

The 21st Century Educator

June

Volume 1, Issue 9

2018

Make this summer your Genius Hour!

This Month's Learning Focus: Makerspace & Genius Hour

Summer's almost here! Take this summer to refresh and create your own **Makerspace** and **Genius Hour**. What topics are you interested in? What do you want to explore further to develop your own creativity and reenergize your love of learning? Do something fun this summer - create something new, relax, reimagine yourself!

Creating a Makerspace

Jar of Jargon defines a **makerspace** as providing "hands-on, creative ways for students to design, experiment, and invent as they engage in science, engineering, and tinkering." Laura Flemming from <u>Worlds of</u> <u>Making</u> provides this definition: "To define a school makerspace by its purpose and simplest of terms, it is a place where young people have an opportunity to explore their own interests; learn to use tools and materials, both physical and virtual; and develop creative projects." Here is another great quote: "Making is fundamental to what it means to be human. We must make, create and express ourselves to feel whole. There is something unique about making physical things. These things are like little pieces of us and seem to embody portions of our souls" from Mark Hatch, <u>The Maker Movement Manifesto</u>.

"Makerspace is more than a space itself, it is a mindset that can and should be taught (Gerstein, 2014). We have a student culture of children who have learned to consume technology; educational zombies with all of their technological skill residing in the swipe of an index finger. With a Makerspace, we can move beyond consumption to creation" (www.Makerspaceforeducation.com/Makerspace.html)!

So how do you create a makerspace in your classroom or school? Some teachers have makerspaces in their classrooms and some schools utilize their library for a makerspace. Traner MS has renamed their library "The Learning Commons" where students can go to create, build, problem-**Continued on Page 3**

Practitioner in the Spotlight

Webster's Dictionary defines a Practitioner as someone who is **"actively engaged in an art, discipline or profession"**. A **21**st **Century Practitioner** is someone who is "actively engaged in the art of the 21st Century Learning Practices" by infusing them in his/her instruction. This feature of the newsletter shines a spotlight on 21st Century Practitioners in our district who are doing amazing things in their classrooms utilizing the 21st Century Learning Practices and working towards making our students college and career ready.

Ms. Megan Delossantos, Beasley ES



Please give a short background of yourself, what you teach and when you first started using the 21st Century Learning Practices?

I have been teaching for ten years, and I have taught 1st, 2nd, 3rd, 5th, 6th, and EL. I have taught mostly in the upper grades. I am currently teaching fifth grade at Bud Beasley E.S. I have been using some of the 21st Century Learning Practices for a few years now, but last spring, I took the Practitioner Class, and I really learned how to plan and implement these practices into my instruction.

How has using the 21st Century Learning Practices transformed your instruction?

Using the 21st Century Learning Practices allows me to better differentiate between my students, and it has also made my instruction more fun and engaging. I find that when my lessons incorporate the 6 Dimensions of 21st Century Learning, my students are engaged in their own learning and take away so much more from each lesson. Using these practices has also transformed my instruction because now, before I plan my lessons I use the NVACS and the 21st Century Competencies. I try to incorporate as many of the 6 dimensions as possible into my instruction; I usually try to make each learning activity interdisciplinary. I do not have a lot of technology in my classroom, but I still am able to incorporate all the other dimensions in my instruction. Finally, my instruction has transformed to give my students different opportunities to practice these competencies and help them develop their 21st Century Learning Skills.

Inside this issue:	
Makerspace and Genius Hour	1
Upcoming Events	1
Practitioner In the Spotlight: Ms. Megan Delossantos at Beasley ES	1
Operation K-5 Computer Science	3
Student-Facing Competencies	3
Exemplar Classrooms	4
Helpful Hints and Tips	4
What do 21st Century Learning Practices look like in the class- room? Videos here.	4
Teeny Tiny PD	4
What the Tech and Other Tools	4
Upcoming Courses, Webinars_Videos &	5



Articles

- <u>CUE of NEVADA events</u> -Our own Terra Graves will be the <u>Keynote Speaker</u> at the Fall Conference!
- ◆ <u>Nevada Project Wet</u> for Educators on the Truckee River, June 23, 2018
- Nevada State Science Teachers Association -Lots of things going on <u>here</u>!



The 21st Century Educator

Practitioner in the Spotlight continued from Page 1

June 2018

How has implementing the 21st Century Learning Practices transformed your students' learning and their achievement?

