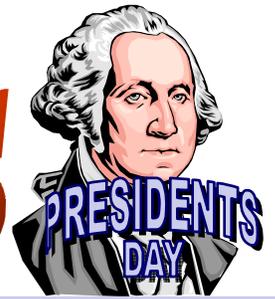


YOUTH SERVICES NOTES



Week of February 17, 2014

No. 158

Pamunkey Regional Library

Valentine Make and Take Program



All of our programmers had an assignment to promote TumbleBooks to parents and children during the February Snuggle with a Book Program. Here at our Atlee Branch, teen volunteers show TumbleBooks to attendees at a Valentine Make & Take program.

– Linda Gosnell, Pamunkey Regional Library ■

From PUBYAC

LEGO Mindstorms

Hello all! I am interested in starting a LEGO Mindstorms program at my library. However, I'm not really sure how/where to start. I know other libraries have done this so I was hoping you would be willing to share your wisdom with me.

1. Which kit did you purchase? How many?
2. What ages did you gear the program towards?
3. How many participants did you allow in each session?
4. What was the format of your program?
5. Any other useful information.

Thanks so much in advance!

Posted February 4, 2014 by Kim, Children's/Young Adult Librarian, Hudson Library & Historical Society, Hudson, OH 44236. Thank you so much to everyone who sent

(Continued on page 3)

Chesterfield County Public Library

Winter Reading Displays



Another photo on page 2

Youth Services Notes

is issued weekly by

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The Institute of Museum and Library Services is the primary source of federal support for the nation's 123,000 libraries and 17,500 museums.



Through grant making, policy development, and research, IMLS helps communities and individuals thrive through broad public access to knowledge, cultural heritage, and lifelong learning. This newsletter project is made possible by a grant from the U.S. Institute of Museum and Library Services.

Winter Reading Display at Chesterfield

Continued from page 1



Winter Reading Program 2014 Artwork is from *My Heart is Like A Zoo* by Michael Hall is copyrighted by Michael Hall and used with permission.

Dates to Remember

Regional Early Literacy Activity Center Exchanges, Spring 2014

Thursday, March 6, 2014	Waynesboro Public Library	Waynesboro
Friday, March 7, 2014.....	Bedford Public Library.....	Central Library
Friday, March 28, 2014	Pamunkey Library System.....	Ashland
Thursday, April 3, 2014.....	Southside Regional Library	Boydton Public Library
Tuesday, April 8, 2014.....	Chesapeake Public Library.....	Central Library
Friday, April 11, 2014	Tazewell County Public Library	Tazewell
Thursday, April 17, 2014	Middlesex County Public Library	Location to be announced
Friday, May 2, 2014.....	Prince William County Library System.....	Bull Run Regional Library, Manassas

Online Courses

February 17–March 21, 2014	Early Literacy and Books: Making the Connection.....	online course
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Conferences

March 11-15, 2014.....	Public Library Association	Indianapolis
June 26–July 1, 2014	American Library Association Annual Conference	Las Vegas
September 18-20, 2014	Association for Library Service to Children National Institute.....	Oakland
October 22-24, 2014.....	Virginia Library Association.....	Williamsburg

Literacy Support Opportunity

Library of Congress Now Accepting Applications for 2014 Literacy Awards

Deadline Is March 31

Applications are now being accepted for the 2014 Library of Congress Literacy Awards, which are made possible through the generosity of **David M. Rubenstein**, co-founder and co-CEO of The Carlyle Group.

These awards were first conferred in 2013 to support organizations working to alleviate the problems of illiteracy both in the United States and worldwide. The awards seek to reward organizations doing exemplary, innovative and easily replicable work over a sustained period of time and to encourage new groups, organizations and individuals to become involved.

“The Library of Congress Literacy Awards program made a big impact on the field of literacy with its initial awards, conferred last year on Reach Out and Read, 826 National and PlanetRead,” said Librarian of Congress **James H. Billington**. “The Library is grateful to David Rubenstein for his continued support of this important initiative.”

