



Center for Talent Development  
Northwestern University  
School of Education and Social Policy

# Talent

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NORTHWESTERN  
UNIVERSITY

## Director's Message

### New Year's Resolutions

Is helping your children or students with their career goals on your list of New Year's Resolutions?

In this issue of *Talent*, Paula Kosin, career consultant with Career Vision, shares sage advice for engaging in career exploration that leads to more informed decision making and personal and professional fulfillment.



Grade school students should be immersed in learning about the world of work and the many career options available. As parents and educators, our role is to help young children understand that the answer to, "What do you want to be when you grow up?" can be choices other than doctor, teacher or firefighter.

Middle school and high school students should continue this process of learning about options, while also identifying their own interests, aptitudes and values.

Throughout the career development process, Kosin espouses strengths-based education — a concept CTD has championed for more than three decades in outside of school programs designed to develop students' talent areas further.

To augment Kosin's advice, we interviewed Kristin Labby, an instructor in our Accelerated Weekend Experience program, to learn how she discovered her "calling" as a scientist and how she introduces CTD students to the wonders of biochemistry and her profession.

By offering myriad high-quality programs with classes on cutting-edge topics and access to content experts and motivating teachers, CTD strives to do its part in making the future a bit brighter for us all.

Best wishes for a happy and productive year!

*Paula Abeguski-Kubilus*

## Career Advice for Gifted Students

### Four Tips for Future Success

**Brain signal decoder. Digital archaeologist. Astro-teacher and space junk recycler. These are just a few of the jobs included in the World Future Society's report, 70 Jobs for 2030. Clearly, these are not your mother's career options.**

With careers changing so rapidly, are today's students ready to be tomorrow's professionals? Can they be made ready? At what age must their training begin?

To gain insight into the career development process for gifted students, Center for Talent Development interviewed career consultant Paula Kosin. Kosin works for Career Vision, a career consulting organization that uses a research-driven model for advising individuals on recognizing their potential and making decisions that lead to maximum career satisfaction. Kosin advises many gifted students and she has led several popular sessions at the CTD Opportunities for the Future family conference.

One reason for Kosin's success is that she provides guidance and assurance while also challenging clients to stretch their thinking about career planning. At first glance, her four tips below could be seen as counter to conventional wisdom. Read on, however, and you might start to see them as common sense.

### TIP #1: Being Smart Doesn't Guarantee Success.

The key to thriving in the 21st Century will be how students develop and integrate a variety of skill sets. "It's essential to teach students how to be resilient, resourceful,

flexible and adaptable," Kosin says. "We also need to emphasize hard work."

Sometimes when gifted students hit obstacles, they back off and say the task is too hard, but Kosin's response is, "We need to teach students that hard is not bad. Hard simply requires grit and persistence."

Developing these character traits early on can make all the difference<sup>1</sup>, and there is a lot of discussion about the importance of these traits surrounding the introduction of Common Core State Standards.

Kosin explains that many of today's jobs — she cites hydroponics and vertical farming as examples — might be retrofitted for the future. People throughout history have been farmers, but the future will require *skyscraper* farmers whose job is to feed the world's growing population while also reducing global warming and improving urban environments. This "new" (or adapted) profession will open up possibilities for plant scientists, horticulturists, crop physiologists, engineers and architects, as well.

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**"We need to teach students that hard is not bad. Hard simply requires grit and persistence," says Kosin.**

# Career Advice for Gifted Students

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In every field — from education to neuroscience and nanotechnology — Kosin believes one thing is certain. “Most, if not all, jobs are going to be dependent on technology,” she says. “You’re not going to be able to say, ‘I hate computers.’”

Building on a foundation of technological literacy, Kosin encourages parents and educators to emphasize the need for basic skills. “Science, math, a good vocabulary and the ability to write well are all important,” she says.



Photo of vertical vegetable farm provided by Sky Greens Pte Ltd.

While Kosin encourages students to prepare well for their future careers, she cautions that those careers cannot be chosen based solely on interest.

## TIP #2: Know that you CAN'T be anything you want to be.

“Motivational speakers will tell you, ‘If you believe, you can achieve,’ and ‘You can do anything you want if you just put your mind to it,’” says Kosin. “Those comments make me cringe. You can be anything you want to be ... *provided* it aligns with your talents, interests, personality and values.”

Kosin wants to refocus the conversation on developing talent areas, explaining that in the American culture, “We have tradition-

ally been focused on what students need to work on. We’re always looking at the glass half-empty, and that can bring people down because they feel the need to be perfect.”

To remedy this problem, Kosin helps her clients focus on their strengths. “Strengths-based career planning takes a look at what you do best and what you’re interested in and empowers that,” she says. “When you’re maximizing your strengths, the areas in which you don’t do as well get minimized, allowing you to focus on doing the things that you’re best at.”

Kosin adds, “It’s still work, but you’re investing hard work, effort and time into something in which you have a higher potential for success.”

Identifying a student’s strengths and aptitudes early not only aids career decision-making; it can ensure the right college choice as well.

## TIP #3: Choose a career direction BEFORE you choose a college.

“Frequently in American culture, we ask high school juniors and seniors two questions: ‘Where are you going to college?’ and ‘What is your major going to be?’ We *don’t* typically ask the question, ‘What are you going to do?’ And that breaks my heart,” says Kosin.