21st Century Learning Practices have transformed my students' learning by allowing them to become more interdependent with their learning. For example, I give them their learning objectives at the beginning of each project and then it is up to them to decide how they are going to plan and complete their assignments. They collaborate with each other, and they must learn how to persevere and complete their tasks together. After my students have completed different tasks, they always tell me that it was important that they worked as a team. They have also improved on selfregulating their own work. For example, during one of the projects that we completed, some of the groups had to go back a couple of different times to revise their work. The most engagement that I see from my students is when they use the Skilled Communication dimension. My students have really become passionate about supporting their work with evidence and being able to communicate this knowledge to a group or specific audience. I have seen all students take an active role in their learning by implementing the 21st Century Learning Practices in my classroom.

In thinking about planning with, and implementing, the 21st Century Learning Practices, what advice would you give to someone who is new to 21st Century Learning?

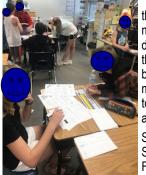
Some advice that I would share with someone who is new to 21st Century Learning, is this: do not be afraid of trying to implement any of these competencies in your instruction. I am sure that you are already implementing some of the 6 dimensions in your classroom instruction right now, and maybe each time you plan, try to add another one into your instruction. It will become easier each time that you plan your instruction. I would also tell someone that if you do not have a lot of technology in your classroom, do not worry. 21st Century Learning is so much more than using technology in the classroom.

Please describe the activities you are doing related to 21st Century Learning to demonstrate the students' learning.

This year my students have been working on multiple activities that incorporate the 6 Dimensions of 21st Century Learning. The final project that my students completed was designed by another teacher. I decided to incorporate it into my lesson because it uses



many of the 21st Century Competencies. I also made sure that it incorporated the NVACs and that it was 21st Century aligned. This project took us about one month to complete. When I started this project, I grouped my students into groups of three or four students; they had to collaborate with their groups on taking a field trip to outer space. They had to imagine that it was the year 2251, and they had to pick one place to go on a field trip to. They had to compare data about two places to travel to, collect data and use this data to construct a graph, and then analyze this data to then make their choice about where to go. They



then had to write a paragraph to explain why they picked one field trip over another. Next, my students had to make a packing list with their group. They had to use this list to then decide what type of suitcase to design and build. There were different types of suitcases that my students could choose from to construct. Many of the groups built one suitcase but found out that they needed to revise their suitcase because it did not meet the assignment requirements. Students had to use their knowledge about volume and measurement to build their suitcase. Many groups said that this was the most challenging part. It was amazing to observe students having to create and solve this problem together.



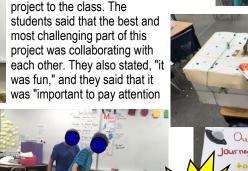
Students then had to create a scrapbook that explained their experience on their field trip. Some groups started to delegate some of these tasks to each other during this project. Finally, students had to each write a persuasive letter to our principal, Ms. Arrascada,







in math." This project was a success and students were able to apply their knowledge to complete this learning activity. This lesson incorporated collaboration, knowledge construction, problem solving, self-regulation, and skilled communication.



about getting permission to go on this field trip. The last thing that students were required to do was to present their



The 21st Century Educator

June 2018

Makerspace and Genius Hour continued from Page 1

solve, etc. on a project they're interested in. Starting a makerspace is a process involving multiple factors-finding the right space, getting students and faculty involved, as well identifying

leaders and mentors to take charge. Here is a blog that has some great tips to get started: <u>Smith System: Education Trend: Starting a Makerspace? Your Beginner's Guide</u>. Here is another great resource to get started from *Edutopia*: <u>Starting a School Makerspace from Scratch</u>. Here are resources if you are a librarian: <u>A Librarian's Guide to Makerspaces: 16 Resources</u>. <u>Makerspaces.com</u> has amazing ideas for all things makerspace! Angela Watson of <u>thecornerstoneforteachers.com</u> investigated makerspaces and interviewed Cheryl Nelson and Wendy Goldfein of *Get Caught Engineering* to share how they have managed makerspaces in their own classrooms and helped other elementary and middle school teachers get started, too. Angela had several questions about how to implement makerspaces and you might have some of those same questions: "How do kids know what to do? How can you find out what they're learning? How do you make time for that with all the other tasks crammed into the school day? And how do you keep the makerspace from turning into a chaotic mess?" Click <u>here</u> for that interview. Please share with your colleagues who may be interested in creating a makerspace in their own classroom.

