SLIDES AND RESOURCES AVAILABLE AT brianhousand.com/wow2015
HELLO
My name is BRIAN
Teaching for High Potential (THP) is designed with educators in mind. Each issue is filled with practical guidance and classroom-based materials for educators striving to understand and challenge their high potential learners. Additional supporting resources are also provided for each article on the NAGC website.
Writing about technology can be hard.
The Potential Power of Podcasting

Arguably one of the most influential technological innovations of the past decade, the iPod has sold over 100 million units. While most of these devices are loaded with digital music, an increasing number of them are being utilized to listen to some of the over 100,000 free podcasts. Although originally designed for iPods, podcasts now can be downloaded on any mp3 device or on your computer.

So, What Is a Podcast?

A podcast is a digital file that contains audio and often video images that are downloadable from the Internet. Podcasts are not a singular event, but rather a series of broadcasts on a common theme or topic. While podcasts can be found on websites, the largest database exists within the store at iTunes.

For anyone who does not have iTunes already loaded on their computer, this powerful, interactive media player is available for free from http://www.apple.com/itunes/download/. The database can be searched by keywords or browsed by topic. Once you find a podcast you are interested in, you can listen to individual episodes, or you can subscribe and when new episodes are available, they will automatically download onto your computer—for free.

Much of what is available has been created by small groups of devoted individuals who possess an overwhelming desire to share their knowledge and opinions. Often these podcasts lack what one might consider to be educational value, but don’t be discouraged. In the vast sea of available podcasts there is a multitude of rich resources. Here are some of my favorite podcasts:

iTunesU (http://www.apple.com/itunesu) is a collection of recorded lectures from actual classes in various disciplines from universities such as UC Berkeley, Stanford, MIT, and Duke. This is a treasure trove for quality, high-level content for students whose curiosity may seem insatiable.

Ask a Biologist (http://www.biology.berkeley.edu/podcast) features scientists from...
DON'T FORGET PODCASTS
iTunes U
Collaboration is a Cinch with EtherPad

Brian C. Housand, East Carolina University
brianhousand@gmail.com
http://tinyurl.com/brianhousand

Every now and then a technology tool comes along that completely revolutionizes the way that I work. I am sure that you have had the experience of collaborating on a project where a Word document was emailed among the members of your group. Perhaps you have even had the misfortune of editing a file that was not the most recent version or even experienced the frustration of trying to assemble multiple documents into one single file.

By now many of you have heard of and used one of my favorite tools, Google Docs (http://docs.google.com). Docs was one of the first tools to offer group collaboration on a single document. Docs presents a fully online version of Microsoft Office and includes “cloud” versions of Word, Excel, and PowerPoint. Since 2006, I have been touting the virtues of Google Docs, but many of the teachers that I have introduced Google Docs to resist using it with their students. The fear automatically create a randomized URL that you can share with your collaborators, or you can choose to customize the name of your pad. For example if you wanted to create a pad named “tech-project,” you would enter http://etherpad.com/tech-project in the address bar of your browser. If the pad does not already exist, then you will be prompted to create it. A word of advice, when you create a new EtherPad, bookmark the site or write down the link, otherwise you will not be able to retrieve the document as it is only saved on the Internet. Once created, the pad you started will be available forever.

The free edition allows up to 16 people to simultaneously view and edit a single document. EtherPad also highlights the contributions from each user with a different color, so users can easily see who has added to the document. EtherPad continuously saves your work. To view the EtherPads in
Welcome to the Research tool!

Here you can search for any topic that interests you, find information, images, quotes, citations and more, and then quickly insert them into your document.
ELEM 6400

ADVANCED ASSESSMENT AND TEACHING IN THE ELEMENTARY GRADES
EAST CAROLINA UNIVERSITY / SPRING 2015 / DR. BRIAN HOUSAND

MODULE ONE: INTRODUCTION TO ASSESSMENT
JANUARY 12 - JANUARY 28

MODULE TWO: RELIABILITY, VALIDITY AND ABSENCE OF BIAS
JANUARY 28 - FEBRUARY 11

MODULE THREE: STANDARDIZED TESTING
FEBRUARY 11 - FEBRUARY 25

MODULE FOUR: SELECTED VS. CONSTRUCTED RESPONSES
FEBRUARY 25 - MARCH 18

MODULE FIVE: PERFORMANCE, PORTFOLIO, AND AFFECTIVE
MARCH 18 - APRIL 1

MODULE SIX: UNIT CONSTRUCTION AND INSTRUCTION
APRIL 1 - APRIL 29

FINAL: EVALUATION OF INSTRUCTION
Teachers, do you...
- Not have enough time for grading?
- Want useful measurements on student performance?
- Need a free solution to help?

