



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

NACTA 2017 Blue Ribbon Presentation

Are You My Teacher?

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NACTA

North American Colleges and Teachers of Agriculture

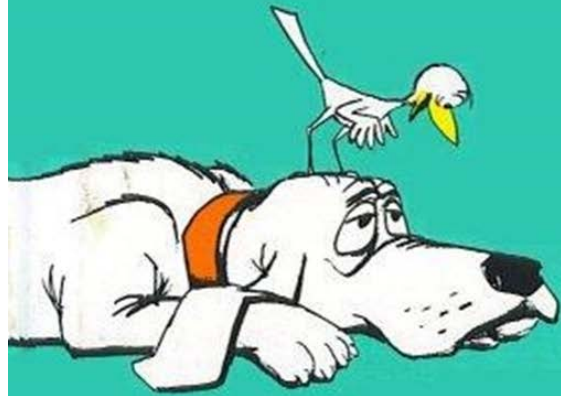
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Are You My Teacher?



by P. D. Eastman

- Everyone seeks a teacher/mentor/coach at different stages of life.
- Am I prepared to deliver what they are seeking and need?



Student Expectations of a Teacher?

- **Competent-Knowledgeable**
- **Challenge-Motivate**
- **Care-Fair**





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Are You My Teacher





Are You Ready to be Her/His Teacher?

- Can you remember when students were unsure if you were a graduate student or a faculty member?
- Have you encountered the student who looked at you in disbelief that someone that old is their teacher?
- In both cases, the student wants to know, is it possible you are my teacher.
 - » You don't have enough life experience
 - » You don't have enough experience about my life





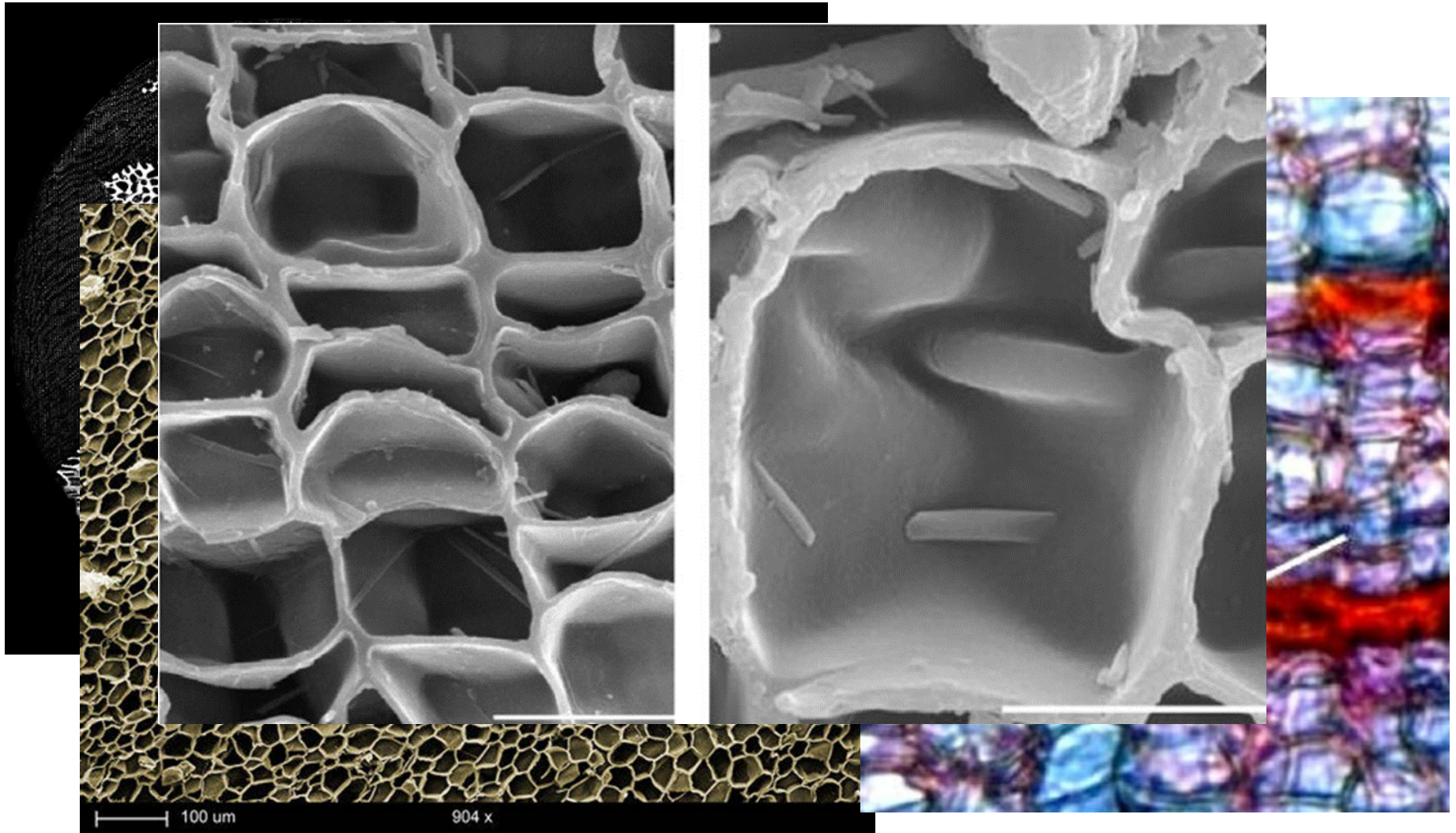
What are the Imbedded Questions and Observations

