

# WESPTSA Newsletter

December 2016

## WESPTSA... Part of Something Bigger

Did you know that the WEPTSA is part of a larger organization - the National PTA (see <http://www.pta.org/index.cfm>) as well as the Michigan PTA (see <http://www.michiganpta.org/>). The National PTA website has many great resources that can be beneficial to parents. They also produce a magazine that gives parents information, tips and resources regarding child and education (check it out at <http://ptaourchildren.org/>). These topics can range from understanding what transgender means, to exploring how much screen time is too much, to ideas for kid-friendly family dinner recipes. The National PTA is also engaged in advocacy. You can check out their Take Action Network Here (see <http://www.pta.org/advocacy/takesaction.cfm?navItemNumber=3451>).

Like the National PTA, the Michigan PTA website also contains information about advocacy and information directly pertinent to Michigan, such as Ok2Say, which addresses bullying, harassment, and threats to safety. The Michigan PTA also provides for College Planning and Internet Safety. Both the National PTA and the Michigan PTA websites are great resources for parents - regardless of how involved you are with the WEPTSA.

1

LIKE US ON FACEBOOK

<https://www.facebook.com/WESPTSA/>

2

JOIN US ON FACEBOOK

<https://www.facebook.com/groups/gowcs.ptsa/>

3

VIEW OUR WEBSITE

<http://wesptsa.weebly.com/>

### Upcoming WESPTSA & School Events:

12/8: PTSA meeting @ Discovery Media Center (7-8:30)

12/12-12/16: PTSA Holiday Shoppe

12/19-1/2: Winter Break

1/10: Parent Info Night @ Discovery Media Center (6:30-7:30) - prescription pain medication abuse

1/12: PTSA meeting @ Discovery Media Center (7-8:30)

2/7: Parent Info Night @ Discovery Media Center (6:30-7:30) - keeping your family safe on the Internet

2/9: PTSA meeting @ Discovery Media Center (7-8:30)

### Upcoming School Dates & Events

- 1/3: School resumes from break
- 1/16 : No School - Martin Luther King Jr Day

## Promoting Logical Thinking and Problem Solving at Home

This year Dec 5-11 is computer science education week to promote awareness of how computing influences our world. As a part of CS Ed week children around the world participate in computing activities, including an Hour of Code. Below are tools that you can use to engage kids in problem solving and logical thinking

We use computer science principles everyday in our lives. For example, when we use a recipe to cook, we are using an algorithm (a step-by-step process) to solve a problem (make the dish). Another example is making the Thanksgiving dinner, which we all know is quite hectic. The cook can either make one dish and then move to another. A more efficient way that we use is to split making the whole dinner (Turkey, Mashed potatoes, gravy, pumpkin pie, etc.) into several subtasks which can be run simultaneously. While Turkey is cooking, I could be boiling potatoes and also making the gravy, rolling out the dough for pie crust, etc. This is what computer scientists would call parallel processing where an operation is split into parts that are executed simultaneously.

Hour of Code is one-hour long introduction to computer science and computer programming. Here are some websites to get you started:

- Code.org (<https://code.org/learn>). You can select activities based on grade levels (pre-K to grade 9+) as well as technology (iPad or Computer or Android) you have at home. The site includes number of characters based on kids interest, StarWars, MineCraft, Music, etc.
- Tynker (<https://www.tynker.com/hour-of-code/>). Another website with a number of activities based on grade level and interest

As your children move beyond the Hour of Code, the following tools can take them to the next level to allow them to explore advanced computer science ideas.

- Scratch Junior (<https://www.scratchjr.org/>). With ScratchJr, young children (ages 5-7) can program their own interactive stories and games. In the process, they learn to solve problems, design projects, and express themselves creatively on the computer.
- PBS Kids Scratch (<http://pbskids.org/apps/pbs-kids-scratchjr.html>). With PBS KIDS ScratchJr (ages 5-8), kids can create their own interactive stories and games featuring their favorite characters from Wild Kratts, Nature Cat, WordGirl and Peg + Cat! The storytelling possibilities are endless with this creative coding app for children.
- Scratch (<https://scratch.mit.edu/parents/>). With Scratch, children (aged 8-16) can learn to program and develop interactive media, such as stories, games, and animation.

It is not all about using technology to teach computer science ideas. We can use “unplugged” activities and games (i.e., board or card games) that the whole family can play to promote development of computer science ideas for kids.

- Robot Turtles (<http://www.robotturtles.com>). A board game that sneakily teaches programming fundamentals to kids ages 3+.
- Bits and Bytes (<http://www.bitsandbytes.cards/>). A card game that teaches kids fundamentals of computer science, logical thinking, and problem solving.
- Code Monkey Island (<http://codemonkeyplanet.com/>). This introduces kids to fundamentals of programming, including boolean and conditional logic.

If you have any comments or questions, please feel free to connect with Aman Yadav via email ([ayadav@msu.edu](mailto:ayadav@msu.edu)) or Twitter (@yadavaman).