If so, then Flubaroo can help!
- Grade online assignments in under a minute!
- Get reporting and analysis on student performance!
- Email students their scores.

Want to learn more?
- Read the Overview to see how easy it is!
- Visit the Flubaroo Help Center for more.

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Flubaroo is free to use!
Watch a 3 minute demo.

Read What People are Saying!
Click below to see where Flubaroo has been featured!

Flubaroo is an edCode.org project
Connect:
- edCode.org
- Discussion Group
- Follow on Twitter
- Follow on Google Plus
- Purchase a bumper sticker or decal

---

Flubaroo is a California nonprofit.
Is This the Future of Reading?

We are living in a digital age. An age that has transformed the way that we think, learn and express ourselves. In the 15th Century, the Gutenberg press revolutionized the way knowledge is presented. Books by and large have not changed their form since they were first invented. In the 21st Century, technology is, again, changing the way that information is shared and electronic books, also known as ebooks, is the new way. In many instances, versions of books are available for free to view online or to download. While ebooks have been around for a while, they are often an underappreciated resource for literacy and learning. There are many services that offer ebooks for purchase, but I would like to highlight five online libraries that offer ebooks for free and present what may well be the future of the book.

Google Book Search
http://books.google.com/

Google offers a growing online library of books that have been digitally scanned and cataloged. The full text of books that are out of copyright are available to view, and a preview of more current titles is available. Perhaps the best feature of the site is in the “About This Book” tab. Here you will find a collection of popular passages, reviews, references from other web pages, and for select titles, an interactive Google map that identifies locations mentioned in the book.

Project Gutenberg
http://www.gutenberg.org/

The original producer of free eBooks, Project Gutenberg’s online library boasts over 20,000 books available. Like most free eBook services, this library features titles that are now part of the public domain. Part of the philosophy of Project Gutenberg is to provide ebooks in forms that are easily accessible for all users. For example, the time that it takes to download a copy of James Joyce’s Ulysses is well under 10 seconds. Access to a rich library of literature is no longer a luxury, but a convenience to your students.

will store over 200 books at a time. The most revolutionary feature of the Kindle is that it does not require you to connect to a computer or the Internet to load new books. Its wireless technology allows you to purchase a book from anywhere at anytime in less than a minute. Currently there are over 100,000 titles available for purchase at prices that are much lower than traditional books. One of the goals of Amazon, is to not only have every book in print for purchase for the Kindle, but also every book that has ever been in print! At close to $400, the price of the Kindle may seem steep, but this is the same price that the iPod was introduced at in October of 2001. Initially, many doubted the viability of the iPod, but within over 141 million sold worldwide, the iPod has transformed the way we listen to, watch, and purchase music and video products. Will Amazon’s Kindle ignite a similar revolution? Only time will tell.

While books may change the way they look or are delivered to us, this much will remain constant: Future generations will still read works of great literature and will be transported to magical lands, embark on great adventures, or be swept away by the romance and splendor of it all. The medium of delivery may change, but the message of a great book will always remain.

For more information and links to other eBook resources, visit my Google page at:
http://brianhousand.googlepages.com
Amazon Kindle

From Wikipedia, the free encyclopedia

Jump to navigation, search
Amazon Kindle

Amazon Kindle

Manufacturer Amazon.com
Carries no writing
Available November 19, 2007
 captives 600-650 pp.
107 ppi resolution,
4" diagonal
7.5" x 5.3" size
4-level grayscale
Electronic paper
1000:1 contrast
Operating system Linux 2.6.10 kernel
Inverted QWERTY keyboard

