

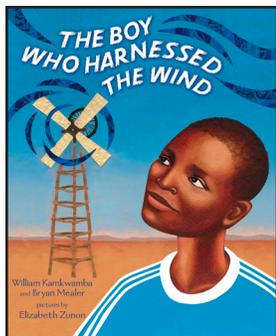


# CRUCHLEY'S COLLECTION

Diana Cruchley is an award-winning educator and author, who has taught at elementary and secondary levels. Her workshops are practical, include detailed handouts, and are always enthusiastically received.

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## THE BOY WHO HARNESSSED THE WIND



The true story of a boy living in Malawi who created a windmill to generate electricity and pump water for his village.

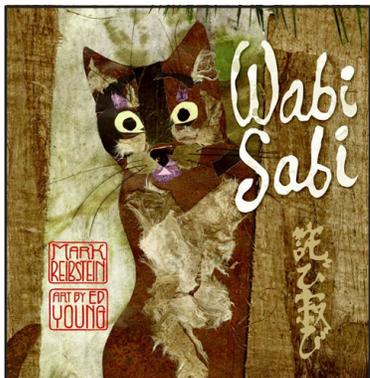
William Kamkwamba, Penguin, ©2012, 978-0-8037-3511-8

## THE ILLUSTRATION

Elizabeth Zunon's illustrations are a combination of drawings (for hands, faces, arms and legs) with cut off and overlapping papers (like a collage). You could start with an inexpensive block of 12 X 12 paper from Michaels (sometimes as low as \$14 for 180 pages) from which students could try this style of art.

There are several other recent picture books, including *Wabi Sabi*, that use this style.

Take picture of the student art, and organize a PowerPoint or Keynote slideshow so that students can see how elegant the overlapping images look once they are in the book.



## WERE IS MALAWI?

Ask students to find Malawi on a map and identify the countries that surround it. It is a small, land-locked country, with a population of 12 million. It has a million orphans, from AIDS. 80% of the population is subsistence farmers growing maize (and tobacco as a cash crop). 70% have no latrines. The surrounding countries are Tanzania, Zambia, and Mozambique with Zimbabwe close.

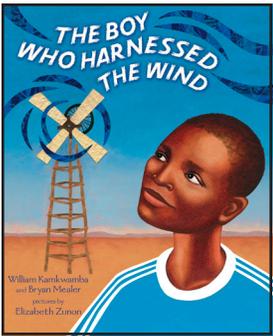


## THE FAMINE ON CANADIAN PRAIRIES IN THE 30'S

Malawi, and other African countries, regularly suffer from famine induced by lack of water. This reminded me of the man-made destruction of the 30's on the Canadian prairies that caused our "dust bowl" years.

I looked but couldn't easily find a YouTube on the Canadian prairie experience, although there are quite a few images - not as many for us as for the Americans of course. In any case, this seems like an area of Inquiry that might result in a great class project to produce a YouTube on the Canadian prairie experience of the 30's.





## THE BOY WHO HARNESSSED THE WIND, CONT.

### THE MAKER MOVEMENT OR “TINKERING SCHOOL”

The Maker Movement espouses taking cast-off materials to create unique clothing, art, machines, etc. On line sites like *Quirky* or *Skillshare* show the practical (and often beautiful) results.

Tinkering School puts real tools in the hands of very young school-age children, teaching them safe use, and then allowing them to take apart and figure out machines. All wires must be cut off right up to the housing of the machine. All batteries must be removed. Good machines for this purpose are plastic clocks, typewriters, printers, and toasters. You can get them from friends and garage sales as well as checking out on-line the kinds of tools that are valuable. I'm thinking that if you can't fit it in, it might make an interesting home assignment for parents and kids to do together.

### EXTREME WRITING

A springboard from a picture book to personal writing should provide at least three topics if possible. Here are some ideas:

1. Think about electricity in your life. What things would you not be able to do without electricity? (For example, cars and buses need a battery to start.)
2. William can take things apart and use them for new purposes. Write about your experiences taking apart things, building things, or creating things.
3. The villagers do not understand so they think William is crazy (*misala*). Write about times you have been misunderstood.

### WILLIAM KAMKWAMBA'S TED TALK

Students can hear Kamkwamba's TedTalk at:  
[http://www.ted.com/talks/william\\_kamkwamba\\_how\\_i\\_harnessed\\_the\\_wind?language=en](http://www.ted.com/talks/william_kamkwamba_how_i_harnessed_the_wind?language=en)

### AN INQUIRY INTO CROPS OF THE AMERICAS

Historically, corn was one of the North American crops exported around the world, so it is interesting that it is the major crop of Malawai. Students may be interested in investigating what other foods originated in the Americas, including chocolate, tobacco, potatoes, vanilla, tomatoes, peanuts, avocado, chili peppers, papaya, pineapple, maple syrup, sunflower, wild rice, turkey, cranberry, sweet potato, quinoa, brazil nuts, cashews. This is an interesting potential Inquiry topic.

### ART

The Internet has lessons for how to draw nearly anything - in this case, an ear of corn. You could start students with a cartoon corn at [http://www.youtube.com/watch?v=n\\_fx0mTxbh4](http://www.youtube.com/watch?v=n_fx0mTxbh4) followed by a more sophisticated drawing at: <http://www.youtube.com/watch?v=lsYfc6KMXh4>

### SCIENCE OF CORN

As a science study you could bring in jeweller's loupes and enough corn so that each pair of students can have a slice. Use the loupes to have students ask themselves, "What does this look like? What does it remind me of?" They should think of 5-10.

- tiny pats of butter
- little yellow pillows
- coated pills
- colourful pool toys
- little balloons

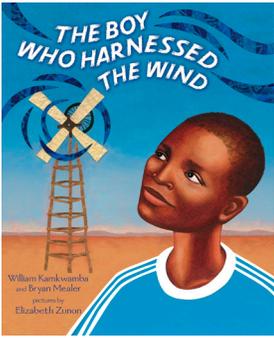


The science question is, "If it looks like a tiny pat of butter, is there any way it could act like a tiny pat of butter?" (Of course, corn oil, is very high calorie and often used as a replacement for butter, so that isn't too hard.)

What about "If it looks like a little yellow pillow, is there any way it could be acting like a little yellow pillow?"

A good Inquiry series of questions can come out of these, and often a little experiment can be constructed to test whether it is indeed acting like what it looks like. For example, could we extract a kernel carefully and see if it floats, like a pool toy?

Remind students that 95% of nature is function over form. That is, it doesn't look beautiful just to look beautiful; there is a reason for it.



## THE BOY WHO HARNESSSED THE WIND, CONT.

### CREATING SETTING THROUGH VOCABULARY

Show the students the following list of Malawi words. Then ask them to listen carefully as you use a document projector to read the story. Ask them to look for the approximate meanings of the word. Discuss their answers, and more importantly, what context clues they used to make their decision.

- maize
- pepani
- magesta a mphepo
- tonga
- misala
- muli bwanji
- wachitabwino



### OTHER BOOKS SET IN AFRICA

There are many picture books set in Africa. The following seem to be particularly good:

- *How the Leopard Got His Claws* (Nigeria. I have written teaching ideas for this one) (see dianacruchley.comn)
- *Galimoto* (Malawai. A boy makes a toy vehicle)
- *I Lost My Tooth in Africa* (Mali. A girl receives 2 chickens from the African tooth fairy)
- *My Father's Shop* (Morocco. A boy helps his father's rug business)

