

## **UNIT 2 – EXPLORING STEM CAREERS**

### **ADDITIONAL RESOURCES**

#### **LESSON 6: WHAT IS A SCIENTIST?**

**KNOWTHAT?!:**

**[http://www.youtube.com/playlist?list=PLqqASJUPUsUcU8gq2bzt4pA6xznPSxw\\_x](http://www.youtube.com/playlist?list=PLqqASJUPUsUcU8gq2bzt4pA6xznPSxw_x)**

#### **LESSON 7: DEAF PROFESSIONALS IN STEM CAREERS**

**<https://www.deaftec.org/stem/professionals>**

- Anna Thelen, Chemistry Technician, Mérieux NutriSciences USA (4:29)
- Ryan Shields, CNC Operator, Tiffany & Co. (5:40)
- Ricky D. Sanders & Justin A. Davis, Machinists, Corpus Christi Army Depot (6:16)
- Will Roach, 777 Build Engineer, Boeing (4:48)
- Matt Martella, Applications Programmer, Highmark (6:14)
- Bill Huber and Qing Quan, Software Engineers, IBM (6:29)

**The first video shows a student writing on paper with a pen/pencil versus texting) -**

**[http://www.pbslearningmedia.org/asset/wpsu09-stemcareers\\_vid\\_curstext/](http://www.pbslearningmedia.org/asset/wpsu09-stemcareers_vid_curstext/)**

**The 2<sup>nd</sup> video shows game technology differences i.e. an fashioned ping pong Nintendo game being played on an old fashioned TV versus Xbox/WII Tennis being played on a flat screen computer(15 seconds) - [http://www.pbslearningmedia.org/asset/wpsu09-stemcareers\\_vid\\_pongwiiten/](http://www.pbslearningmedia.org/asset/wpsu09-stemcareers_vid_pongwiiten/)**

**The 3<sup>rd</sup> video shows someone using a typewriter versus a computer (15 seconds)-**

**[http://www.pbslearningmedia.org/asset/wpsu09-stemcareers\\_vid\\_typecomp/](http://www.pbslearningmedia.org/asset/wpsu09-stemcareers_vid_typecomp/)**

#### **LESSON 8: CHANGING TECHNOLOGIES**

**Lists engineering and technology topics:**

**<https://www.brainpop.com/technology/seeall/>**

#### **LESSON 9: WHY STUDENTS SHOULD BE INTERESTED IN A STEM CAREER**

**STEM Careers – Why students should be interested in STEM careers**

<https://www.youtube.com/watch?v=HxuEHHERFIQ>

<https://www.youtube.com/watch?v=Vf5ExGW2E9E> - Jobs of the Future

<https://www.youtube.com/watch?v=3bnMBhO0LnU> - What I want to do in the future

**Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook (OOH)**

<http://www.bls.gov/ooh/>

**Fastest growing occupations: 20 occupations with the highest percent change of employment between 2014-24.-** <http://www.bls.gov/ooh/fastest-growing.htm>

<http://www.careercornerstone.org>

## **LESSON 10: COOL STEM CAREERS**

**Cool Science Careers under Web Adventures:**

<http://webadventures.rice.edu/stu/Games/Cool-Science-Careers/> [requires Adobe Flash]

Middle and high school students experience what it is work in a STEM career through interactive activities and games.

- Professional Pathfinders: You are matched to a science career based on your interests. You are asked 21 questions and answer if you are very interested, somewhat interested, not interested.
- Imagine Yourself: The students are able to virtually conduct activities that are done by people in STEM areas. This activity includes education requirements and interviews with scientists.
- Zoom In: Want to get the facts straight, select a science career and zoom in. Learn what education is needed and read interviews with real people in science.
- My science career picks: Which of the careers on the site did you like best? Vote and see how others have voted.
- Ask a scientist: Do you have questions about a science career, see common questions and answers.

**These activities and web site has information on assisting students in selecting majors and the preparation needed for training in that area. Parts of this web site could be used for activities geared towards preparation for college selection etc.** <http://www.egfi-k12.org/about/>

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1. Click on Engineer Your Path

a. Click on meet a student- click on a student's picture and find out why these students chose particular Engineering majors.

b. After the explanation from the college student about their major, you can click on the area of interest the student has, and get more information about it i.e. mechanical engineering (<http://www.egfi-k12.org/#/cards/mechanical>)

c. Getting In: Advice and strategies needed to get into an engineering major when going to college. (<http://www.egfi-k12.org/engineer-your-path/getting-in/>)

Staying organized - You will see a basic schedule to help you plan ahead and stay on top. Find out what you need to do your junior and senior year of high school, including test dates and application deadlines. (<http://www.egfi-k12.org/engineer-your-path/getting-in/stay-organized>)

## **LESSON 11: MEET MORE DEAF PROFESSIONALS WORKING IN STEM CAREERS**

<http://deaftec.org/stem/professionals> - tapes of deaf professionals working in STEM areas

- Anna Thelen, Chemistry Technician, Mérieux NutriSciences USA (4:29)
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STEM Career - Deaf (dental office)

<https://www.youtube.com/watch?v=lyslbpVcuhU>

STEM Career - Deaf (works on helicopters and planes)

[https://www.youtube.com/watch?v=8\\_8QdX4qCJ4](https://www.youtube.com/watch?v=8_8QdX4qCJ4)

Article: <https://www.nasa.gov/centers/armstrong/features/nasa-s-first-deaf-engineer-in-active-mission-control-role-impresses>

The Stem Career Website - <http://stemcareer.com/students/>

## **LESSON 12: POSSIBLE STEM CAREERS: COMPUTERS**

Website: <https://studio.code.org/courses>

- Course 1: for early readers or students with no language
- Course 2: For students ages 6+
- Course 3: For students ages 8 to 18
- Course 4: for student ages 9 to 18

<https://code.org/>

## **LESSON 13: EXPLORING CURRENT STEM JOBS**

Learn about possible STEM careers by completing the online activities found at:  
<http://ionfuture.org/>

## **LESSON 14: POSSIBLE STEM CAREERS IN THE FUTURE**

**Top 10 Dream Jobs In the World: We take a look at 10 of the Dream Jobs in the World! This is a countdown of the 10 most dream jobs in the world.**

<https://www.youtube.com/watch?v=T91Q4RGXq7c>

**5 Dream Jobs You Wish You Had- Do you sit around and watch movies on Netflix all day? You could be getting paid for that! Check out this video for a list of all the dream jobs you wish you had. [https://www.youtube.com/watch?v=\\_9jyww56nvM](https://www.youtube.com/watch?v=_9jyww56nvM)**

**Project the Popular Science slideshow called 10 Best Jobs of the Future.**

<http://www.popsci.com/science/article/2010-08/10-best-jobs-future-0?image>