$399
That was Then; This is Now:
Sputnik at 50 and the Google Lunar X Prize

That Was Then...
October 4, 2007, marked the 50th anniversary of the launch of Sputnik by the Soviet Union. This event was not only a technological marvel and milestone in science, but Sputnik also represents a watershed in the history of gifted education. In a single moment, a chord of fear was struck in the hearts of Americans. No longer was the U.S. the leader in intellectual innovations. Our sense of pride was crushed because the greatest minds of the enemy had outperformed us. The educational community responded with what Tannenbaum (1979) referred to as a “total talent mobilization” of the best and brightest students. As a result, gifted students were identified and accelerated, grouping, and telescoping opportunities were instituted in schools where programming had not previously existed. Gifted students were expected to excel in higher-level content and readily advance to more difficult coursework to “fulfill their potential, and submit their abilities for service to the nation” (Tannenbaum, 1979, p. 12).

50 years later, the Soviet Union no longer exists and many of the gifted programs inspired by Sputnik have long since faded. Just as in the pre-Sputnik era, despite the dedicated work within the field of gifted education, little attention and resources are being devoted to identifying and providing services for the gifted. However, we may be on the brink of what could be a new Sputnik for the 21st century.

This Is Now...
Google has teamed with the X Prize Foundation to sponsor a global race to the moon. While it has been over 30 years since anyone has explored the moon and it may be another decade before any government agency decides to return, the Google Lunar X Prize, will award up to $30 million to any non-government team that is able to land a craft on the moon and can complete the mission goals. The grand prize of $30 million will be awarded to

While the world has changed dramatically over the past 50 years, the pendulum of education reform seems to have swung back to a pre-Sputnik era. In the age of No Child Left Behind, little attention is being paid to our talented youth. In a globalized world that has become increasingly “flat” (Friedman, 2007), we should consider what the reaction will be if a group does win the Google Lunar X Prize particularly if this group is not from the U.S. What will this mean for the American education system? Will this be a sign, as Sputnik was, that we are not adequately preparing our youth to participate and compete on a global level? Could this be a rebirth of the golden age of gifted education?

A generation of bright young people was inspired by the launch of Sputnik and the future of what could be. Certainly, most of us in gifted education know the story of Homer Hickam and the “rocket boys” who were roused by the launch of Sputnik. Now, with the Google Lunar X Prize, we may be inspiring a new generation to gaze up into the October sky and discover a whole new future.

For more information visit:
Google Lunar X Prize at http://www.googlelunarprize.org/
Google Moon at http://www.google.com/moon
BECOME A PART OF THE FUTURE! SIGN UP FOR OUR NEWSLETTER:

Email Address  

STAY INFORMED
NASA'S NEW SPACECRAFT

FOLLOW NASA'S ORION

Twitter | Facebook | LinkedIn | YouTube | Instagram
Inspiring Student Creativity from SCRATCH
BRIAN C. HOUSAND, EAST CAROLINA UNIVERSITY
brianhousand@gmail.com

Are your students itching to delve into the world of computer programming, but you are not sure how to support them in this creative endeavor? Well, SCRATCH may be the solution.

When I think back to my earliest memories of computers, I was fascinated by the world of programming. Growing up I spoke BASIC and LOGO like they were second languages. The number of hours that I spent typing lines of code on my Commodore 64 was often followed by an even greater number of hours debugging the programs.

In the 21st century, LOGO and BASIC are as archaic as Latin. Seymour Papert (1997), one of the primary developers of LOGO, suggested that Latin is taught in schools because it serves to develop general cognitive skills. Indeed, this is precisely what I learned from programming. I am not suggesting that we teach our students these early computer languages. Instead, I want to introduce you to a programming language designed for today’s digital natives.

SCRATCH (http://scratch.mit.edu) was designed to introduce computer programming to ages 8 and up, and it is a free, open-source program available for download on both Mac and PC. Inspired by LOGO, SCRATCH was developed by Mitchel Resnick, director of the Lifelong Kindergarten Group (http://llk.media.mit.edu) at the MIT Media Lab (http://www.media.mit.edu). SCRATCH is a graphical programming language that allows the users to manipulate different bits of project gallery, approximately 170,000 projects have been uploaded to the site. Rather than being limited to viewing only the final project, SCRATCH users are able to see all of the programming that was involved in the creation of the process. This transparency allows students to closely examine how the process was designed.