- It is not can you use the internet but are you staying current with the technology.
- How do I adapt to innovation and technology changes?
- Are you wasting my time?
- If you are not willing to stay current how can I trust you?
- Technology changes fast.





Discover and Refinement



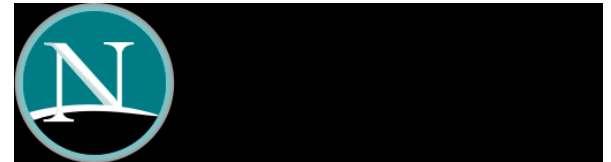
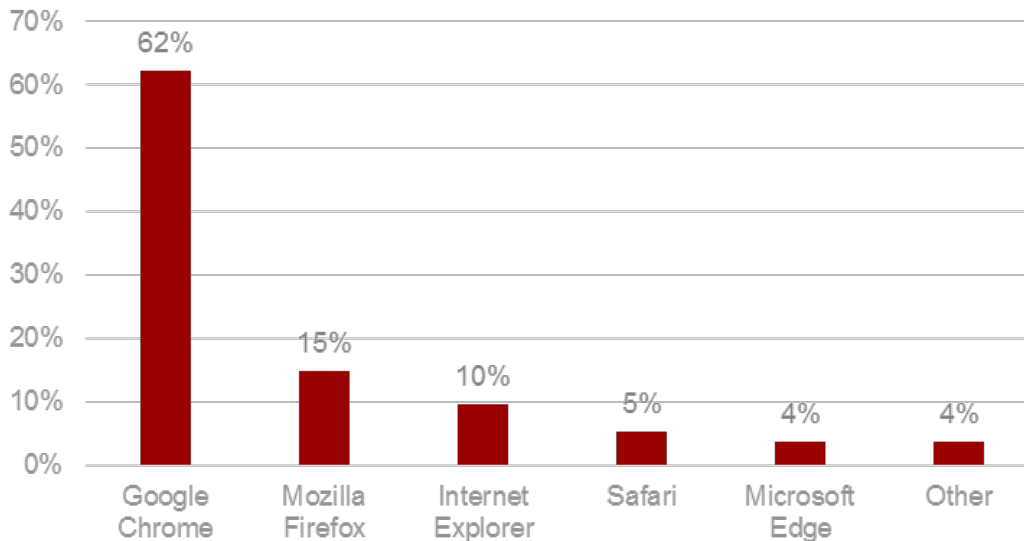


When I began teaching 1995

- **WWW:** Tim Berners-Lee (1989)
- First web browser (1990)
- Netscape (1994)
- Microsoft Internet Explorer (1995)



Browser Use Today





Innovation in My Career?

- **PowerPoint was officially launched on May 22, 1990**



2017

Case IH Autonomous Vehicle





What Will Happen to All the Tractor Drivers?

