



NSDL/NSTA Web Seminar:

**FunWorks: Inspiring Students to Pursue
Math and Science Careers!**



Thursday, September 20, 2007



Today's NSDL Expert:



Sarita Nair-Pillai
Project Director
EDC, Inc



<http://nsdl.org>





Who we are



- Education Development Center, Inc.
An international non-profit organization that conducts research and creates programs to advance learning
- Gender, Diversities & Technology Institute
A group within EDC developing technology-based projects that leverage the power of diversity to improve education and work



<http://nsdl.org>



Did you know....

Over 80% of the fastest growing occupations in the U.S., and two-thirds of the occupations with the largest growth, are dependent upon a knowledge base in science and mathematics.

Coble and Allen (2005), Keeping America Competitive. Denver, CO: ECS, p. 2

More than 50% of the current science and engineering workforce is approaching retirement.

Tapping America's Potential (2005). Washington, D.C.: Business Roundtable, p. 9



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Stereotypes about gender appropriate occupations are formed before students start middle school

Agree	Disagree

Stamp your answer



More research on career development

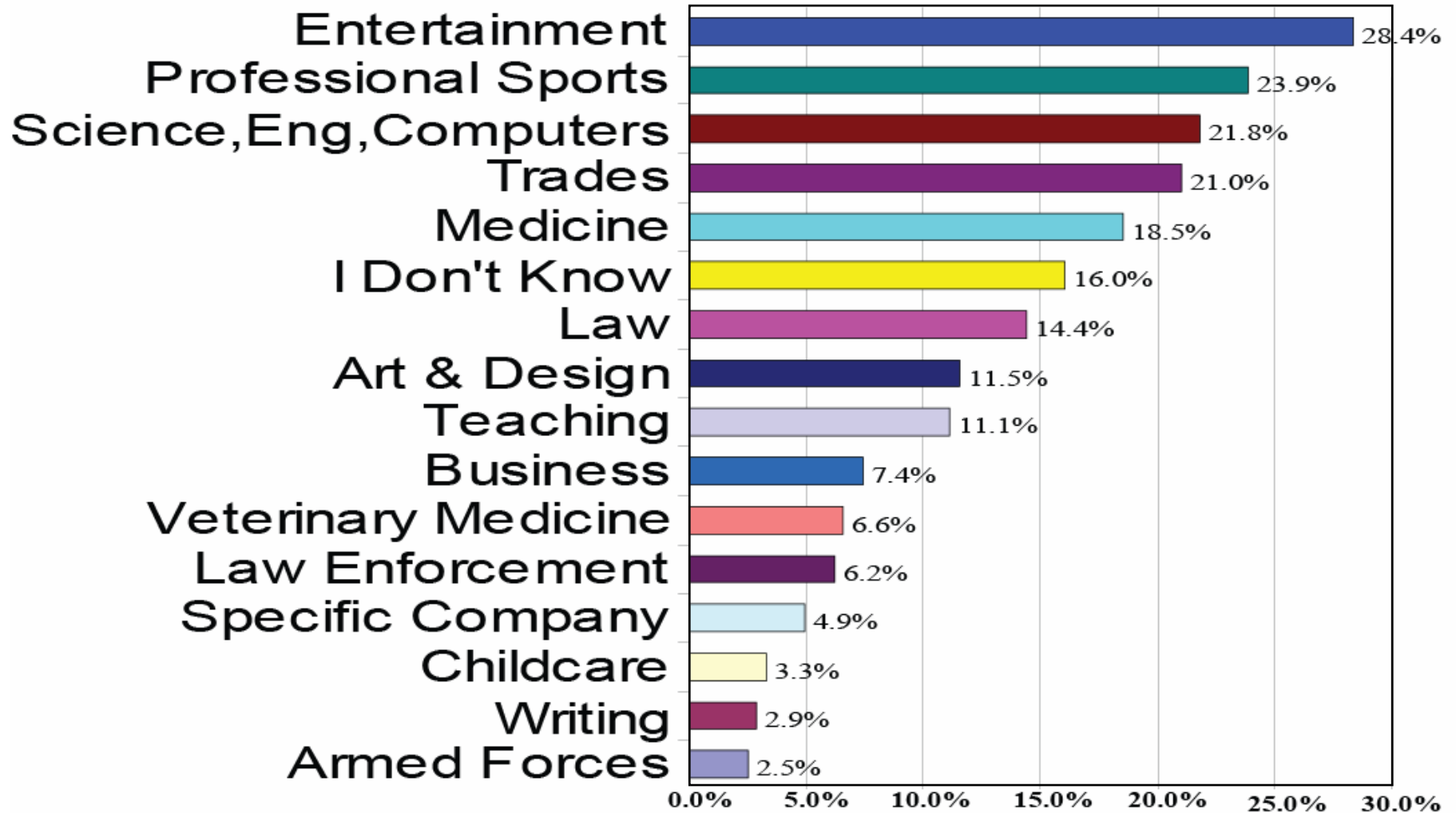
- Students at risk, girls, and youth of color often limit their career choices early
- Few middle-schoolers have realistic career plans or an awareness of the world of work
- Self-efficacy: students' career goals are based on what they believe they are capable of doing