SCRATCH is intended to be accessible to a wide audience with a range of abilities. The designers describe it as having a “low floor,” meaning that it is easy to learn the basics. Although SCRATCH was created for ages 8 and up, do not be fooled by the simplicity of its design. SCRATCH also enables users to create complex projects and is used as part of many college level computer science courses as an introduction to programming. Perhaps most meaningful for gifted educators, SCRATCH has wide walls or the ability to support a wide variety of diverse projects related to any interest area via its online community.

The SCRATCH website provides resources for educators (http://scratch.mit.edu/pages/educators), including tips on getting started and videos to guide teachers through the introduction to their students. There are also a series of “SCRATCH Cards” that provide mini-lessons on specific programming ideas. The cards may be used as scaffolding for the students to improve on or add new elements to their program. Discussion forums (http://scratch.mit.edu/forums/) are a good source of ideas for using SCRATCH. By visiting the educators forum you can learn how others are using SCRATCH with their students and post your questions, ideas, and ex-
Tutorials for beginners

Write your first computer program
Code.org

Learn the basic concepts of Computer Science with drag and drop programming. This is a game-like, self-directed tutorial starring video lectures by Bill Gates, Mark Zuckerberg, Angry Birds, and Plants vs. Zombies. Learn loops, conditions, and basic algorithms. Available in 30 languages.
Ages 8-10+ | Modern browsers, smartphones, tablets
10,000,000+ participants
http://learncode.com/ys
Teacher's notes

Tutorials that teach JavaScript

code.org/learn
Most 12-year-olds love playing videogames — Thomas Suarez taught himself how to create them. After developing iPhone apps like “Bustin Jeiber,” a whack-a-mole game, he is now using his skills to help other kids become developers. (Filmed at TEDxManhattanBeach.)
What’s new in Xcode 6.

Xcode 6 introduces a radically new way to design and build software. Swift is an innovative new programming language for Cocoa and Cocoa Touch and, when combined with Xcode tools, makes programming a delightfully live experience. This same live experience permeates throughout Xcode 6. Live rendering within Interface Builder displays your hand-written UI code within the design canvas, instantly reflecting changes you type in code. And the new view debugger explodes all the UI layers into a 3D visualization, making it easy to understand how your interface is composed, and identify overlapping or clipping views. Watch the “What’s New in Xcode 6” video >

developer.apple.com/xcode
Developing iOS 8 Apps with Swift
by Stanford
To subscribe to an iTunes U course, click View in iTunes.

Course Description
Updated for iOS 8 and Swift. Tools and APIs required to build applications for the iPhone and iPad platforms using the iOS SDK. User interface design for mobile devices and unique user interactions using multi-touch technologies. Object-oriented design using model-view-controller paradigm, memory management, Swift programming language. Other topics include: animation, mobile device power management, multi-threading, networking and performance considerations.

Prerequisites: C language and object-oriented programming experience exceeding Programming Abstractions level and completion of Programming Paradigms.

Recommended: UNIX, graphics, databases.

Name | Description | Time | Price | View in iTunes
--- | --- | --- | --- | ---
1. Logistics, iOS 8 Overview | --- | 1:08:25 | Free | View in iTunes
2. Lecture 1 Slides | --- | --- | Free | View in iTunes
3. Introducing Swift, MVC | --- | 1:14:20 | Free | View in iTunes
5. Lecture 2 Slides | --- | --- | Free | View in iTunes
5. Reading Project 1 | --- | --- | Free | View in iTunes
6. Programming: Project 1 | --- | --- | Free | View in iTunes
8. More Swift and Foundation | --- | 1:12:45 | Free | View in iTunes
9. Lecture 3 Slides | --- | --- | Free | View in iTunes

bit.ly/stanford-xcode
LEARN TO CODE BY PLAYING A GAME

codecombat.com
Learn to code interactively, for free.

