

CARDBOARD ROBOTIC HAND LITERACY SUPPLEMENT

ADDING LITERACY AND NUMERACY SUPPLEMENTS TO TINKERS LESSONS

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“Education is all a matter of building bridges.” ~ Ralph Ellison

This unit is designed to supplement the Cardboard Robotic Arm section of the 9 Applied Design, Skills and Technology (ADST) Lessons found at <https://digmore.prn.bc.ca/helpful-resources/adst/>. ADST support exists for SD60 teachers, including materials, tools and training. Please contact your administrator if you'd like to access this support.

LESSON TITLE = NOVEL STUDY: THE RUNNING DREAM

A great way to develop empathy in design thinking is to put yourself in the shoes of the people who you are designing for. The two books I've selected both have main characters that have experienced a conflict that results in the loss of a limb. This novel study helps students explore the themes of empathy, overcoming adversity, courage and persistence. I've designed this unit for The Running Dream, but it's generic enough to use on any novel. Another excellent candidate for this unit is Soul Surfer, by Bethany Hamilton, though the book isn't as widely available on platforms like YouTube (for students who aren't reading at grade level).

<p><i>NOVEL STUDY: THE RUNNING DREAM (BY WENDELIN VAN DRAANEN (COMPLEMENTS THE CARD-BOARD ROBOTIC ARM LESSON)</i></p>	<p>Literacy Task: Novel Study. The Running Dream Or 2004 autobiography Soul Surfer: A True Story of Faith, Family, and Fighting to Get Back on the Board by Bethany Hamilton <u>Curricular Competency (Gr 6):</u> Construct meaningful personal connections between self, text, and world</p>	<p>After creating a Robotic Cardboard arm, students will participate in a novel study whose main character is an amputee. Students will then engage in writing and discussion tasks that help them construct meaningful personal connections between self, text and the world.</p>
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Target Audience: Grade 6 students (Literacy). *This lesson is adapted from the Google Docs Template - "Book Report".*

Prep Work:

- **YouTube Adaptation:** Access earbuds and iPads to connect students who aren't yet reading at grade level with this audio version of Running Dream on YouTube. Alternatively, you can low/no-tech pair struggling readers with students who read fluently.
 - Part 1:
 - [Chapters 1-10](#)
 - [Chapters 11-20](#)
 - [Chapters 21-26](#)
 - Part 2:
 - [Chapters 1-6](#)
- Digital Novel Study c/o Google Classroom. This novel study makes use of Google Doc's Template – "Book Report". Ensure your students can access laptops and/or the computer lab to "fill in the blanks" for this novel study. You can find [google's template gallery here](#). Alternatively, you can print out a paper copy for students who are unable to access technology. See Worksheet Section.
- Break your class into discussion groups (about 4-6 per group)

Materials List:

- 1 novel per person: THE RUNNING DREAM (by Wendelin Van Draanen)
- Individual student access to computer/iPad/chromebook OR printed "fill in the blank" version of novel study.
- Earbuds/headphones for students who need to listen to the novel

Question:

How does reading a novel about overcoming adversity and a participating a Design Thinking Challenge about developing prosthetics help you better understand the characteristics, qualities, strengths, and challenges that make you unique and important? How are you able to use your strengths to contribute to you home and/or communities?

Grade # Curriculum:


- **Big Idea:** Exploring [stories](#) and other [texts](#) helps us understand ourselves and make connections to others and to the world.
- **Curricular Competencies:**
 - Construct meaningful personal connections between self, [text](#), and world
 - Respond to [text](#) in [personal, creative, and critical ways](#)
- **Content:** Strategies and Processes → Metacognitive Strategies

Discussion Prompts:

- A Novel Study at its best is a good conversation about a good book with people who love reading. Sometimes it's hard to know what to say in a book study conversation. Fear not!

That's what visual prompts are for! Brainstorm a list of questions students might ask each other during discussion time and refer kids to the poster of these prompts if they don't know what to say. Feel free to add more awesome questions to the poster as they arise.