Genius Hour and 20% Time

In Ken Robinson's TED Talk, "Do Schools Kill Creativity?", he explains that "instead of growing into creativity in schools, students are growing out of it (sad face). We are expecting our students to conform to a certain standard that does not apply to all of our students, and these standards are no longer giving our students the opportunity they need to be creative, inventive, and innovative." In addition, in the article called "How Schools Are Killing Creativity", the author states, "Creativity isn't a test to take, a skill to learn, or a program to develop. Creativity is seeing things in new ways, breaking barriers that stood in front of you for some time. Creativity is the art of hearing a song that has never been written or seeing a work of art on an empty canvas. Its essence is in its freshness and the ability to make dreams come to life." Genius hour is a great way to add the creativity back into students' lives. (Information from http://minds-in-bloom.com/implementing-genius-hour-classroom/)

Genius hour is a movement that allows students to explore their own passions and encourages creativity in the classroom. It provides students a choice in what they learn during a set period of time during school. Genius hour was originally started by Google - their philosophy being that if you allow employees the freedom to work on things that interested them, their productivity would increase. Google gave their engineers 20% free time in their work day to spend on whatever project they wanted. In implementing this philosophy, Google said that 50% of their projects were actually created during this time! Then, author Daniel Pink wrote "Drive" where he writes about how the Google 20% time-projects have been used in other organizations.

The same genius hour principles apply in the classroom as they do in the corporate environment. The teacher provides a set amount of time for the students to work on their passion projects. Students are then challenged to explore something to do a project over that they want to learn about. They spend several weeks researching the topic before they start creating a product that will be shared with the class/school/world. Dead-lines are limited and creativity is encouraged. Throughout the process the teacher facilitates the student projects to ensure that they are on task.

There are many educators leading the way with passion projects in their classes, but much of their inspiration came from the book The Passion-Driven Classroom: A Framework for Teaching & Learning by Angela Maiers and Amy Sandoval. A.J. Juliani also wrote a recent book about Genius Hour and 20% Time in education. (Information from <u>www.geniushour.com/what-is-genius-hour</u>)

TeachThought.com has a great graphic and information on <u>6 Principles of Genius Hour in the classroom</u>. The 6 Principles are: the sense of purpose, design, inquiry and navigation, create, socialization, and the 80/20 rule. In another great <u>article</u> from *Edutopia*, a teacher shares what she did and what she learned when she implemented Genius Hour in her fifth-grade class. Ms. Smith says, "Genius Hour could be adapted to any grade level or student type. This year I plan on expanding it to my special education class. The vibrant creativity pulls students into the learning process and makes school a place they want to be—and that's not exclusive to one age or type of student." This article from *Edutopia* explains <u>6</u> <u>Tips for Getting Started with Genius Hour</u> - it's a great place to start. Cult of Pedagogy has <u>Your Top 10 Genius Hour Questions Answered</u>!

Want to know more about creating a Makerspace or Genius Hour? More resources on pages 4!

Welcome to Operation K-6 Computer Science!

Are you a K-6 teacher who is super excited about Computer Science? This opportunity is for you!

WCSD's 21st Century Learning Department is seeking **30 motivated and innovative elementary school teachers** to be part of the new **K-5 Computer Science Cadre**. Participating teachers will each receive a robust technology package that includes iPads, <u>Makey Makeys</u>, <u>Spheros</u>, <u>Cleverbots</u>, and <u>Lego WeDo sets</u>.

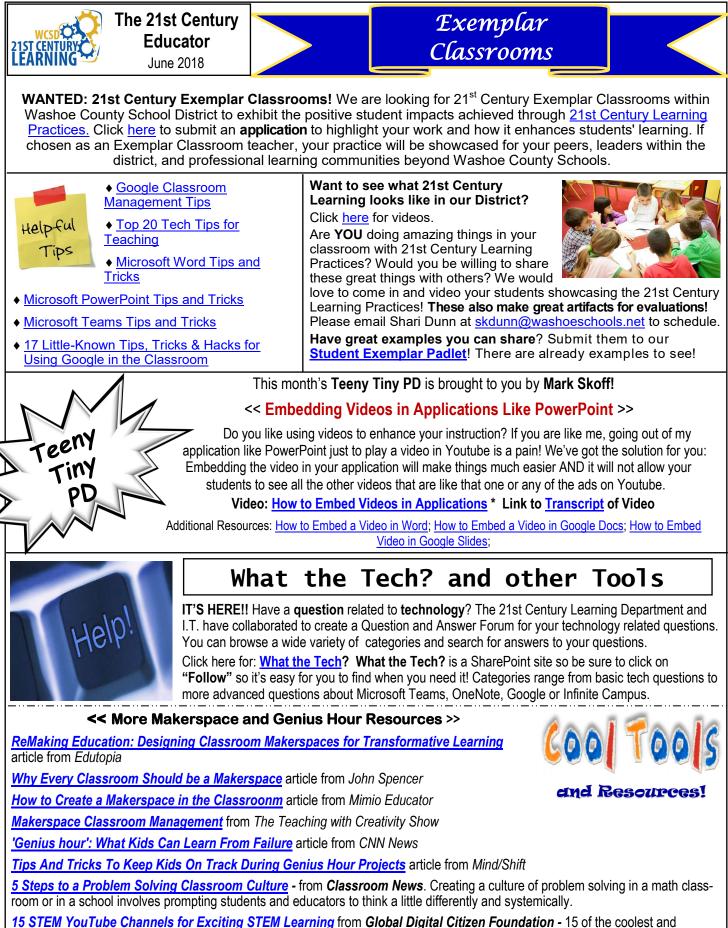
We will also provide you with professional development and support to help you integrate computational thinking skills and computer science into your K-5 classroom. For more details and to apply for this amazing opportunity, <u>CLICK ON THIS LINK</u>. (Application deadline is June 15th, 2018)

