Mackenzie McNickle
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Introduction

I am a third grade teacher at a Title I school in Gainesville, Florida. My school is about 75% racial minorities, and about 82% economically disadvantaged, according to the 2011-2012 School, District, and State Public Accountability Report published by the Florida Department of Education. I currently teach an unofficially-recognized advanced cohort, which includes high achieving gifted and non-gifted students. I teach all subjects to my students, and do not coteach or have a teaching assistant. My gifted students receive services on Tuesdays and Thursdays, from 1:00 - 1:45 in the form of science enrichment with a certified gifted teacher. They are with me for every other academic subject, and there are no other gifted services offered.

For me, it is a challenge to ensure that all of my students' needs are being met. Since there is not a gifted or advanced curriculum, I must fill in the gaps that the traditional curriculum has. I use a combination of acceleration and enrichment to reach my students. Since they are all highly motivated learners, we have the opportunity to do more in-depth study of third grade concepts. I found that many of these websites offered an interactive component, which allows the student to manipulate objects and make more connections to the material. I do not have access to a lot of the resources that officially-recognized and sanctioned magnet programs have, so I rely heavily on free Internet content to enhance my students' learning.

This list of resources has been carefully collected to address many of the gifted characteristics, such as enjoyment of learning, superior language ability, advanced interests, use of high-level thinking skills, multiple capabilities, high motivation, high intellectual level, awareness of social issues, insight and pattern recognition, and high-capacity memory. (Davis, Rimm, & Siegle, p. 33) They meet gifted students' needs for a more independent, student-directed teaching style, and allows for "unstructured and flexible" (Davis, Rimm, & Siegle, p. 39) learning tasks that gifted students prefer.

Bellringers and Attention Grabbers

The following websites include engaging videos, and address gifted students' enjoyment of learning, high curiosity, advanced interests, interest in new topics, preference for novelty, and interest in adult topics. These websites would be suitable for whole-class use as an attention grabber at the beginning of a lesson or to fill a few extra minutes in the classroom day.

1. **Wimp.Com www.wimp.com**
   This website gives a list of the top family-friendly YouTube videos of the day. The videos are sorted by category, including life, fun, culture, learning, and feel-good. It is a collection of positive videos that could be showed to a class as an attention grabber before a content lesson, as a brain break, or as a springing-off point for a discussion on values or ethics. Gifted students would respond well to this novel, engaging format. Videos such as "Man Surprises Shoppers and Pays for Their Groceries" could lead to a

self-reflective discussion on social issues. Other videos, like "After a 9-Year Journey, This Spacecraft Will Finally Reach Pluto," can open class discussion on current event topics and allow students to tie information that they already know or have learned in class to current events.

2. **Wonderopolis** **www.wonderopolis.org**
   This website is a collection of "wonderings," or questions about the world, with kid-friendly answers. Teachers can subscribe to "The Wonder of the Day" and receive these via email for daily discussion in class. Wonders may include questions such as "Why do you blink?" or "Why are some drinks bubbly?" For some wonders, there are accompanying resources, like teacher lesson plans, activities, or videos. These lessons include Wonder Words. Students can explore different Wonders independently. Over the summer, the website includes "Camp Wonderopolis," an interactive website for children with independent activities like "Build Your Own Golf Course." Gifted students demonstrate a high level of curiosity, and frequently ask question. This website allows students to explore the how and why behind many natural phenomena.

3. **StudyJams and BrainPop** - **studyjams.scholastic.com** and brainpop.com
   StudyJams and BrainPop are both websites with a series of videos and slideshows on a variety of topics. StudyJams contains videos on math and science topics only, while BrainPop includes videos on math, science, social studies, language arts, health, engineering and technology, and arts and music. BrainPop also includes a BrainPop Jr. website for students in grades K-3, and a Brainpop ESL for English language learners. Both websites can be used to enhance STEM lessons and engage the students through humorous and clearly explained videos. The videos can be used for enrichment, as they go into more detail than a typical textbook. These websites give teachers the opportunity to expose students to material of a higher grade level, to deepen students' understanding of another topic learned in class, or to reinforce a lesson. For instance, I might end a lesson on energy by showing students a StudyJams video on the same topic to sum up what we have learned. Alternatively, I might show a BrainPop video on the Harlem Renaissance after we've read a story in class that took place during that time period. Gifted students are interested in the "big picture" and enjoy making connections between sources.

