

Children's Literature and Mathematics

Submitted to Dr. Daniel Jarvis
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Section: P/J 4
EDUC 4274
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Summary of “Get Up and Go!” by Stuart J. Murphy

A dog named Sammie helps his owner, a young girl, get ready for school in the morning using time lines, rhymes, and addition. The use of time lines within this story allows students to visualize how long it actually takes the girl to complete a simple task, like brushing her teeth. Throughout the story the young girl completes multiple tasks before she heads off to school and after the completion of each task it is added onto the time line. This allows students to see how the time line gets larger as the story progresses. Each task is represented by a specific colour so students are able to go back and make a reference to any task and see its length which helps students see the representation of more than and less than. Students in primary and junior grade levels can relate to this book as each student has their own unique morning routine before they go to school.

Murphy, Stuart J. (1996). *Get Up and Go!* China: Library of Congress Cataloguing-in-Publication Data.

ISBN 0-613-00049-8

Questions:

Looking at the title of the book and illustration on the front cover, what do you think this book is about?

What would happen if the young girl in the story only had 30 minutes to get ready in the morning? What would she have enough time to complete her morning routine?

Can you think of a way that the girl could use less time to get ready in the morning?

How much time does it take for the girl to eat her breakfast?

How much time does it take the girl to get dressed?

How can you tell which routine takes more time in by looking at the time line?

How do we find out how long it takes the girl to get ready before she goes to school?

Throughout the lesson we will encourage the students to use math terms when answering questions, for example, time, minutes, plus, equals, more, and less.

1. Lesson Plan Information	
Subject/Course: Mathematics	Name: Marissa Lewington and Shawn Stein
Grade Level: 1	Date: January 27, 2009
Topic: Number Sense and Numeration – Number Lines	Time and Length of Period: 10:00am – 10:35am (35 mins)

2. Expectation(s) and Learning Skills
<p>The students will:</p> <ul style="list-style-type: none"> - Solve a variety of problems involving the addition of whole numbers to 20, using concrete materials and drawings (e.g., number lines) <p>Today, students will: perform the addition of whole numbers using number lines based off of the students' morning routines.</p>

3. Pre-assessment
<p>A. (i) Students</p> <ul style="list-style-type: none"> - Have an idea of common morning routines and their approximate completion times. - Are able to count whole numbers up to 20 <p>(ii) Differentiation of content, process, and/or product (may be accommodations and/or modifications)</p> <ul style="list-style-type: none"> - T.J. has visual perception difficulties therefore, he will be given a handout with activity instructions and a visual representation of a number line that will be attached to his desk.
<p>B. Learning Environment</p> <ul style="list-style-type: none"> - Students will work at their desk individually to complete this activity. All the materials will be located at the supply table. Students will need to gather all the necessary materials to complete this activity. The example number line will stay posted on the board as a reference.
<p>C. Resources/Materials</p> <ul style="list-style-type: none"> - <i>Get Up and Go!</i> - Murphy, Stuart, J. - Glue sticks - Number line handout (blank number line) - Crayons - Morning routine pictures (such as breakfast, toothbrush) - Class example of morning routine timeline (from book)

- Pencils
- Erasers
- Scissors
- Manipulatives

4. Content (The What)

- Visual example of the little girl’s morning routine. A number line will be constructed as a class with different colours of construction paper to represent different tasks and their times.
- Each student will be handed a number timeline sheet and a sheet of common morning routines to complete the activity.
- The students will create a number line based on their morning routines (must choose at least 3).
- All the numbers on the number line represent time (in minutes).
- Each activity will be glued on the number line sheet. Students can draw a morning routine if it is not found on the sheet provided.
- Each activity’s time will be coloured differently on the number line.
- Each morning routine will also have its time written underneath the picture.
- Students will add up all activities on the number line and get a total number of minutes for their morning routine. The students must show their work for their addition. Students are able to use manipulatives to aid them, if necessary.