“Literacy is the basis for success in life, and I am pleased to be able to continue my support of organizations dedicated to inspiring people to learn to read and to urging those who can read to read more,” said **David M. Rubenstein**.

The Library of Congress Literacy Awards are administered by the Library’s Center for the Book. Final selection of prize-winners will be made by the Librarian of Congress with recommendations from literacy experts on an advisory board.

Three prizes will be awarded in 2014:

The Rubenstein Prize (\$150,000) will be awarded to an organization that has made outstanding and measurable contributions in increasing literacy levels and has demonstrated exceptional and sustained depth and breadth in its commitment to the advancement of literacy. The organization will meet the highest standards of excellence in its operations and services. This award may be given to any organization based either inside or outside the United States. Reach Out and Read was the 2013 winner.

The American Prize (\$50,000) will be awarded to an organization that has made a significant and measurable contribution to increasing literacy levels or the national awareness of the importance of literacy. This award may be given to any organization that is based in the United States. The 2013 winner was 826 National.

The International Prize (\$50,000) will be awarded to an organization or national entity that has made a significant and measurable contribution to increasing literacy levels. This award may be given to any organization that is based in a country outside the United States. Planet Read, based in India, was the 2013 winner.

The application rules and a downloadable application form may be accessed at <http://www.read.gov/literacyawards>.

Applications must be received no later than midnight on March 31, 2014.

Founded in 1800, the Library of Congress is the nation’s oldest federal cultural institution and the largest library in the world. The

Library seeks to spark imagination and creativity and to further human understanding and wisdom by providing access to knowledge through its magnificent collections, programs, publications and exhibitions. Many of the Library’s rich resources can be accessed through its website at <http://www.loc.gov>.



The **Library of Congress Center for the Book**, established by Congress in 1977 to “stimulate public interest in books and reading,” is a national force for reading and literacy promotion. A public-private partnership, it sponsors educational programs that reach readers of all ages through its affiliated state centers, collaborations with nonprofit reading-promotion partners and through the Young Readers Center and the Poetry and Literature Center at the Library of Congress.

Source: Press Release, February 4, 2014 ■

LEGO Mindstorm

Continued from page 1

me information about starting a LEGO Mindstorms program. Here is a link to a Google doc with all of the responses I received:

<http://bit.ly/1j5bLhu>



The document is also attached to this newsletter.

■

From PUBYAC

All Ages Storytime

Hi all, I'm the sole children's librarian at 4 branch libraries. We currently only offer preschool storytime (ages 3-5), and younger children attend, too. The youngest I've had is 5 months old. My question is how do you plan and present a story time for such a mixed age group (0-5) so that all attendants enjoy the program? Thanks. Posted May 4, 2011 by Bridget R. Wilson, Youth Services Librarian. Hello, I just realized I never posted a compilation of responses to my query back in May 2011 about an all ages storytime. My apologies! Here's the compilation. Posted February 4, 2014.

 I have presented a "family" storytime that gets a range of attendees, from babies through preschoolers. There was a steep learning curve, but I've come to rely on anything that invites participation (books with refrains the kids can say with you, etc) because the younger toddlers will often focus on participating with the group, and anything with singing. I've felt like I was losing control of the group because a more complicated book wasn't holding the attention of anyone under 3 years old, but as soon as I started singing all eyes and ears were on me. You can incorporate nursery rhymes and other songs with simple hand movements to engage the gross motor skills of the younger ones, and preschoolers will still enjoy familiar rhymes.

And as much as you can, encourage parent participation. I try to emphasize to the parents (well, sometimes I harass them) that modeling participation and good behavior for their kids helps the whole group - when the tiny ones see their mom singing along or moving with the activity they are more likely to stay engaged.