4. **Flocabulary** - **http://www.flocabulary.com/**
   Real hip-hop artists write for this educational website, which has engaging videos on many academic topics with a rap song playing throughout. Each hip-hop song can be an attention-grabber or a review. Each song includes a fill-in-the-blank activity that teachers can use to ensure students are engaged and paying attention during the song. All subjects are included, but vocabulary is the main focus. Students can also create their own raps. Gifted students display a preference for novelty, and academic content in the form of rap music is very different from other content students may have experienced. Some gifted students may have a specific interest in music or hip hop, and others may find the humor in the unlikely pairing between the branches of government, for example, and a rap song.

In the classroom, I would use this resource as an attention grabber before we learn a particular topic, or to reinforce a topic we've already learned.

5. **The Futures Channel - http://thefutureschannel.com/**
   The Futures Channel is a collection of videos and information about math and science careers. There is a quote on the front page from a teacher who uses the website to respond to students asking, "When would I ever use this?" There are short, engaging videos on many different careers and real-world applications of math and science. This website would be a great way to positively respond to students who are expressing frustration or self-criticism in response to a difficult academic topic. It could also be used to head off such comments or feelings in students who may tend to underachieve when they are less interested in a particular topic by giving them the opportunity to connect what is being learned in class to the bigger picture. Finally, the website meets the gifted characteristic of having high career ambitions, as it allows students to see the reality of math and science careers and the skills and education needed to achieve those careers.

Independent Study Tools

These websites include interactive, self-paced study and research tools that students can proceed through with little teacher direction. The websites are kid-friendly and age-appropriate for elementary school children.

6. **Quizlet www.quizlet.com**
   Quizlet is an online flashcard collection. Students and teachers can create flashcards of their own, or can use provided flashcards. As you review the flashcards, the website keeps track of which ones were missed, and then will continue to review those for you until mastery is achieved. As the words are reviewed, the website requires students to type in the term exactly before moving on. There are also options to create a test for yourself from the flashcards, specifying type of question preferred (multiple choice, free response, matching, etc.). Finally, there are games that can be played with each flashcard set. Quizlet would be an effective tool to help students with vocabulary study, or to encourage students to use at home as an independent study tool. Gifted students who are eager to learn and are self-motivated learners would greatly benefit from this tool.

7. **Kidsites.com - http://www.kidsites.com**
   This is a database of many different kid-friendly websites, including all subjects. It can be difficult for students to find information that they need online, especially if they are in the younger grades or lack access to a computer at home. This website is a great tool for students and teachers to begin the research and exploration process at school.

8. **Woodlands Resources - http://resources.woodlands-junior.kent.sch.uk**
   This British website is a great collection of more information and resources on a variety of topics, such as math, literacy, science, geography, history, and Great Britain-specific topics. This website would be excellent for use as a web quest with gifted students, or as a student-directed learning center for independent study. Gifted students have a

motivation to learn more information, and may have advanced and specific interests that would be well-served by this website.

9. **Crickweb - http://www.crickweb.co.uk**
   This is a British website that has interactive activities organized by age level. These activities would be great to do whole group or as a learning center. Activities include categorization, matching, and drag-and-drop, in addition to explanations with accompanying interactive components. The website could be used to deepen understanding, extend knowledge, or enrich students' content knowledge of standards being reviewed in class.

10. **ChessKid - chesskid.com**
    Students can learn how to play chess and play students from around the world online. The website is very safe, and is good for independent practice of chess, an activity that teaches reasoning skills and memorization. Teachers can use the website as part of an extracurricular program for gifted students, or can do a chess activity once a week.

11. **KidRex - kidrex.org**
    This is a student-friendly search engine that closely resembles Google. Students are able to run a normal search, but are guaranteed to find appropriate, relevant, child-friendly results on the topic of interest. This tool can reduce the frustration associated with fruitless internet searches using regular Google, and can help students learn how to search for sources of information. Part of a gifted curriculum involves student-led learning, and this tool will give younger students the ability to easily find credible sources of information.

12. **Word Central - wordcentral.com**
    This is a Merriam-Webster website that gives kid-friendly definitions. Students can play games that test verbal skills, and can even create their own words with definitions using the Build Your Own Dictionary Tool. This allows for highly verbal gifted students to express their creativity. I would use this tool as an enrichment activity on a choice menu for students to do when they were finished with other work or during centers time.

