to answers questions using evidence from the text. Description: Students read "Winter Worries and Health Hazards" and answer the comprehension questions using evidence from the text.

Grade 5

-Writing: Expository writing about snow

CCSS.ELA-LITERACY.W.5.2

Go outside and help the adults in your house shovel some snow. Pay attention to how you are using your body. Then write a one page informational text about "how to shovel snow". Make sure to include and introduction, conclusion, facts and details, and transition words. You may want to discuss the following....

- -Equipment (shovel, clothing, etc)
- -How often should you shovel? Wait until the snow is finished or shovel multiple times during the day?
- -Where do you put the shoveled snow?

-Science/Social Studies: Citizenship

CCSS.ELA-LITERACY.W.5.1

Write a short paragraph to answer each question

Truth in Friendship

Imagine that a friend is going to do a comedy act in a talent contest. He tells you the jokes from the act. The jokes are awful. Do your tell him? If so, how do you say it?

Test Your Compassion (compassion is caring for people and other living things)

You find out that a friend had no time to study for a test because she had to help around the house when her mother was sick. So your friend cheats on the test. What do you say to her? What do you do? Do you tell the teacher?

It Takes Guts

Imagine you're playing basketball with a friend. Some kids come up and take your friend's basketball. Describe what you would do.

-Math: Standards Practice worksheets tied to the curriculum

CCSS.MATH.CONTENT.5.NF.A.1

<u>Music</u>

Grade 5

- 2.5 Read whole, half, quarter, eighth, sixteenth, and dotted notes and rests in 2/4, 3/4, 4/4, 6/8, 3/8, 9/8, and alla breve meter signatures
- 4.7 Improvise melodic embellishments and simple rhythmic and melodic variations on given pentatonic melodies and melodies in major keys

Objective: The student will change the song in small ways to make it their own.

Description: The student will look at the musical example provided and listen on youtube if possible (link provided). They will then change: one or more notes for the melody, change one or more rhythms in the song, as well as change some lyrics to have their own variation. They then have to write sentences on WHAT they changed it from and what they changed it to. They should mention if they changed the Verse or the Refrain and specific notes and rhythms that they changed. This enables them to write vocabulary and identify rhythm and note names.

Art

Grade 3

Objective: Students will practice looking (observation skills) and recording(drawing).

Students will draw household objects from observation.

Students will use implied texture to complement their drawn objects.

Standards: MA Visual Arts

3.1 2.2

P.E. & Health

Grades K-5

Standards: 2.3 Perform rhythm routines, including dancing, to demonstrate fundamental movement skills 2.12 Participate in activities that promote physical fitness, decrease sedentary lifestyle, and relieve mental and emotional tension 2.20 Demonstrate exercises in strength training, cardiovascular activities, and flexibility training. 1.2 Identify behaviors and environmental factors that influence functioning of body systems 2.4 Identify physical and psychological changes that result from participation in a variety of physical activities 2.5 Explain the benefits of physical fitness to good health and increased active lifestyle 2.6 Identify the major behaviors that contribute to wellness.

Lesson #3 PE/Health Activity and Reflection Students will be asked to find an activity at home that will keep their body moving for a full 30 minutes. Examples will be given: build a snowman, go sledding, indoor play, chores around the house. Student must complete this activity and then reflect on this activity. Younger students will be asked to draw pictures of their activity and write simple sentences describing what they did. Older grades will be asked to write a reflection summary of their activity and what fitness benefits were achieved: i.e. cardiovascular, flexibility, strength. These reinforce concepts learned in health and PE which are familiar to all grade levels.

STEM

Grades 3, 4, 5

Objective: Students are to use everyday objects found at home, apply the engineer design process, and come up with a usable invention.

Standards: 3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

Description: Students choose one activity from several. Each activity uses easily found household items. Student use the engineering design process to turn ordinary things into a unique new creation. Students will document their process according to grade level ability.

Middle School:

Grade 6 Blizzard Bag

ELA:

Objective:

Students will read the novel **Seedfolks** by Paul Fleischman to complete ELA writing tasks about character traits, point of view, and theme.