 I do not currently host a storytime with several ages, but I think it could be a great idea. One at-home daycare would regularly come to my Baby storytime (0-2yrs). At first it wasn't a problem, as many families come with siblings, but then she started bringing 4 older children (3-5yrs). Since the older children were louder and active, it began to bother the other patrons. I didn't want them to stop coming because it was enjoyable for the three babies she would bring, so we came up with the idea to have a separate table set aside filled with books, crafts, play-doh, etc. This was the "older kids spot" and they loved the special attention.

They would go over there when we would do gross motor activities with the infants and toddlers. This made the other patrons feel safer and the older

children not left out. The 3-5 yr olds would also participate when we sang songs, read stories, and even sat on the floor and "bounced" while we did lap bounces with the babies.

 You can never go wrong with music in storytime, especially songs that have a lot of movement/dancing with them. Even if the younger ones can't do all of the moves, they will still enjoy the music. Also, any stories that are told through puppets, flannels, props, etc. will be a hit with a broad range of ages. Hope that helps!

 I offered an all ages family storytime for several years - we average attendance of 5-15. My director cancelled it b/c she felt the numbers weren't high enough. Anyways, when I did it, I tried to have a mixture of stories and activities. I geared it mainly towards the older kids, but mixed in lots of songs with movements the younger kids could follow. Also, our storyroom opens into a children's play area and parents can take whiny and wiggly little ones out for a break.

 You sound like you are in a similar position to me. I am also a solo children's librarian at a small library with four branches. I would be very interested in hearing what you find out about how to host a storytime for the entire preschool range. I have children from 0-5 come, but mostly focus my storytimes to the 3-5 range.

 I've been in your shoes in previous jobs! :) Even though where I am now we have programs for each individual age-group, we also offer a couple of Family Storytimes which are open to all ages, so they are comparable. I know you are probably getting a lot of suggestions, so I will just give you my "rule of thumb". I always have more than enough planned than what I can use, so that it is easier to adjust to the ages that show up. I always begin with longer stories for the older kids, and let the stories get shorter as I go. If I look out at my audience and all of them are preschoolers (which happens a lot at my library), I will skip the longer stories altogether and just do shorter stories. As the program progresses, I also do a lot of movement songs, felt boards and such--more at the end of the program when they are getting more wiggly than I do at first. If I have a puppet show or craft, I tend to do those at the end, but I let people know that we will have them, because I find people will stick around if you promise a puppet show and/or craft. It is sort of an award for listening and participating.

(Continued on page 5)



All Ages Storytimes

Continued from page 4

I actually use this pattern of planning for all programs, even if they are age-specific...doing the longer and/or more involved stories and poems and such at the beginning and getting shorter as I go. It seems to have served me well over the past 25 years. I think the key is to learn to be flexible. That was not something I was really good at when I first began in my career, but it has gotten a lot easier with experience.

A word about being the children's librarian/storyteller at 4 branches...I once had a job where I had to "travel" with my storytimes, but the nice thing about that is that you can usually do the same program at each branch--however, your audiences may be different and that's where the flexibility will come in handy again. One thing I liked was that some of the branches only had small audiences, and they tend to listen longer and better, so I could do more with them. ■

Favorite Class Visit Books

Hi Pubbyac-ers! I am on the lookout to refresh my class visit material. If you feel inspired, I would love to hear some of your favorites and what grades they work best with and I will compile a nice list for everyone. To get things going, I will share my favorites!



k-3 grade nonfiction: *Actual Size and What Would You Do With a Tail Like This* by Steve Jenkins; *How Many Jelly Beans* by Andrea Menotti; *Bubble Homes and Fish Farts* by Fiona Bayrock; *An Egg is Quiet* by Dianna Hutts Aston.

k-2 fiction: *Pete the Cat, Ribbit* by Folgueira; *The Perfect Nest* by Friend; *Muncha Muncha Muncha* by Fleming; *Little Pea* by Rosenthal, *Baaa Choo* by Weeks.