- Avoid “*not so good*” discussion questions which can be answered in one or two words. For example:
 - *Did you like the chapter?*
 - *What's the main character's name?*
- Instead, encourage kids to engage in deeper thinking questions/prompts such as:
 - What would you do if you were X?
 - I wonder why...
 - I predict...
 - My favourite part was (quote a section and then tell us why)
 - This part (read a selection) reminds me of... because...
 - I can't believe...
 - I find it interesting that... because...
 - I liked it when... because...
 - I didn't like it when... because...
 - I hope that...
 - I think the next chapter will be about...



Make this into a cool poster!

Introduce the Lesson: A great way to develop empathy in design thinking is to put yourself in the shoes of the people who you are designing for. I've selected a novel for us to study. The main character experienced a hardship that he/she has to overcome.

- What's a really big challenge in your life that you've had to overcome? (Allow students to journal about this and/or discuss if they feel comfortable).
- What do you think the novel “The Running Dream” is about?
- This novel study will help us explore the themes of empathy, overcoming adversity, courage and persistence. We'll be reading the novel at home for the most part, while class-time will be spent doing the written portion and having group/class discussions.

Teach the Lesson: Each day, you need to read 5 chapters. The chapters are pretty short, so it won't take us more than a week to read the whole book. Every class, you'll be expected to complete one page of the Book Report (on Google Docs or on paper). We'll spend 40 minutes writing in our Book Report and 20 minutes discussing the **daily discussion/sharing prompt(s)**. It's important that you read your novel for homework and/or during quiet times in class so that you don't fall behind.

Daily Plan

1. 10 minutes: Silent Reading for most of the class while you visit one group and listen to & coach students on their reading fluency/voice/expression.
2. 20-30 minutes: Small Group Reading Circles. Students break into their Reading Circle group (4-6 students per group) to work on their Book Report (complete 1 page per day).

Students are encouraged to talk quietly during this time and share ideas, thoughts and feelings about the novel. It's also a time to clarify any parts that may be confusing. During this time, teacher visits each group for about 5 minutes to ensure students have read their selection and are working at an appropriate pace.

- 20 minutes: Large group discussion of **daily discussion/sharing prompt** in the Book Report. During this time, sit in a large circle and allow each student a turn to ask a question or speak to a prompt (like those on the **cool poster** you made with the kids at the onset of this unit). Teacher notes the depth of reflection in student responses.

End the Lesson:

Exit Slips: There are **Little Exit Slips** below and a **Big Exit Slip** on the last page. Copy & cut out the little ones (you may need to enlarge the table below when you copy it).

Have the kids fill out their response, sign the back and submit to you before dismissal.

<p>Summarize what you heard today: <i>Today I noticed that</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Summarize what you read. <i>Today in the novel</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Analyze! <i>A question I have is</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Analyze! <i>I don't understand</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Analyze! <i>I now understand</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Analyze! <i>An interesting thing I learned was</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Analyze! <i>This story makes me feel</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Analyze! <i>Page ____ reminded me of a time when I...</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Judge! <i>I predict that...</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Judge! <i>I was impressed when</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Judge! <i>I predict that...</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>Judge! <i>I was disappointed when</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

Adapted from Addie Williams Reading Journal

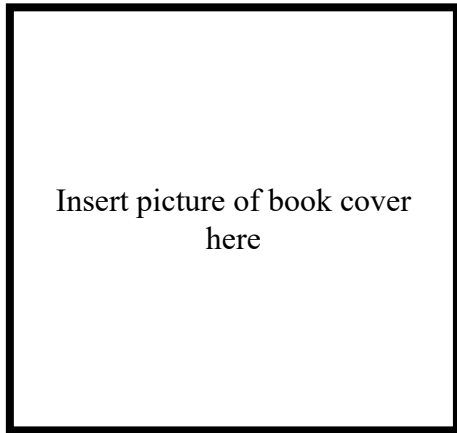
Assessment

- See Last page of Book Report

Worksheet Instructions: Fill in the blanks of this template as you read your novel.