DAY 1 to 2

Read pages 1-17

Directions: Choose two different characters from <u>Seedfolks</u>, then compare and contrast their character traits (refer to your bank of *character traits* if needed). In your essay, remember to include an introduction, explanations in your own words, transition words, cite evidence from the two different chapters, and a conclusion statement.

6.W.4 - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

DAY 2 to 3

Read pages 18-35

Directions: The author wrote this book from multiple points of view. Choose one character from **Seedfolks** and explain how the author helps you understand more about their social or cultural beliefs, practices, or experiences. Include two quotes from the story in your response. How would **your** point of view be similar or different if you were a character in this story?

6.Rl.6 - Determine an author's point of view or purpose in a text and explain how it is conveyed in a text

MATH: One of our teaching points for this year, based on data collected, is working with problem solving/ open response math questions. As a grade we are working on teaching students systematic steps and strategies when presented with a word or open response question in math. For our blizzard bag we will create math assignments on Study Island that will require students to use these systematic steps to answer questions. These steps will be included with the assignments as a handout. The assignments will be online but also printed out for their blizzard folder in case technical issues. When students return we will go over these assignments, be graded and we will discuss how they used these strategies.

Standards: Common Core Areas of Concentration: "Students use the meaning of fractions, the meanings of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for dividing fractions make sense. Students use these operations to solve word problems."

Lesson Plan for Blizzard Bag

Grade 8 Blizzard Bag

Procedure:

Assessment:

Dawne Piers-Gamble 8th American History

MA History Standards:	USI.15 Explain the varying roles and responsibilities of the federal government in the United States. (H, C)	
Common Core:	CCSS.ELA-LITERACY.RH.6-8.2 Determine the central ideas or information of a secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.	
Lesson Objective: Students will	 Explain what a federal system of government is Summarize how power is divided between federal and state governments. Identify three powers the president alone can assert Sequence the steps in the appeals process Identify the Three Branches of the United States government Describe the requirements, terms, powers, responsibilities, checks and balances of each of the three branches of the United States government 	
Materials:	 Textbook: United States History Beginnings to 1877 Teacher made question sheet Teacher made graphic organizer Pen or pencil 	

Heather Dekarski 8th ELA Lesson Plan for Blizzard Bag

organizer.

1. Read pages 182-186 in textbook.

2. Answer four comprehension questions in complete sentences. 3. Use the information read on pages 182-186 in textbook and the charts in the textbook, Separation of Powers (pg.183), Checks

Teacher will assess student comprehension of the content text based on the accuracy of the written responses to the questions and the graphic

and Balances (pg.184) and Federal Office Terms and Requirements (pg. 190) to complete the graphic organizer

Blizzard Bag assignments will be focused on providing additional practice in written expression. Each Common assignment will utilize a sentence-building technique or Core focus on a particular part-of-speech and focus on how that part-of-speech or structure can enhance writing. Understand the function of the prepositional phrase (show Lesson time or location) Objective: Use prepositional phrases to add detail Students will... **Materials:** Teacher made sheet with preposition list, teacher-created example and directions **Procedure:** Refer to materials Teacher will assess student comprehension of the **Assessment:** content text based on the accuracy of the written responses to the questions and the graphic organizer.

From: Pat Diefendorf, Eighth Grade Science

Option "selected": a series of one day lesson

Sample lesson - from the Sept. 5th, 2016 Science World

NGSS Objective: Consider structure and function by examining the traits of an animal. Write about the "jobs" that the animal might be good at due to those traits.

CCSS Objective: Write arguments to support claims using valid reasoning and relevant and sufficient evidence.

Steps:

- 1. Before reading the featured article, *Pup on Patrol*, think about and list on a piece of paper, some of the ways people use animals in everyday life. Why are these animals chosen?
- 2. Read the article entitled, *Pup on Patrol*. As you read the article gather evidence to answer the following questions:
- 1. How does wildlife cause problems at and around airports?
- 2. What measures have been taken to solve the problems?