2 grade and older fiction: *Spoon and Chopsticks* by Rosenthal; *Stuck* by Jeffers; *The End and Moo* by LaRoche; *Anansi and the Moss Covered Rock* by Kimmel.

Looking forward to hearing yours!

Posted January 22, 2014 by Jackie Overlid.

Thanks for all the suggestions! Here is the list of titles with successful grade levels. No particular order, sorry! (Personal note, I just read *Moo!* by La Rochelle to two kinder classes and it was a huge hit! They ended up reading it with me after the first page and immediately shouted for me to read again. There was also a nice blog piece about another librarian using it with kinder teacher outreach very successfully.)

Posted February 4, 2014.



- ◆ *Betty Bunny Loves Chocolate Cake* by Michael B. Kaplan: K-2nd
- ◆ *Don't Read This Book* by Jill Lewis: K-2nd and maybe older.
- ◆ *Books by Margaret Read MacDonald* (i.e., *Squeaky Door*, *The Old Woman and Her Pig*, *Teeny Weeny Bop*) : K and up
- ◆ *Chocolatina* by Erik Kraft: 2-3rd
- ◆ *The Day The Stones Walked* by T.A. Barron: 3rd
- ◆ *The Tadpole's Promise* by Jeanne Willis: 3rd and up
- ◆ *Carnivores* by Aaron Reynolds: 3rd and up
- ◆ *I Want My Hat Back* by Jon Klassen: 3rd and up
- ◆ *Boa Constrictor song* (kids stop moving the body part at each line) 3rd and up (sung together with *Carnivores* and *I Want My Hat Back* for a "things that get eaten" theme.)
- ◆ *Frog Princess* by Pamela Mann: 2nd
- ◆ *Z is for Moose* by Kelly Bingham: k-3rd
- ◆ *Tikki Tikki Tembo* by Arlene Mosel: k-3rd
- ◆ *Ming Lo Moves the Mountains* by Arnold Lobel: k-3rd
- ◆ *Books by Mo Willems*
- ◆ *Cat Secrets* by Jef Czekaj
- ◆ *Children Make Terrible Pets* by Peter Brown
- ◆ *Where in the Wild* by David M. Schwartz (two more, all similar, same author, also wrote recent *Rotten Pumpkin* about decomposition which is fun to booktalk around Halloween season)
- ◆ *Paper Bag Princess* by Robert Munsch
- ◆ *Tiny Seed* by Eric Carle
- ◆ *Pete the Cat I Love My White Shoes* by Eric Litwin
- ◆ *Pete the Cat and His Four Groovy Buttons* by Eric Litwin: preschool-2
- ◆ *Biggest, Strongest, Fastest* by Steve Jenkins
- ◆ *Actual Size* by Steve Jenkins: all
- ◆ *What Do you Do With A Tail Like This* by Steve Jenkins: all
- ◆ *An Egg is Quiet* by Dianna Aston: all
- ◆ *A Butterfly is Patient* by Dianna Aston: all
- ◆ *A Rock is Lively* by Dianna Aston: all
- ◆ *A Seed is Sleepy* by Dianna Aston: all
- ◆ *Bubble Homes and Fish Farts* by Fiona Bayrock: 2nd and up
- ◆ *Guess Again* by Mac Barnett: 1-4th (report of kids falling out of chairs from laughing too hard)
- ◆ *Who Sank the Boat* by Pamela Allen (also done as a flannel and with a real foil belt and pennies to demonstrate the weight that sinks the boat)
- ◆ *Once Upon a Cool Motorcycle Dude* by Kevin O'Malley: all, 2-5th (recommended for family gatherings)
- ◆ *Neville* by Norton Jester: 2-5th

(Continued on page 6)