*We strongly encourage Leaders Network K-6 teachers to apply! If you are not a K-6 teacher, please feel free to forward this to an elementary school teacher that you feel would be a strong candidate.

Student-Facing 21st Century Learning Competencies are here!!!

We've now designed **One-Pagers** that include all Dimension for each grade-band!

See the 21st Century Learning Department's webpage for <u>Student-Facing 21st Century Competencies</u> for more information and on how to print these in poster-size.



most popular STEM YouTube channels you'll find.



The 21st Century Educator June 2018

Please encourage colleagues at your site to take the Practitioner Badge course!





21st Century Practitioner Badge Courses

21st Century Educator Practitioner Fall 2018 Badge Course Oct. 9 - Nov. 19, 2018; Brown Center; 4:15 - 6:15pm Facilitators: Misha Miller-Hornbuckle & Terra Graves Link to Register

Sign up for the Waitlist - This will prompt more sections opening in MyPGS.

21st Century Leader Badge Courses

Prerequisite: Must have successfully completed Practitioner Badge

21st Century Educator Leader Badge Course Fall 2018 -Dates, Times and Location - TBD Watch MyPGS for registration details.



Have a great tool, article, or website you'd like to share? Have any suggestions for topics you'd like to see included in future newsletters? We'd love to hear your voice! <u>Email</u> us and we'll check it out!

ZISI CENI

This monthly newsletter brought to you by The 21st Century Learning Division



Questions, Concerns, or Suggestions

Mail Stop: 21CLD/I.T., Admin Building C

Editor: Dr. Jessica Stepaniak

Check out our webpage frequently for new updates and resources.

EdTech Courses

Explorer Badge - CAMP 21 <u>Online</u> Course Did you know... You can take Camp 21 more than once to earn credit. There are many options to choose from, so you'll be able to pick something new to learn about and explore! Class is worth 1.0 credit.

Facilitators: Terra Graves & Misha Miller-Hornbuckle Check MyPGS for Upcoming Dates to Register

Other Free Webinars, Videos & Articles

<u>How Podcasts Can Improve Literacy</u> article from eSchoolNews.com

<u>4 Reasons Why Teaching Coding Improves SEL Instruction</u> from eSchoolNews.com

<u>Picture This: 4 Steps to Understand Copyright Issues</u> article from eSchoolNews.com.

350+ Real-World Activities Make Math Relevant article from Tech & Learning

<u>15 Ideas to Ensure That Project Based Learning is Grounded in Content And Standards</u> article from Tech & Learning

Tips and Tools to Enhance Collaboration Between Tech and Curriculum article from Tech & Learning

<u>Student-Centered Learning</u> Part 2 - article from The Twitter History Teacher. Check out the additional resources on this site.

<u>Using Microsoft Learning Tools in Inclusive Classrooms</u> article from Monica Burns, www.classtechtips.com

<u>New Layout Controls in Google Slides</u> article from New Technology For Teachers

How OneNote Helped One MIE Teacher's Students Master Math video from OneNote Education

Designing and Creating Makerspaces with Beth Holland and Douglas Kiang webinar from edtechteacher.com

Wonderful Ideas To Ignite Collaboration, Creativity and Computational Thinking webinar from edweb.net

Free *Webinars* from *edWeb.net*. Click <u>here</u> for a list of free Webinars offered **monthly** on a wide variety of topics.