People all over the world are learning with Codecademy. Join in now!
From Consumer to Producer: DIY and the Maker Movement

One might argue that the field of gifted education has been built firmly upon the foundation of Constructionism. The ideas of Dewey, Vygotsky, and Bruner seem to be alive and well in gifted education in the form of hands-on, project-based, and problem-based learning. I think few would argue that learning by doing is not a noble goal for most gifted learners. However, learning by doing is not in and of itself the means to an end. If we look at this through the lens of Renzulli’s Enrichment Triad Model, what we desire is for students to move towards self-selected independent or small-group investigations of real-world problems. This idea is echoed in Betts’ Autonomous Learner Model and many other models of gifted education. Yet, there is another idea building on the principles of Constructionism and gifted pedagogy that I would like to bring to your attention: CONSTRUCTION-ISM.

Instead of having students learn by doing, constructionism focuses on learning by making. Constructionism is an idea inspired by constructionism and is typically attributed to Seymour Papert who also happens to be one of the co-

As I look at the Maker Movement, I see a subculture of innovative grown up gifted kids and continuing to explore their creative sides. I imagine that as you think about the gifted students with whom you currently work that there are several who immediately come to mind and fit the profile of a maker.

One of the most fascinating web resources that I have encountered is DIY (www.diy.org) because it embraces the maker movement and provides a venue for kids to explore a variety of interests and develop talents in a wide range of areas. According to the website, “DIY is a place for kids to share what they do, meet others who love the same skills, and be awesome.” DIY is a community of creators designed for kids to develop skills through completing a series of challenges. Skills range from animator to zoologist in over 100 different areas. Each skill area is made up of a series of challenges. For example, geologist has 11 challenges and includes activities such as making a seismometer, conducting a soil test, and making a glacial simulation. Interestingly, specific instructions are not provided as to how to complete the challenges. Instead, each individual is fully...
Featured Skills

Bitster
Bitsters use electronics to explore, tinker, and build awesome prototypes.
13 Challenges

Game Designer
Game Designers create new worlds where the rules are a little different.
14 Challenges

Minecraft
Minecrafters build with virtual blocks.
16 Challenges

Darkness Engineer
October 31st would be just another day, if not for the great Darkness Engineers of our time.
9 Challenges

Angler
Anglers find and catch fish.

Animator
Animators are the magicians of movies.

Architect
Architects design buildings and structures.

Astronomer
Astronomers investigate everything between Earth and the farthest reaches of space.
Data Visionary

Data is just a series of measurements, but locked inside is a story. Data Visionaries transform rows of numbers into understandable imagery. We bring complex facts to life.
Make a Diagram
Draw a diagram to explain something. Diagrams are great for explaining ideas that are hard to describe in words or numbers.

Map Data
Draw a data map by hand or create a digital map using Mapbox, Google Maps or other tools. Put your data in a map form to craft a story about it. Every map is actually a data visualization.

Design an Infographic
An infographic is a graphic that goes beyond a single graph and into a series of charts, iconography and illustrations to tell the story behind complex data. Use graphics software like Photoshop or draw by hand.

Create a Timeline
A timeline is a way to visualize data about events that occur over time. Create a timeline about your life or someone else’s and upload it to complete the challenge.
Don’t Be Bored... MAKE Something!

Joey Hudy
The 21st Century is SO Yesterday

“The world is moving at a tremendous rate. No one knows where. We must prepare our children, not for the world of the past, not for our world, but for their world, the world of the future.”
— John Dewey

The admonition that we should be preparing our students for the 21st century is everywhere. There are numerous books, blogs, and content resources promoting and espousing the virtues of 21st century learning. If one examines the titles and descriptions of presentations at any gifted or general education conference, reference to 21st century learning is prevalent. Most of us in gifted education have regularly advocated for teaching...
21st Century Student Outcomes and Support Systems

- Learning and Innovation Skills – 4Cs: Critical thinking, Communication, Collaboration, Creativity
- Information, Media, and Technology Skills
- Core Subjects – 3Rs and 21st Century Themes
- Life and Career Skills
- Standards and Assessments
- Curriculum and Instruction
- Professional Development
- Learning Environments
“There is no such thing as a new idea. It is impossible. We simply take a lot of old ideas and put them into a sort of mental kaleidoscope. We give them a turn and they make new and curious combinations.”
ENGAGING CURIOSITY
CURIOUSITY + EFFORT = INTELLIGENCE

(von Stumm, Hell, & Camorro-Premuzic, 2011)
EXPLORE
THE GARDEN
Homework

1. History
Tickling Curiosity

Tickling Students' Curiosity

byrdseed.com/tickling-curiosity
A WEEKLY DOSE OF CURiosITIES & PUZZLEMENTS
PUZZLEMENTS.CO
Search this site

There's just so much science, nature, music, art, technology, storytelling and assorted good stuff out there that my kids (and maybe your kids) haven't seen. It's most likely not stuff that was made for them...