Favorite Class Visit Books

Continued from page 5

- ◆ **Double Trouble in Walla Walla** by Andrew Clements 2-5th
- ◆ **MadLibs** games 2-5th
- ◆ **How Many Jelly Beans** by Andrea Menotti: all
- ◆ **Perfect Nest** by Catherine Friend: 2nd and up
- ◆ **Baa Choo** by Sarah Weeks: k-1st
- ◆ **The End** by David La Rochelle: 2nd and up
- ◆ **Moo!** By David LaRochelle: k-2/all
- ◆ **Little Pea** by Amy Krouse Rosenthal: k-2nd
- ◆ **Spoon** by Amy Krouse Rosenthal: 2-5th
- ◆ **Chopsticks** by Amy Krouse Rosenthal: 2-5th
- ◆ **Stuck** by Oliver Jeffers: 3-5th
- ◆ **Miss Brooks Loves Books, and I Don't** by Barbara Bottner: 2-5th

Plus: Collection of 3rd grade Read Alouds:

<http://klmpeace.wordpress.com/2013/11/21/why-my-tweeps-rock-3rd-grade-read-alouds/> ■

Young Adult Library Services Association

YALSA Names 2014 Quick Picks for Reluctant Young Adult Readers

The Young Adult Library Services Association (YALSA) announced its 2014 Quick Picks for Reluctant Young Adult Readers selection list. The list is presented annually at the **ALA Midwinter Meeting**.

The Quick Picks list suggests books that teens, ages 12-18, will pick up on their own and read for pleasure; it is geared to the teenager who, for whatever reason, does not like to read.

The complete list of 77 titles and 3 series, drawn from more than 200 nominations, can be found at

<http://www.ala.org/yalsa/quick-picks-reluctant-young-adult-readers>.

The Quick Picks for Reluctant Young Adult Readers committee also selected a Top Ten list:

- **Brown, Jeffrey.** "Star Wars Jedi Academy." Scholastic, 2013.
- **Bruchac, Joseph.** "Killer of Enemies." Tu Books, 2013.
- **Charbonneau, Joelle.** "The Testing." Houghton Mifflin Harcourt, 2013.
- **Henderson, Elisabeth and Nancy Armstrong.** "100 Questions You'd Never Ask Your Parents: Straight Answers to Teens' Questions About Sex, Sexuality, and Health." Roaring Book, 2013.

- **London, Alex.** "Proxy." Philomel, 2013.
- **Lynch, Chris.** "Vietnam #4: Casualties of War." Scholastic, 2013.
- **Medina, Meg.** "Yaqui Delgado Wants to Kick Your Ass." Candlewick Press, 2013.
- **Newman, Aline Alexander and Gary Weitzman.** "How to Speak Dog: A Guide to Decoding Dog Language." National Geographic, 2013.
- **Shen, Prudence.** "Nothing Can Possibly Go Wrong." Faith Erin Hicks. Roaring Book Press, 2013.
- **Zadoff, Allen.** "Boy Nobody." Little, Brown Books, 2013.

"We feel such a sense of accomplishment and pride finishing this varied list of books for reluctant readers throughout the country," said **Chair Derek Ivie**. "Quick Picks really has anything any teen might like: zombies, dystopias, dogs, crafts, graphic novels, etc. However, there are no graphic novels of zombie dogs making crafts in a dystopian world. Maybe next year? With that said we are thrilled with this selection!"

YALSA's portfolio of book and media awards helps strengthen library services for and with teens by identifying quality, age appropriate resources for librarians and library workers to share with the teens in their communities.

Source: ALA Press Release, February 4, 2014 ■

DayByDayVA



WWW.DAYBYDAYVA.ORG FAMILY LITERACY CALENDAR

Thanks

for the photos!

- ◆ **Linda Gosnell and Lisa Morgan**, Pamunkey Regional Library
- ◆ **Barbara Gumulak**, Chesterfield County Public Library

LEGO Mindstorms Ideas Compilation

Hi there-

I purchased 3 lego Mindstorm kits for our library. I only have one copy of the programing software but I've installed it on more than one computer and it works fine. I ran a six week Robotics club at a local elementary school for grades 6-8. It went well and the kids loved it but it was a very casual, free and experimental. I would give the kids a general "task" and ask the kids to complete them in groups. I find that 3-4 kids per Robot allows the most hands on activity for the kids. If I would do it again I would limit the attendance and have a better curriculum for each session to make it more structured. I would really love to get an FLL club going at our library (a competitive robotics team to represent the library) but right now I don't have the time or expertise to really implement that.