- 3. What are the advantages of using Piper to keep wildlife away from airports compared with other methods?
- 3. After you have finished reading the article use evidence from the article to answer the questions above.

When you have completed the questions, look at the "Dogs at Work" sidebar on p. 11. Answer the following: What advantages and disadvantages animals bring to the jobs they do?

4. Complete the worksheet entitled, Help Wanted! (students will think of other situations in which a working animal might be useful and use this skill sheet to describe a job in which animals could help. Then find a working animal that would fit the bill.)

High School:

ENGLISH

Each snow day students will be given a short story to read, reflect on, and answer questions. The list for each class will include the following stories:

Grade 9: College Prep and Honors (Honors will be differentiated by thematic test questions on the unit)

Day1

The Necklace by Guy de Maupassant

- -accompanying discussion questions
- -Reader response: What was your reaction to the surprise ending? Share thoughts in open response format.
- -Extend interpretations to a discussion of morals with agree or disagree statement. Read reflection of the literary critic Edward D. Sullivan pointing to a moral, such as "Honesty is the best policy," and contrast it with "blind chance rules". Cite evidence to support positions.

Assignments will be handed out in paper format ahead of time for students without internet access at home. Google Read/Write application will be used for those students needing special education accommodations in the home.

ART

The high school art department sees the Blizzard Bag initiative as a great opportunity to reinforce content that is already covered throughout the school year. The assignments we choose would all align with Massachusetts Visual Arts Frameworks. We will create a series of 1-day assignments that students can choose from. These assignments will be given to students in a packet at the beginning of the season and will also available on the school website.

An example of a high school art 1-day assignment:

Complete 5 contour line drawings of trees. Work from observation (look out the window or GO outside and draw trees that you can see). These drawings are due 3 days after the snow day.

SCIENCE AND TECHNOLOGY

Students will complete a previously distributed packet to be worked on during snow days that will consist of MCAS questions for students to practice and complete.

MATH

Assignments based on enrichment activities for the given units and timeframes would be distributed

in advance and available online. The main content would be challenging real life mathematical situations and problems that revolve around current classroom content.

SPECIAL EDUCATION

Math

MCAS review questions for 10th grade will be provided with a link to an associated webpage that will allow for content review ie Khan Academy.

The 9th grade will complete a project working with fractions using their favorite recipe tripling the measurements and presenting their findings and explanation of their work on poster board.

ELA

Students will be asked to read short stories and complete Plot pyramids. The stories will include: <u>After Twenty Years</u>, <u>One Throw</u>, <u>The Southpaw</u>, and <u>A Secret For Two</u>.

Academic Support

Work targeted toward each student's individual goals as listed on their IEP.

SPANISH

For my Spanish 2 classes I plan to do a series of one day reading assignments on topics that have previously been explored in class. A sample of blizzard bag assignments are listed below:

Spanish 2 Blizzard Bag Assignment #1 Snow Day #1

Students will be asked to translate into English and answer the questions listed at the end of the assignment in Spanish using complete sentences (the attachments below and the directions will be listed on the class webpage.)

SCIENCE

The science department thought it best to present a long term project that will be completed in stages during the snow days. They also suggested the following possible ideas:

- Research project done in stages
- Chapter reading answering questions
- Reading in the content area books and/or articles
- Khan Academy videos that align with current chapter
- MCAS practice tests and/or problems (printed or online)

CHOIR

For the high school choirs I plan to do a series of practice logs of one day assignments. I also have attached a documentary film to view about "Into the Woods" which is the musical the is being planned by the drama club this year.

Blizzard Bag assignment - Day One

Attached please find a choir practice log to keep track of the music you practice at home. You must practice three pieces for at least 10 minutes each, especially work on memorizing the words to the songs. We will have vocal quizzes based upon your practice log upon our return to class.

Also please watch information about Stephem Sondheim and the performance of "Into the Woods". We will have a class discussion about the film upon our return to class. Please click on the link below to view the film.