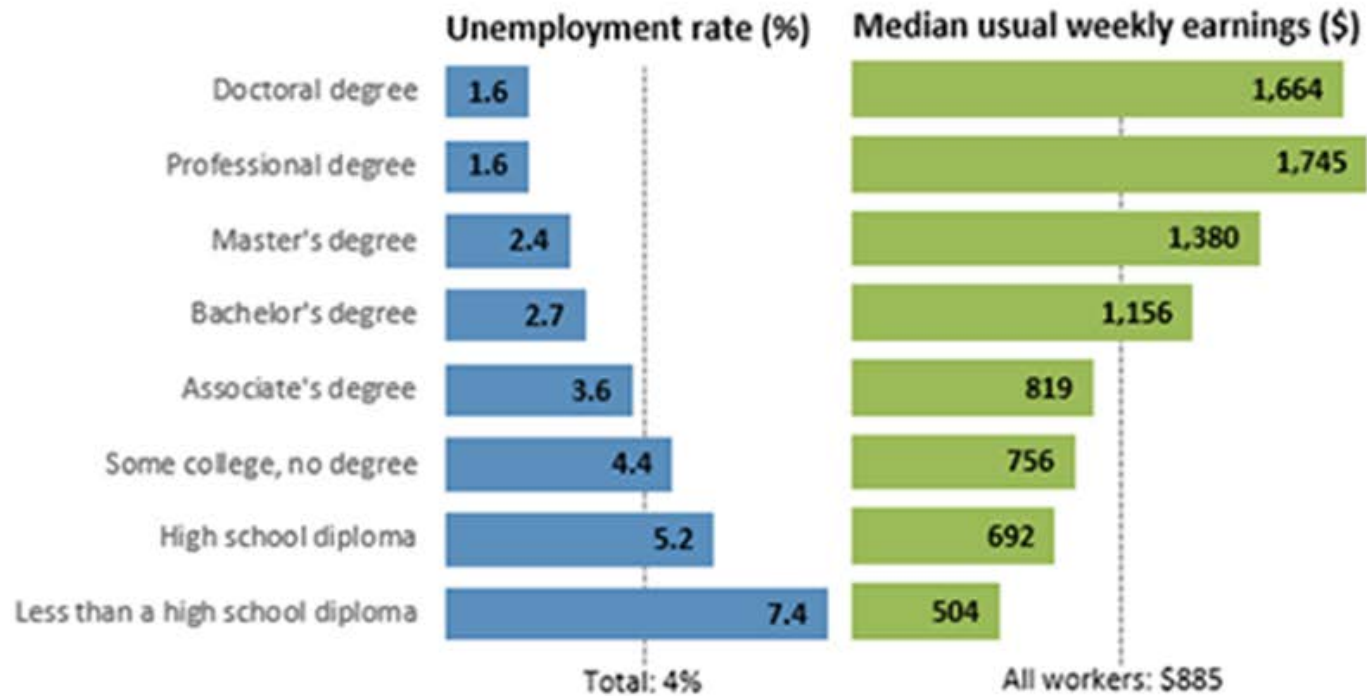


**You will help them learn to create
a job or career that did not exist.**



Unemployment and Educational Attainment

Unemployment rates and earnings by educational attainment, 2016



Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.