Good luck and please let me know what you learn from others!

.....

We partner with our local robotics club at the High School (Team 2056) and they've come in and run [Saturday](#) Lego Robotics programs for 9-12 year olds. We had 8 teen volunteers from the high school, 3 parents, and then we allowed 15 kid participants.

The great thing about this is that we didn't have to purchase any kits (the team had them) and I didn't need any expertise. So far the partnership has been fabulous and if you do have a local robotics club, I'd recommend looking into seeing if they'd run programming for grades 6-8.

ALSO:

[You asked: Stacy, Did you happen to read any books on robotics to learn the basics?](#)
I got my hands on the kits 22 hour before I was to run my program. I tried to read up on the mindstorm website, but it didn't make sense until I had the robots in front of me. Hands on is the best way to learn. I still need to work on my programing skills.

.....

Hi

Found a link that might be helpful as you plan this program;

<http://tinkergroup.wordpress.com/2013/05/10/lego-mindstorms-from-april-2013-meeting/>

You also might consider seeking out local Mindstorm or LEGO robotics clubs in your area--they might be up for a demo!

Have fun!

.....
Hi Kim-

I am currently in the process of writing a grant for our library to get some mindstorms and do a similar project.

I would love to be copied on whatever you find out.

I was talking to my son as his middle school has a Lego Mindstorm. He said that they are super easy and it was a "center" in his technology class and he and his partner would work through a task list. I asked him [this morning](#) and he said that you wouldn't want to have more than 5 kids maximum working on one robot. He said it would be better if it were like 4 kids to a robot.

I also asked him if the teacher was there working with him the whole time he was working on the robot to supervise and he said NO.

So it sounds to me like you could have 4 robots and 16 kids and one teacher monitoring everyone's work.

I am still doing research on my end and I will share with you whatever I learn.

thanks and good luck with your project.

.....
Hi Kim,

I'm a library assistant at the Dover Public Library in Dover, DE. My supervisor forwarded me your email asking about Lego Mindstorms programming. My coworker, Kerri, and I were coaches of a First Lego League team for the 2013 season. We haven't yet ventured into robotics programming outside of First Lego League, but if you have any questions about having an FLL team at your library we are happy to help! I'll answer your questions in the context of running a FLL team, since that's what I've had experience with so far:

1. We received a grant from First State First Lego League (Delaware's branch of FLL), which included the NXT Robot Set with DC Battery. As you may know, in the First Lego League the kids have certain "missions" they most program the robot to accomplish. We found that it could be difficult and time-consuming to have the kids take turns trying out their programs on just one robot, especially since they would often want to tweak their programs right after they tried them out. Ideally, we'd like to have more than one next season.

2. First Lego League team members must be between ages 9-14, so that's the age group we stuck with. They found the programming challenging but fun and picked up on the basics pretty quickly.

3. First Lego League teams can have 3-10 kids. We started out with the full 10 and some kids on the waiting list. We had a lot of interest and wanted to get in as many kids as possible. Some dropped out along the way and we ended up having 7, which I think was a good number for a team.

4. As rookie coaches, I think we still have a lot to learn about formatting Lego League meetings. Because we only had the one robot, we often had the kids break up into groups to work on the different aspects of FLL. For instance, a few would work on the robot while the others would work on their FLL Project Skit, then they would switch places.