5. Teaching/Learning Strategies (The How)

Teacher Role

(i) Introduction of the Activity, Routines and Procedures

(25 mins)

- Introduction to Activity: read “Get Up And Go!” by Stuart J. Murphy.
- Make reference to the number line that the little girl keeps for her morning routines.
- “What would happen if the girl in the story only had 30 minutes to get ready in the morning? What would she have to do to her morning routine?”
- “Can you think of a way that the girl could use less time to get ready in the morning?”
- “How can you tell which routine takes more time in the morning by looking at Sammie’s number lines?”
- “What is a number line? A number line is a line that is equally split up and it is used to help you count.”
- Explain “Today class, we will be making number timelines based on our morning routines, like Sammie did for his owner. Everyone will be making their own number line. We will be using pictures, glue sticks, and a number line sheet (show handout).”
- “First let’s go over Sammie’s number line from the book.”
- Go over Sammie’s number line from the book, reconstructing it like the activity, using pictures and coloured construction paper.
- Hand out a number line sheet and an activity to each student. The students can grab glue, crayons, and scissors during this time from the supply table.
- Explain to the students that they will pick at least 3 activities that they perform as part of their morning routine and they will glue the pictures on the number line and give each

activity a time limit. The students will also colour the number line a different colour for each activity. If a student has an activity that does not have a picture, than they can draw their own picture. Each student will then add up and total their number line, using manipulatives if necessary.

- Now it's the students turn to make their number lines.

(ii) Lesson Conclusion

(10 mins)

- "So, can anyone tell me what we did today?" "We used number lines to mark out the time of our morning routines. Why are number lines useful?" "Number lines are used to help with counting. Would anybody like to share their number line with the rest of the class?"
- Any student who wants to can present their number line to the class and briefly explain it.
- Finally, we will clean up after the activity.

6. Assessment (Collection of Data) / Evaluation (Interpretation of Data)

- We will mark using a checklist for how well instructions were followed and completeness of activity.

Critique of "Get Up and Go" by Stuart J. Murphy

Accuracy

Get Up and Go is a book based on time lines created during a young girl's daily morning routine before school. The concepts within the book are presented properly and accurately which allows students to explore and add meaning to each concept. We rate this section of the book a 6/6 because it touches upon all the main concepts within the story.

Visual and Verbal Appeal

This book is very visually and verbally appealing as the illustrations and writing style come together to make a cohesive book. The illustrations are done with acrylics on water colour paper which adds texture and depth to the pictures. A colour time line is presented after each part of the morning routine is completed. They are represented by different colours so students are able to visually see which routine took longer to complete. This also helps the students add the total amount of minutes it took the girl to complete each task. This book is a rhyming book which presents students with an opportunity to see connections between different words. We

would give this section a rating of 5/6 because Stuart Murphy and Diana Greenseid have created a visually and verbally appealing book for students based on our above critique.

Connections

A huge part of the Ontario Curriculum is having students know how to make connections about what they are learning to the outside world. This book allows students to build a meaningful relationship between mathematics and their outside world. Every student has their own unique morning routine and they can use the concepts from this book to add and count the number of minutes it takes them to get ready in the morning. We feel that Stuart Murphy did an excellent job of creating a book that students are able to personally connect too and therefore a rating of 6/6 is given. The book presents itself to include students from a diverse population.

Audience

Get Up and Go is an inclusive book that can be applied to different cultures, races, and genders. Each student is going to have their own personal background that they come into the classroom with but this storyline is applicable to everyone. This book has foreshadowing as the students can examine the pictures to make educated guesses on what may come next and shows the representation of greater and less than. We would give the book a rating of 4/6 for audience.

Wow Factor

We feel that “Get Up and Go” does not present the reader with new ideas nor does it provide multi-layered connections. The book is great in all the other categories but it does not spark something new to the reader or make the reader think beyond the text. We would rate this part of the book 1/6 due to the reasons stated above.

Overall

Overall, we believe that this book presents itself as a good source for explaining and understanding time lines and minutes. The storyline throughout the book is visually and verbally appealing to students. Students are also able to relate to the book, since a lot of the routines are

common to all students. This allows students to have a better understanding and grasp about the number lines and addition that they are learning. They can also relate this to other aspects of their life, students will be able to represent that some routines and tasks take longer to complete than others. These mathematical ideas can be used to express different relationships within their own life.

Self-Assessment

Shawn Stein

I would give myself an 18/20 on this assignment. I feel that I worked hard on this assignment and I am proud of the finished result. I feel that my partner worked a little bit harder than I did though and that is why I only gave myself an 18.

Marissa Lewington

I would give myself a mark of 20/20 for this assignment. I spent time analyzing the Ontario Curriculum document to find the right expectation to relate to our book. I also made sure that all the requirements of this assignment were met by using the checklist in our course outline. Shawn and I brainstormed our ideas to come up with a mathematic activity and worked together to complete this assignment.

References

Murphy, Stuart J. (1996). *Get Up and Go! China*: Library of Congress Cataloguing-in-Publication Data.

Hellwig, S.J., Munroe, E.E., & Jacobs, J.S. (2000). Making informed choices: Selecting children's trade books for mathematics instruction. *Teaching Children Mathematics*, 7(3), 138-143.