Our research - The 5 most popular jobs cited by middle school students (Rate from 1 – 5, with 1 being most popular)

Hair Stylist	Doctor	Teacher
Basketball player	Lawyer	

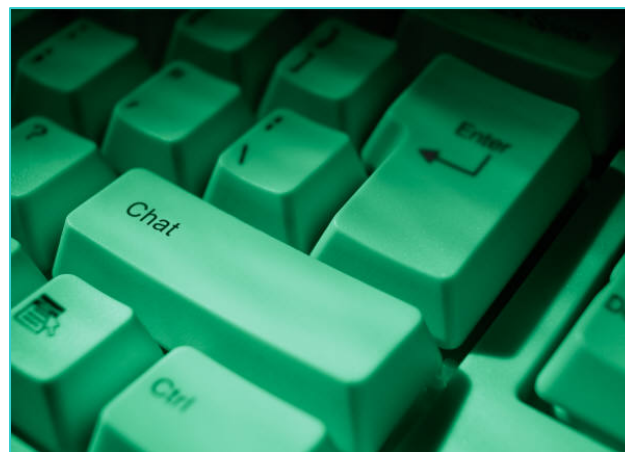
Popular Job Categories





In our survey, what did most middle school students state were the most important aspects of a job to them?
(e.g., money, hours, etc.)

Write your answers
on the chat





Most important aspects of a job...

- Liking the work I do (72%)
- The money I make (61%)
- Helping other people (40%)
- Making my family proud (39%)
- Liking the people I work with (35%)
- Being my own boss (12%)
- Where I work (office, outside) (11%)
- Choosing my own work hours (7%)

The FUN WORKS

...for Careers You Never Knew Existed.



Updated: August 24, 2005

Games

Music

Technology

Sports

Art/Design

Medicine/Law

Exploration

welcome

This Web site is about careers. Not just the interesting ones other people have, but the ones YOU can have. Don't know where to start? Well, dive right in and:

- EXPLORE many different areas, not just the ones that seem obvious
- THINK about what you enjoy. See where it leads you.
- EXPERIENCE lots of ideas

You may not know now exactly what you want to do as an adult, but this site will help you start. Discover who you are, what you like to do and what you do best.

Not sure what to click on? Try taking this [quiz](#) to help you figure out what to do next!

Click here if you're interested in any careers having to do with [Math](#) or [Science](#).

keyword search

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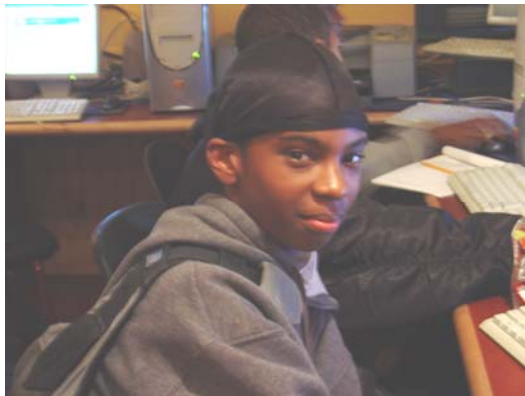
<http://thefunworks.org>





Why this project?

- Importance of STEM careers
- Formative middle-grades age range
- Lack of comprehensive, contextualized resources for youth
- Connection between academics and the 'real world'





Building the FunWorks





Inspire youth to explore STEM careers they might never have considered

The FUN WORKS
...for Careers You Never Knew Existed.