5. It might help to know that I have no previous robotics experience, but found the basics of the programming fairly easy to figure out (there are tutorials on the software that came with our robot). We were also lucky enough to have someone from the community with Lego robotics experience act as a mentor for our team, and he was a great help. And if you are interested in starting an FLL team, there are many helpful resources out there. Many can be found on the FLL website: www.firstlegoleague.org

I hope that was helpful! I'm not sure if you're interested in having a Lego League team at your library or if you're just looking to do a general Lego Robotics program. But if you have any questions that you think I can help with, don't hesitate to get in touch!



Hi Kim,

I coordinate CCPL's Robotix Blox program. We currently use LEGO® Mindstorms™ NXT and LEGO® WeDo™ robotics products in our programs. WeDo™ are a fantastic tool for working with younger students. They are geared for ages 7-10. We use Mindstorms, with students from 8-18, although I think they're best for 10 and up.

- We have a couple different of models that use Mindstorms
- Stand alone programs (1 day, 2hour program, 12 kids with 6 robots)
- Week long "Camp" programs (4 days, 2 hours a day, 12 kids with 6 robots)
- Monthly clubs (Monthly, typically 2 hours, numbers of kids can vary, 6 robots)

The first two are challenge based for better student-driven learning. We used to take students through particular tasks, but we wanted students to actively learn, rather than mimic what we taught. So, we've moved to curriculum that is similar to a FIRST Lego League model. Since we're a library, we thought, Book Based Challenges!

For example, Camp HalfBOT is based on *The Lightning Thief*. The participants have to program a robot to tackle the challenges that Percy and his friends face, like avoiding a minotaur, capture the flag, or send an iris message. There are multiple solutions to any challenge, so students can use 21st Century Skills like creativity, collaboration, and critical thinking to design their program and "add-ons" to the robot.

<https://www.youtube.com/watch?v=yPSObLuLBfI#t=46>

You can also see Wimpy Robot Camp (based on *Diary of a Wimpy Kid*) on our Teen Youtub Channel: <http://www.cuyahogalibrary.org/Kids-Teens/TeenSpace.aspx> We've also done *Catching Fire*, *Charlie and the Chocolate Factory*, *Middle School the Worst Years of My Life* and *The Hobbit*

Stand alones basically follow the same plan as the camps, just with fewer challenges. Our staff introduce a few very basic elements of programming to the students using the Lego Education software (very important to get this version rather than the retail as it has guides), and then introduce the first challenge, by gathering the students around the board, reading the section of the book (1 or two pages),

then introducing the challenge. Students then break into teams of two and begin working on the challenge, they're free to come back to the board and test, etc... After about 20/30 minutes, staff introduce the next two challenges and so on.

We typically use the last 30 minutes of camp for Demo/Demo time. Students can invite parents, friends, whoever to come and see what they've done, then they break down their robots.

I hope this helps. Please feel free to ask anything else that might be useful.

.....

Our Central library has 6 kits. Not sure of the model, but it is not the most current one. I have used them once, last fall, for a one time program. I had the bases started and the kids finished and ran them. It took a little over an hour. We really didn't have time to get into the programming side of things. I would say the best ratio is two kids per robot. I had it open to teens, but I got mostly tweens.

This summer I will be hosting a four week robot camp. The kids will preregister and it will meet once a week. Hopefully we will be able to do more with the programming of the bots. It will be marketed as a beginner class with the Central library hosting an advance class with the VEX robots.

I started a robot Pinterest board (for both real and fake robots) and have pinned a several websites that are just about the mindstorm robots. (scroll down a bit.) <http://www.pinterest.com/librarylady218/robots/>

SLJ

.....

Hi Kim!

We've been doing a LEGO Robotics program for a few months at our library now. We actually have it split into two groups - ages 7-10 use the LEGO WeDo kits, and ages 11-14 use LEGO Mindstorms EV3. I limited registrations to 16 kids in each group (which is too many, really), and we filled up within minutes (and that's in a 4,000 person community with NO advertisement!).