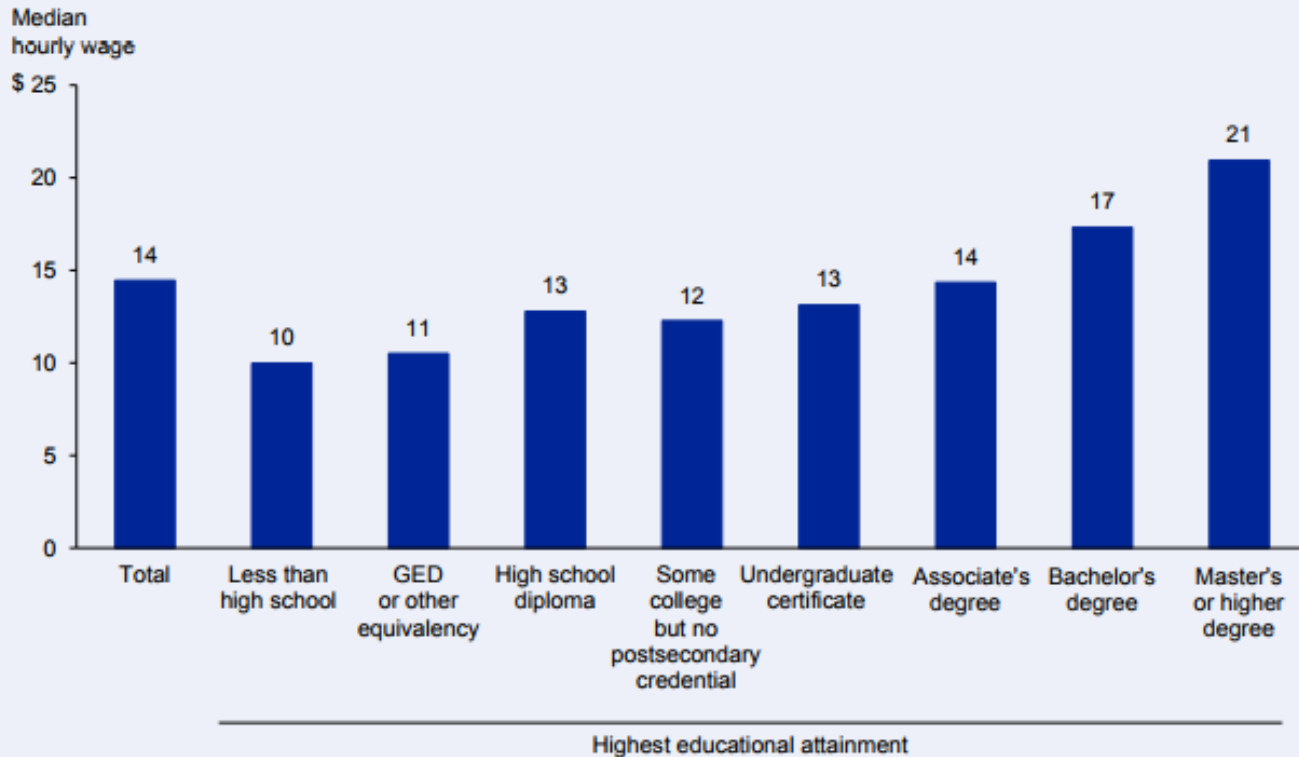
Source: U.S. Bureau of Labor Statistics, Current Population Survey.



Unemployment and Educational Attainment

Figure 18.

Median standardized hourly wage for spring 2002 high school sophomores who were currently employed, by students' highest educational attainment: 2012



NOTE: Earnings that were reported in a format other than dollars per hour (e.g., dollars per week) were standardized to dollars per hour. Estimates and standard errors are available in tables C-16a and C-16b.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002/12).



Embrace Innovations in Education

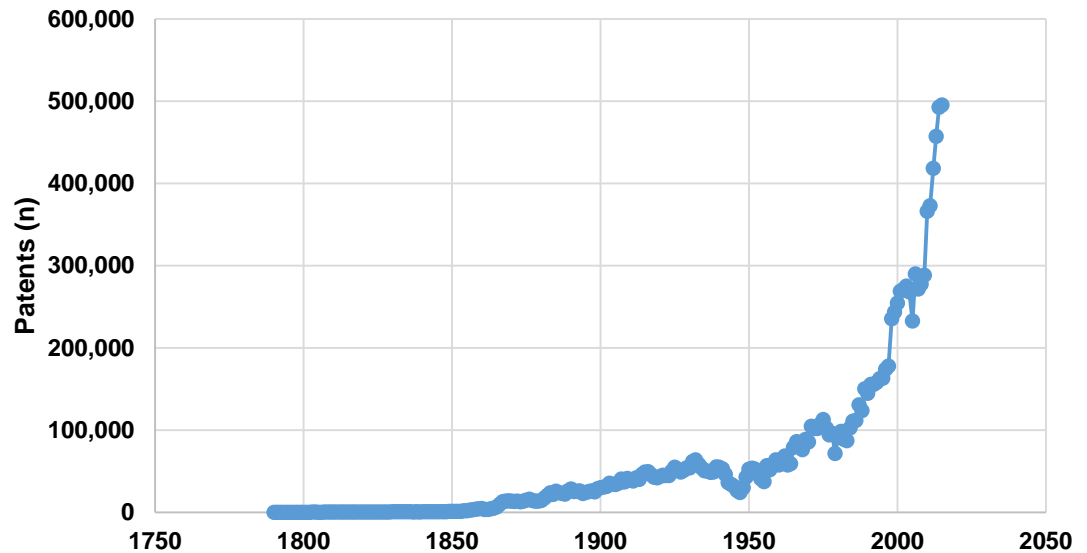
“Technology is a gift of God. After the gift of life it is perhaps the greatest of God's gifts. It is the mother of civilizations, of arts and of sciences.”