13. **American Museum of Natural History Ology - www.amnh.org/explore/ology**
    This website focuses on all the "-ologies." It includes articles, pictures, games, activities, quizzes, writing activities, polls, videos, interviews, and more. The website is rich with information on a variety of topics, and would be perfect for a gifted student interested in a specific topic, or for just general exploration and knowledge acquisition.

Student-Directed Curriculum Materials

These websites are great for gifted students. They are comprised of self-paced learning units, allowing gifted students to move through material at their own individual paces. Teachers could use this material as part of a classroom setup in which students explore topics of interest individually, checking in periodically with a teacher or facilitator. Teachers could also use this website during a predetermined individual study time, where students pursue topics of interest.

Teachers would have to set up an accountability system to ensure that learning and mastery of skills is taking place. Some of these websites are directly related to specific core academic subject areas, while others are dedicated to the development of critical thinking skills.

14. **Code.org - code.org**
    This websites inspires and teaches students how to code for computer science purposes. This helps students with problem-solving skills, and would be great as a mini-unit, an extracurricular activity, or an at-home project.

15. **Khan Academy www.khanacademy.org**
    This website has video tutorials for ALL grade-levels (including MCAT). This is good as a reinforcing activity or as enrichment. This website would be great for a motivated independent learner who had access to additional practice materials in the traditional classroom, virtual classroom, or homeschooled environment. There are video series geared toward specific grades, so a student would be able to independently move through the material and check in periodically with a teacher or facilitator to ensure that comprehension and skill mastery is reached. A mathematically-oriented student could use the website as part of an acceleration program.

16. **Sumdog - sumdog.com**
    Sumdog is an interactive Common Core standards practice tool. It's an adaptive series of engaging games that focus on the standards in all subject areas, and keep track of individual progress. Students earn "rewards" as they play, such as avatars and pictures to collect on their home screen. Teachers can look at progress reports for students. Since the program increases in difficulty as students demonstrate mastery, it's great for the gifted student, allowing him or her to progress at his or her own pace, without being held back by the teacher or by other students.

17. **Bite Size www.bbc.co.uk/bitesize and http://www.bbc.co.uk/bitesize/ks2/**
    This is an interactive British website set up for all subjects. Each of the skills has online mini-courses with activities and tests. This website is great for students advanced in math, but there are other subjects as well. The website also has great videos on all math topics to show in class. The downside to the website is that since it is British, the teacher will have to match the appropriate standards.

Teacher Tools and Resources

As teachers of the gifted, we need additional resources to enrich the basal curriculum provided by the school district. These resources are very helpful for adding to the curriculum, lesson and unit planning, progress monitoring the students, and providing meaningful whole group instruction. We must meet these students' thirst for knowledge and need for acceleration.

18. **Common Core Sheets www.commoncoresheets.com**
    This website has worksheets organized by Common Core standard and by grade level. This website is excellent for math enrichment, as it allows the teacher to select similar topics at a higher grade level. For instance, in a third grade class working on rounding,

the teacher can select rounding to the nearest hundred thousand and million (a fourth grade skill) after her students have mastered rounding to the nearest hundred and thousand (a third grade skill). This website is great for review, intervention groups, or extra independent practice, and allows for easy differentiation. While there are language arts, science, and social studies worksheets, math is the most extensive topic covered on this website. The worksheets on Common Core Sheets meet the needs of gifted students by deepening their knowledge, allowing them to use high-level thinking strategies, and taking advantage of their superior reasoning and memory.

19. **Odyssey of the Mind** **http://www.odysseyofthemind.com/**
    Odyssey of the Mind is a worldwide organization that organizes competitions in which students solve problems creatively. The program serves students from kindergarten through college. The program is meant to be an extracurricular program in which students prepare for two types of problems- one complex long-term problem in which students build a device or develop a performance in response to a prompt, and one short-term problem in which students are asked to solve a verbal or hands-on problem when they walk into the room on competition day. However, the Odyssey of the Mind classroom activities can be used at any time in the classroom to sharpen creativity, teamwork, and problem-solving skills, and can easily be tied into science and engineering concepts. I have used Odyssey of the Mind as an extracurricular activity and participated in the district competition, and I have used Odyssey-type critical thinking activities to grow my students' problem-solving skills and to provide team-building exercises for the class.