What's New

"Don't know a word on this page? [Look it up here.](#)"

Games Music Medicine/Law Technology Art/Design Sports Exploration

art/design Career Choices

With my interest in art and design, what kind of job could I do?

Here are just a few ideas:

- [Animator](#)
- [Urban Planner](#)
- [Fashion Designer](#)
- [Industrial Designer](#)
- [Art Conservator](#)
- [Scientific Illustrator](#)
- [Set Designer](#)
- [Cosmetics Chemist](#)

Look it up!
"Don't Know a word on this page? Look it up here." >>

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Updated: December 1, 2006



Debunk myths about what it takes to succeed in STEM careers



Oksana Wall-
Project engineer in
Disney's Ride & Show
Engineering Group



Sheri Garner Ray-
Video game
designer



Encourage youth to understand the relevance of STEM in real world contexts



Stamp the knee that requires surgery



Emphasize 21st century skills such as teamwork, leadership, and critical thinking

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What's New

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Games Music Medicine/Law Technology Art/Design Sports Exploration

SPORTS Career Choices [back to career choices](#)

Sports Doctor Things to Do People Classes to Take

Think Sports Medicine might be a job for you?

- Do you communicate well?
- Can you stay cool, calm and collected in a crisis?
- Do you have an interest in learning about how the human body is constructed (anatomy) and how it works (physiology)?
- Do you understand sports and the sports world?

If you answered yes to these questions, you have many of the skills to be successful in sports medicine!

"There is only one person who can define success in your life - and that's you."
~ Michael Jordan

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Updated: December 1, 2006



Expose youth to the academic preparation required for math and science careers

The FUN WORKS
...for Careers You Never Knew Existed.

What's New

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TECHNOLOGY Career Choices

Can you picture yourself working with a team of people to get a company's computer system up and running? Or would you like to work with doctors and patients to create new medicines? How about using your computer skills to solve crimes or dream up materials for clothing that actually protects the person wearing them? Here are just a few ideas for you to explore with your interest in technology:

- [Biotechnologist](#)
- [Nanotechnologist](#)
- [Computer Security](#)
- [Game Designer](#)
- [Webmaster](#)
- [Effects Artist](#)
- [Information Scientist](#)

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NSA WEB SEMINARS

In my classroom, I teach.....



- a) A unit on careers that includes STEM careers
- b) A unit with a focus on STEM careers
- c) A more in-depth exploration of STEM careers (internships, job shadowing, field trips)
- d) Without any units covering STEM careers



In their own words...



“I’m now interested in Nanotechnology because I like robots, and making small robots would be even cooler.”



In their own words...



“My number one career choice is genetic engineer...I am very interested in genetics, and I want to help cure genetic diseases.”



In their own words...



“I learned about different careers and how to prepare for them and which ones were best for me...I liked Industrial Design and Fashion Design.”



In their own words...

“I used to think that careers were boring, not like basketball. But some of them are cool, like engineering. You get to work with cool things.”





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**THANK
YOU!**



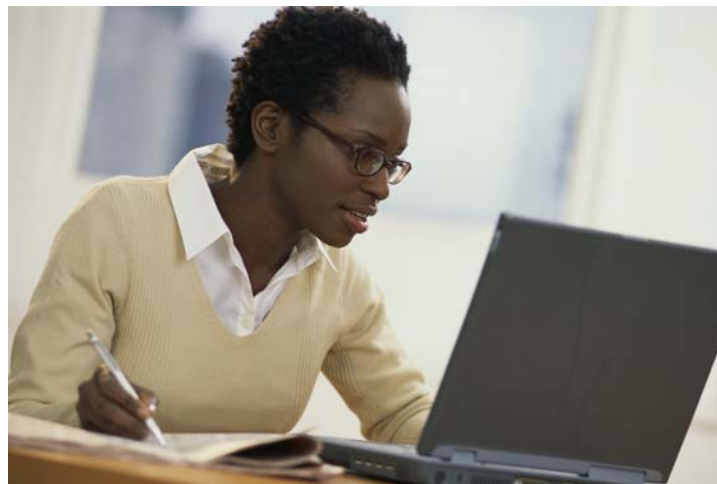
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Go to <http://nsdl.org> and click on the K-12 audience page to:

- Download our Seminar Resource List
- Utilize our blog featuring our presenters for the Fall Series sharing their insights on careers in science and science education:

<http://expertvoices.nsdl.org/2007fall-nsta-sems/>



<http://nsdl.org>





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