- Freeman Dyson



Johannes Gutenberg
c. 1440

Total U.S. Patents Granted
1790-2015



Measure of Innovation



Embrace Innovations in Education

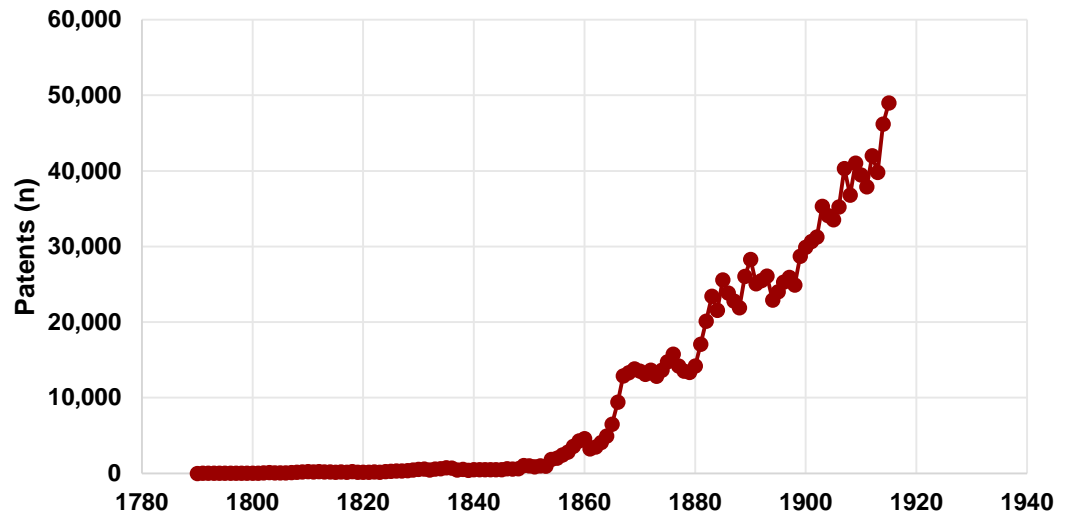
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**Total U.S. Patents Granted
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Measure of Innovation



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Is this Your Classroom of the Future?

Harvard Business School





Are you Preparing for Your Classroom of 2027?

- **What am I doing to stay competent in my craft?**
- **Who will attend?**
- **Where will you meet?**
- **When will you meet?**
- **What is the most effective learning environment?**
- **Will you let the student help design their learning environment?**
- **How much artificial intelligence will you use?**



Are You Using Artificial Intelligence Today?

- “Don't fear super intelligent AI use it to enhance the human experience”
 - Grady Booch
- If your teaching activities rely on being the source of information then **you will be replaced by Siri!**
- The jobs we'll lose to machines -- and the ones we won't?
 - » Machines: frequent, high volume tasks
 - » People: creative, novel and complex
 - Anthony Goldbloom
- Do what we enjoy and are best suited for as teachers!





Student Expectations of a Teacher?

- **Competent**
 - » Current in subject (**What**)
 - » Bring a sense of order to what might appear as chaos (**Explain What**)
 - » Illustrate relevance to the life/career of the student (**So What**)
 - » Explore the current disciplinary boundaries (**What is Next**)
- Jonathan Shaver





What is in your toolbox?

- Am I preparing this student for a lifetime of learning?
- A U.S. student born in 2007 will on average live to the year 2085.





What is Her/His Future?

- Will my students be able to grow potatoes on Mars?
- Will they keep chickens alive on the Moon?
- Will they understand the nutritional requirements to live in low/zero gravity?





Student Expectations of a Teacher?

- **Competent**
- **Challenge**
- **Care**





People Build People

- **Machines don't build people, people build machines**
- Building human capacity is key for the future
- **As educators, we are in the business of developing people**
- We should be ecstatic that we can focus on students and not technology
- Colleges like ours are really good at this
- This takes time and energy but offers the greatest reward!!!!



Challenge

- Expect students to stretch themselves.
- Encourage them to question why.
- Instill a desire beyond compulsory reasons to engage in the learning experience.