Book Report

Name of the book



Your Name: _____

Date: _____

Book Themes: _____

Short Summary of Book (No spoilers!) _____

6 points

Introduction

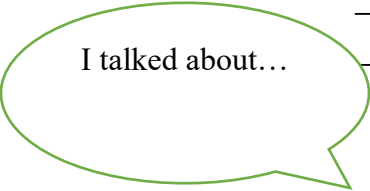
1. Title: _____
2. Author: _____
3. Fiction or Nonfiction? (Circle one)

1. Be Ready to Discuss:

- a. Talk about your first impressions of this book.

- b. Describe your Connections (c/o Adrienne Gear) in full sentences.

- i. Text to Text: How does this book remind you of another text?



I talked about...

- ii. Text to Self: How does this book remind you of a personal story/memory?

- iii. Text to World: Does this book remind you of something else you saw/heard/read in the world? (For example, Movies, YouTube, News)

7 points

The Setting

I talked about...

2. Be Ready to Discuss:

- a. WHEN does the story takes place? _____
- b. WHERE does the story take place?

- c. How much TIME passes from start to finish?

- d. Describe the setting so your classmates feel like they are INSIDE the story!

I shared...

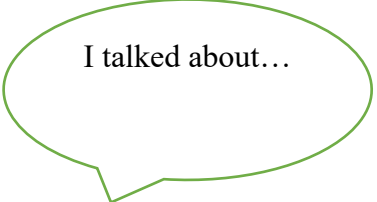


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3. Be Ready to Share:

Find an image online that resembles the setting of this story, then replace the image above. Alternatively, you can draw and paste your own image.

5 points



I talked about...

The Characters

4. Be Ready to Discuss:

a. Who is the main character?

i. Do they have any friends or helpers?

b. Is there someone or something who challenges the main character? (Conflicts are usually Person vs. Person, Person vs. Self, Person vs. Nature)

c. Instead of just naming people, talk about what makes each person memorable. Discuss at least 4 characters.

<hr/> <p>7 points</p>

I shared...



Be Ready to Share: Draw the main character in the box above or find & insert an image (from online) that resembles the main character. Show how you imagine the main character looks.

Plot

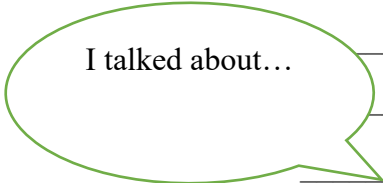
Be Ready to Discuss: Think about the most important events in the story. Be careful not to retell the whole story but give enough detail so that the plot makes sense to someone who hasn't read the book.

1. Beginning: what happened at the beginning?

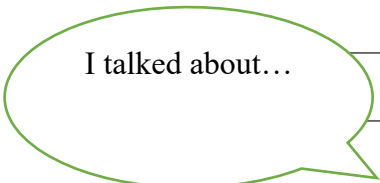
I talked about...
(the beginning,
middle and/or
end)

4 points

2. Middle: usually the highest point of action in the story. Describe the conflict.



3. Ending: how did everything finally work out?



I talked about...

Conclusion

Be Ready to Discuss: It's important to give your opinion! Would you recommend this book to someone else?

Insert 2 emojis that suit this book!

Book Review: You should read this book because...

I give this book a ____ star review because



5 points

Assessment

	Not Yet Meeting	Meeting Expectations	Fully Meeting
Written Work	Less than 20 points	20-34 points	35-40 points
Discussion/Sharing	Evidence of less than 5 discussion/sharing contributions	Evidence of 5-6 sharing/discussion contributions	Evidence of 7 or more sharing/discussion contributions
Total	Less than 25/50	25-39/50	40-50/50

Teacher Comments:

Big Exit Slip

You've read a novel about overcoming adversity and you've participated in a Design Thinking Challenge about developing prosthetics. How does learning about another person's difficulties help you better understand your characteristics, qualities, strengths, and challenges?

Describe what makes you unique and important?

How are you able to use your strengths to contribute to you home and/or communities?