1. Which kit did you purchase? How many? For the 16 younger kids, we have 4 WeDo kits. For the 16 older, we started with 2 EV3 kits (and the expansions kits), and ended up having to purchase a third. All funding was from either a donation to the library, or from the Friends of the Library. All told, these 7 kits cost around \$2,400.
2. What ages did you gear the program towards? The ages we use seem to work pretty well. We allow kids to move up or down based on their interest and ability. Technically, the WeDo kits are for as young as Kindergarten, but that seemed too young for my experience level! We could VERY easily add a teen segment to this, and fill it quickly, but there are only so many hours in the day, you know?
3. How many participants did you allow in each session? We allow 16 to sign up for each segment. It really is too many, but we don't want to turn too many away. There is only one or two adults in the room, which could be part of the issue. That, and kids don't share LEGO's very well! In my ideal world, we would have no more than 3 kids per kit in both the older and younger programs, but that would require either many fewer kids, or many more kits!
4. What was the format of your program? We have our meeting room set up with a table for each kit. On that table is a laptop with the LEGO software running, and the full kit. We used a hardware organizing drawer for the EV3 to better contain the pieces, and that's up there too. After the first few weeks, which were really just basic introduction and playing, we started introducing one new skill (either building or programming) each week, and then giving the kids a challenge that incorporated that skill. The younger kids are there for 45 minutes, the older for 90 minutes, and the groups meet every other **Monday**. At the end of the first programming season (four meeting of each age group), we arranged a competition to allow the kids to test what they've learned by completing challenges that required them, in teams, to build

and program a robot from scratch that would complete different challenges. They really enjoyed that. We are now working on Battle Bots for the older kids - trying to keep things mixed up.

5. Any other useful information. - Tap into the experts in your community! I am mostly comfortable running the WeDo program, because I understand enough of the programming to stumble along. The EV3 is WAY above my head. So, I recruited a Professor of Computer Science, and he comes (with his daughters, who are in the program!), and runs the EV3 program. I still assist, but there's no way I could run that program effectively!

If you (or anyone else who reads this), has any questions, please don't hesitate to ask! We're still figuring things out as we go, but we've averaged 14 kids per session for 3 months, which is a pretty high retention rate for us, and the kids seem to really enjoy it!



Hi Kim,

I've been meaning to send you some information about doing Mindstorms programs, but time has gotten away from me! Here is a recap of what we've been doing and some of my thoughts.

We've been doing Mindstorms programs at our library for about 1.5 years, although I myself only started with them last fall. We have 9 NXT robots (one of which the instructor generally uses as a demo), although we use the EV3 software on our Mac laptops. We try to limit the programs to two kids per robot so they get plenty of hands-on time. We do the programs for grades 4 through high school (although we break it down, usually grades 4-5 and then grades 6+).

Our programs have had several incarnations. We started by doing two, two-hour sessions on back-to-back days. There's a bit of a learning curve when you've never used one before, so this gave kids plenty of time to get down the basics and then start moving on to more sophisticated things. Then we did a couple that were just one session (of 1.5 hours). At that point, we were getting some kids that had experience with the robots and some who didn't, which started getting a bit complicated. So this summer, we are going to do intro classes and then once you've done an intro class you can come to a higher-level class or come use the robots during open lab time. (We haven't ironed out all the details yet for that.)

I did a brief blog post about the first Mindstorms program I did, which you can read here: <http://wp.me/p3AbtC-1R> Generally, we come up with a list of tasks that progressively get harder, that the kids work through over the course of the class. What has worked for us is having the program more structured at the beginning while you're teaching the basics and then letting them explore what it is they are most interested in in the second half of the program. In the second portion, we roam around the room and help them troubleshoot or figure out how to do what they want to do. Some kids have enjoyed trying the sensors, while others like having a specific goal (such as moving the robot through a maze).

For me, there was a steep learning curve for the robots. I found online videos to be the most helpful in learning how to use the robots. (I don't remember which specific videos, but I know I found a lot on YouTube and doing Google searches.)