There are No Shortcuts

- **Good literature cannot be summarized in a statement:**
 - **A Tale of Two Cities: Love your neighbor**
 - **Les Misérables: Help the unfortunate**
 - **David Copperfield: Child abuse is wrong**
 - **Crime and Punishment: Do not kill old ladies, even really mean ones**
 - **Moby Dick: Obsessions can be dangerous**



There are No Shortcuts

- Create a desire in your students to know why the book is worth reading.
- “There’s no shortcut. One needs not just to analyze “the text” but to experience the work.”
- “No one experiences the world in quite the same way as anyone else”

“Cents and Sensibility: What Economics Can Learn From the Humanities”
Gary Saul Morson and Morton Schapiro, June 13, 2017 [Inside Higher Ed](#)



Challenge Students to Stretch for New Goals

- Encourage them to take ownership of their education
- Show how they can achieve desired goals
- Model my willingness to broaden my horizons





Student Expectations of a Teacher?

- **Competent**
- **Challenge**
- **Care**





Do I Know My Students?

- As an educator:
 - » Do I know their name?
 - » Am I aware of how they contextualize learning?
- As a communicator, do I know my audience?
 - » GenZ, iGen



What Defines Gen Z or iGen?

- Beginning approximately 1996
- Don't remember 9/11
- 23 million strong
- Cloud natives, have always had a smart phone
- Have always had a social presence:
 - » Relationships
 - » Virtual reality training
 - » Problem solving



What Defines Gen Z or iGen?

- Highly educated: on YouTube and Pinterest
- Apps of choice Snapchat, Vine, and Instagram
- They want to know in **real time**
- Priority on finding right information fast **NOT** knowing the right information fast
- Most are still adolescents, they will be our students for the next 15 years!



Student Expectations of a Teacher?

- **Care**
 - » Am willing to try and understand their difficulties, their hesitations, and their complexes.
 - » Do I encourage them and build them up?
 - » Have I created and communicated an atmosphere such they know the course evaluation is fair?



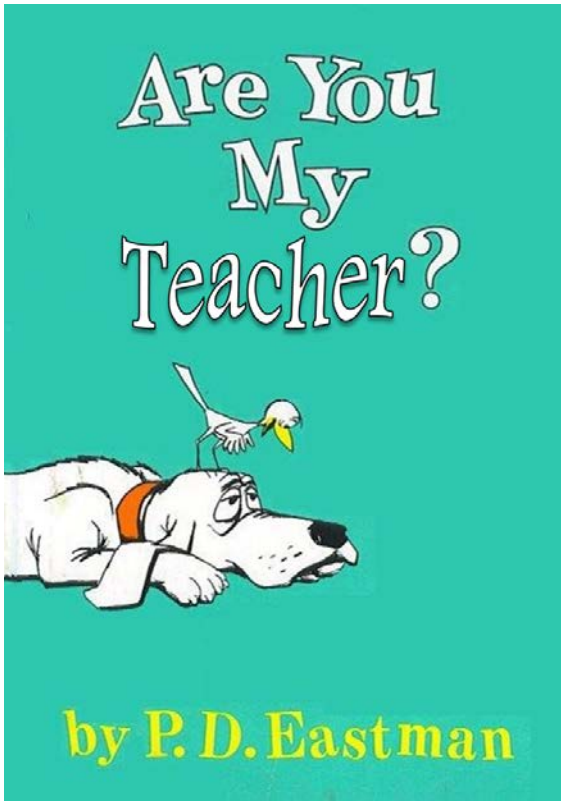
Student Expectations of a Teacher?

- **Competent-Knowledgeable**
 - » It is no longer about **WHAT**
 - » Invest your efforts on **SO WHAT and WHAT NEXT**
- **Challenge-Motivate**
 - » Put **grand challenges** in front of me!
- **Care-Fair**
 - » Let them know you care and will be fair!
- **These expectations have not changed, with time.**
- The teacher-student interaction is timeless
- **FOCUS on Your Student!!**



Who Was Your Teacher

- She was competent
- She challenged me
- I knew she cared and was fair



Mrs. Myra Hiles
1st Grade Teacher



Acknowledgments

- Educational Issues and Teaching Improvement Committee
 - Brian Pearson
- Kevin Donnelly
- Susan
- Thank you