20. **Skype in the Classroom -** **https://education.skype.com/guest_speakers**
    Teachers can arrange for talks from guest speakers through Skype. It can be used in small-group for students studying a specific topic or whole-group to present to a class. The guest speakers present through a live feed, not through a prerecorded video. Speakers through Florida and Georgia include popular children's authors, professors, and artists. The teacher can customize the talk toward the specific needs of the gifted students in the class, adjusting the level of depth and nature of the talk.

21. **Dare to Differentiate -** **http://daretodifferentiate.wikispaces.com/**
    This website is designed for teachers, and has resources for choice menus and other activities ready-made. The purpose of the website is to help teachers differentiate effectively in their classrooms, and has links to resources made by other teachers, as well as lessons and slideshows for teachers. It can be difficult to implement differentiation effectively, especially in the gifted classroom. Fortunately, this website has a variety of resources allowing teachers to tailor instruction toward gifted students.

22. **FunBrain-** **www.funbrain.com**
    This site is for students in grades K – 8, with online educational games in all subject areas. These games could be used as a fun enrichment activity during computer lab time. Gifted students would appreciate FunBrain's creative, novel presentation of concepts normally learned in class.

23. **App: Spritz - http://www.spritzinc.com**
    This app for an iPad allows for the reader to read at very rapid speeds, thanks to an eye-tracking technology that focuses the eye on the center of the word. Readers can read much more quickly than usual, while still preserving the same comprehension level. I think this would be an excellent choice for gifted students- it's a very unique and novel format, and would allow for them to read at much greater speeds. I think that gifted students with a love of reading would absolutely love this app, would find it very stimulating, and would appreciate its design and efficiency. I would allow students to use this app during sustained silent reading time or as an activity when other class work is completed.

Interactive Activities

These interactive activities are ideal for independent practice and exploration. In the absence of manipulatives and other expensive resources, these virtual versions allow students unique, hands-on experiences that permit them to connect topics, extrapolate knowledge to new situations, and to enrich students' advanced interests and knowledge.

24. **Amusement Park Physics learner.org/interactives/parkphysics/index.html**
    Amusement Park Physics is an interactive website in which students can learn how a roller coaster operates and build their own. There are many modules for students. The game gives students directions on how to design their own roller coaster, allowing students to choose which paths will work best. Students can see if their roller coaster works or not - the car will crash to show a mistake. Students can also explore the physics behind other amusement park rides: a merry-go-round, bumper cars, a free-fall ride, and a swinging ship. This website meets gifted students' need for novelty, and allows them to form conclusions by applying their knowledge to the amusement park model. I would use this resource during computer lab time or as a science center, allowing students to explore independently.

25. **Element Quest - http://www.uky.edu/Projects/Chemcomics/**
    This unique website has engaging comics about all the elements in the Periodic Table. Each student is assigned an element and its symbol. Students have to look at the Periodic Table of Comic Books and then read comics about their element, i.e. silver. This website would be perfect to use as a web quest assigned to students in a computer lab, and would meet gifted students' need for novelty and for increased knowledge depth.

26. **Energy Quest - Energyquest.ca.gov**
    This interactive website is set up to look like a child's bedroom. There are many options students can choose to discover content about energy. They can search by categories and play games. This website would be best used by a child as part of a science center rotation, or during computer lab time. Energy Quest allows students to explore an advanced interest in greater depth.

27. **UPM - upmforestlife.com**
    This virtual field trip through a Finnish forest is guided by a "live" tour guide. The format is very interactive and allows the user to zoom in, learn more information on selected

plants and animals, and "walk" through the forest. Some of the topics include short video clips of animals. This is a great resource for younger children who have less exposure to the forest, or to older children in urban environments who do not have the opportunity to visit a forest. This could be done as a whole group exploration, or by students individually on computers or iPads to learn more about the forest. The virtual field trip includes information on environmental issues in the forest, allowing gifted students to further develop their moral thinking and awareness of social issues.

28. **Museum of Natural History Virtual Tour http://www.mnh.si.edu/panoramas/#**
    The Smithsonian Museum of Natural History has created this website to offer a virtual walkthrough of every exhibit (even past exhibits) in the museum. Students can explore independently, with a small group, or as part of a whole group computer lab experience. The Museum of Natural History is an excellent resource for students, but is inaccessible to many students, especially those living in low-income homes. Exploring the museum allows gifted students to further their enjoyment of learning.