But we don't underestimate kids around here. Search 6-1,000+ smart & super-cool, “not-made-for-kids, but perfect for them” videos in the classroom or together at home, curated by Roni Mekaya with her 4-6.7 year olds. Click play and start a conversation.
TYPE I
GENERAL EXPLORATORY ACTIVITIES

TYPE II
METHODOLOGICAL TRAINING / HOW-TO ACTIVITIES

TYPE III
INDEPENDENT OR SMALL GROUP INVESTIGATIONS PRODUCTS AND/OR PERFORMANCES

(Renzulli, 1977)
ENGINEERING SERENDIPITY
LEVERAGING SOCIAL MEDIA AND TECHNOLOGY RESOURCES
TO DEVELOP INTERESTS AND CREATE OPPORTUNITIES

brianhousand.com/nagc2014
Arranging serendipitous encounters isn’t always a function of **WHO YOU KNOW**, it should also be a function of **WHO YOU WANT TO KNOW**. Or **WHO YOU SHOULD WANT TO KNOW**, even if you don’t realize you should want to know them.
Who are the EXPERTS?
How do I follow them?
Who do they follow?
What are they reading?
What are they producing?
UNDERSTANDING DESIGN
Design is everything. Everything!

Paul Rand
I ❤️ FONTS
A simple new way to design

Design shouldn’t be hard but somewhere along the way we became bogged down with expensive, complicated software that put design out of reach for most people. Canva is here to change that, with a tool that makes design simple for everyone.

Canva gives you everything you need to easily turn ideas into stunning designs. Create designs for Web or print: blog graphics, presentations, Facebook covers, flyers, posters, invitations and so much more.

Search and drag simplicity

Search and drag to create beautiful designs without ever leaving the Web. Canva takes care of the boring bits so you can spend more time creating.

Start with a custom layout or a blank page. With all the tools in one place, there’s nothing holding you back.
Design Thinking for Educators

A creative process that helps you design meaningful solutions in the classroom, at your school, and in your community. The toolkit provides you with instructions to explore Design Thinking.

Teachers using Design Thinking

[Image with teachers using design thinking]

designthinkingforeducators.com
Design Thinking for Educators

The design process is what puts Design Thinking into action.

It's a structured approach to generating and developing ideas.

The five phases of the design process:

1. **Discovery**
   - I have a challenge. How do I approach it?

2. **Interpretation**
   - I learned something. How do I interpret it?

3. **Creation**
   - I see an opportunity. What do I create?

4. **Experimentation**
   - I have an idea. How do I build it?

5. **Evolution**
   - I tried something. How do I evolve it?

[designthinkingforeducators.com]
CONSTRUCTING SYNTHESIS
Creativity is just connecting things.

When you ask creative people how they did something, they feel a little guilty because they didn’t really do it, they just saw something. It seemed obvious to them after a while.

That’s because they were able to connect experiences they’ve had and

SYNTHESIZE

new things.

- Steve Jobs, 1995
An idea is nothing more or less than a new combination of old elements.

James Webb Young, 1940
A Technique for Producing Ideas
The capacity to bring **old elements** into **new combinations** depends largely on the ability to see relationships.

James Webb Young, 1940
A Technique for Producing Ideas
People who hope to thrive in the Conceptual Age must understand the connection between diverse, and seemingly separate disciplines.

They must know how to link apparently unconnected elements to create something new.

-- Daniel Pink in A Whole New Mind
KNOW
UNDERSTAND
DO
It’s about THE EXPERIENCE.
DON’T JUST DO SCHOOL
EXPERIENCE IT
One more thing...
BOARD OF DIRECTORS
President-Elect
Two At-Large Members
Parent Representative
State Representative

NETWORKS
Computers and Technology
Conceptual Foundations
Counseling and Guidance
Early Childhood
Parent and Community
Professional Development
STEM

Voting Closes July 14, 2015
livingroomcandidate.org