29. **The Blobz Guide to Electricity - http://www.andythelwell.com/blobz/**
    This is a website to help students learn about circuits. Like some of the other resources I have described, the website has a variety of interactive components that teach the students more information about electricity. I would use this website as a web quest or as an independent science center to enrich my gifted students' knowledge on the topic of electricity.
30. **Geometry 3D Shapes - learner.org/interactives/geometry**
    This has interactive activities for surface area and volume. Teachers can display the rotating models of 3D shapes before a mathematics lesson to help enhance students' understanding of the concepts. Gifted students have a drive to better understand concepts and to use higher-order thinking skills. Manipulating three dimensional objects in space is a complex skill suited for gifted students.

31. **This Dynamic Planet - http://nhb-arcims.si.edu/ThisDynamicPlanet/index.html**
    This website, run by U.S.G.S., is a great resource for earth science, specifically earthquakes and volcanoes. Students can explore volcanic eruptions happening in real time, and can see a full world map showing all historic volcanic eruptions. This website would work well as an independent exploration tool for students during computer lab time. Gifted students could apply knowledge from an earth science unit to make meaningful observations of the volcanic data.

32. **Energy Kids - eia.gov/kids/index.cfm**
    Sponsored by the U.S. Energy Information Administration, this website has lesson plans, games, background knowledge builders, and online field trips. There is a teacher resource area that provides lesson plans integrating a variety of other subject areas, organized by grade level. The website contains information for students on using and saving energy, energy sources, and the history of energy, in addition to games and activities. This website allows students to explore independently and deepen their knowledge on a

specific science topic. Gifted students would benefit from these interdisciplinary lessons that allow students to integrate knowledge from a variety of subject areas.

33. **Rocks and soils activity -**
    http://www.bbc.co.uk/schools/scienceclips/ages/7_8/rocks_soils_fs.shtml
    Students can choose different types of rocks to test in an online lab in this interactive activity. Features of the rocks include permeability, cleavage, wear, and buoyancy, all termed in kid-friendly language. This website would be great for an independent discovery activity during a rocks science unit.

34. **Virtual Frog Dissection -**
    http://www.mhhe.com/biosci/genbio/virtual_labs/BL_16/BL_16.html
    This is an excellent tool allowing for a virtual frog dissection. Dissecting frogs can be messy, expensive, and difficult to coordinate, and can also pose issues for students and parents in the elementary classroom. The virtual dissection has the advantage of providing on-screen facts and information as students proceed through the website. This activity could easily enhance a human anatomy lesson or a study of animals. Students could proceed through the dissection in the computer lab, or in a small group center in the classroom. The activity could be presented as a web quest where students were required to record information on an accountability sheet to turn in, a teacher-led whole group lesson in the computer lab, or as an independent interest center. This activity would accommodate gifted students with advanced interests in anatomy or with high curiosity as to how the frog's organ systems look or work.

Presentation Tools

Gifted students should be given opportunities to demonstrate knowledge in a variety of ways. These websites allow gifted students to express their creativity and synthesize their knowledge into attractive, easy-to-read visual displays. In addition, these websites have the advantage of increasing students' technology skills.

35. **Smore - smore.com/app**
    The website is easy to use, and allows students to create attractive, professional fliers and newsletters. The website provides templates that can be used, and students can also design their own by uploading photos and pictures. This would be great for student projects. After training all students on the use of the website, I would offer this as an option for students for independent research project presentation.

36. **Storybird - Storybird.com**
    The express purpose of Storybird is to "reverse visual storytelling by starting with the image and 'unlocking' the story inside." Storybird users write stories and choose artwork from a large database to accompany the stories, creating virtual storybooks. Teachers can create assignments for students with writing prompts, and allow students to choose artwork from the database to go with their story. Student work can be shared and viewed by everyone in the class. Besides the obvious use- creative writing- the website can also be used to explain science or social studies concepts, to retell a familiar story, or other

academic applications. Gifted students who are creative or artistic would benefit greatly from the use of this website.

37. **Prezi - prezi.com**
    Prezi is an online alternative to PowerPoint, allowing students to easily create attractive and engaging presentations. One of the biggest advantages to Prezi is that students can work on a presentation on any computer once an account has been created, rather than having to use a flash drive. Creating a Prezi can allow a gifted student to express himself or herself creatively, and take pride in his or her original work.

Works Cited

Davis, G., Rimm, S., & Siegle, D. (2011). Characteristics of Gifted Students. In *Education of the Gifted and Talented* (6th ed., pp. 31-53). Upper Saddle River: Pearson Education.