“Sometimes the trouble starts with well-meaning adults who say, ‘Pick the school, and you can explore career options when you get there,’” says Kosin. Take the student who is good at math and science, chooses to go to a liberal arts school, and then realizes he really wants to be an engineer. Sadly, his current school doesn’t offer engineering courses. “That, unfortunately, is how students end up transferring schools and taking five and six years to get a bachelor’s degree,” Kosin says.

“We also see many bright and talented students who love their college courses but skid to a stop just before graduation, feeling like they are on the brink of the Grand Canyon,” Kosin says. “They say, ‘I have no idea what I’m supposed to do with this degree. I loved history classes, but I don’t want to teach. Now what?’”

“Opponents to the idea of choosing a career before choosing a college will say, ‘How can students possibly choose a career when they are changing their mind every other day?’” Kosin says. “It’s a true statement, but it’s true because, I believe, we don’t give them career information and

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opportunities for exploration early on.”

The ideal is when parents and teachers take note that a child loves to build things, play with Legos and do puzzles, and then they expose that child at a young age to careers that involve building or designing things. “Those experiences fuel and help develop an interest in a career path,” Kosin explains. “When that child gets into high school, she can take Intro to Engineering or computer drafting courses and get further steeped in that knowledge so that when she gets to college, she can hit the ground running. She has already clarified an exciting career direction.”

Kosin advises parents and teachers to begin encouraging children’s career awareness when they are in grade school, but provides assurance that it’s never too late. “High school is a great time to start as well,” she says. “Freshmen and sophomores are in a great position to learn about careers and about what they do best.”

Kosin acknowledges that not everyone follows a clear, logical career path and that students do change their minds. The ideal, however, is when students first identify their personal strengths and career interests, then look at the majors that lead to those careers, and, *lastly*, investigate schools with good programs in those areas. “This sequence makes the college search a lot easier and more accurate,” she says.

Whether searching for colleges or deciding on a career path, Kosin has one last piece of advice.

## Tip #4: Don’t use all your resources.

“There is a ton of career information on the Internet,” says Kosin, “but parents and students need to be critical thinkers because not all of it is credible and legitimate.”

For trustworthy career information, Kosin recommends the following four online resources.

- CareerOneStop  
<http://www.careeronestop.org/>
- Occupational Outlook Handbook  
<http://www.bls.gov/ooh/>
- Occupational Outlook Quarterly  
<http://www.bls.gov/opub/ooq/home.htm>
- O\*Net  
<http://www.onetonline.org/>

Perhaps the best resource for learning about careers, however, is the career professionals themselves. Starting in high school, students can reap huge benefits from doing informational interviews and participating in job shadowing.

"These experiences can be such a gateway," Kosin says. "A simple conversation can turn into opportunities for part-time jobs, summer jobs and even full-time work later on."

The most important outcome, however, can be simple self-awareness. Even discovering what *isn't* a good fit for you can be a good outcome. Some careers look good on paper, but shadowing a professional might teach you that the day-to-day work is not a match with your personality. That insight can save you years of frustration.

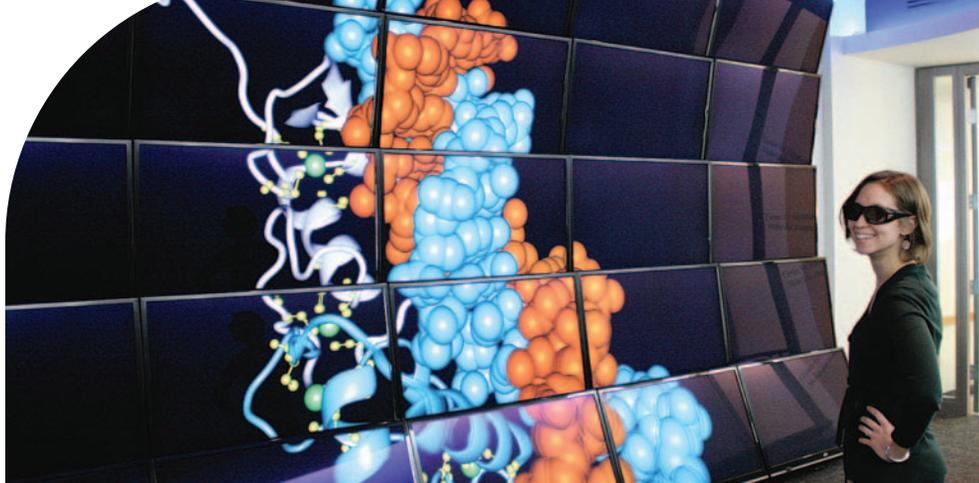
In the best case scenario, job shadowing and informational interviewing can be inspirational — fueling a passion and career pursuit that could literally last a lifetime. Kosin says, "It's rewarding when a student comes back from an informational interview or job shadowing experience with wide, shining eyes, saying, 'I can't believe I could get paid for doing that!'"

<sup>1</sup>MacArthur Fellowship grantee Angela Lee Duckworth talks about why success takes "grit" in a recent *Monitor on Psychology* article: <http://www.apa.org/monitor/2013/12/high-achievers.aspx>



*Paula Kosin is the marketing manager and a career consultant with Career Vision, an aptitude-based, career consulting organization based in Glen Ellyn, Illinois, and serving individuals throughout the country. Kosin's prior experience includes 20 years in career consulting, training and communications for Fortune 500 corporations like Citibank and in student affairs at Syracuse University. Kosin earned an MS in College Student Personnel Services from Western Illinois University and a BS in Journalism from Northern Illinois University. She is also a Licensed Clinical Professional Counselor. ●*

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Biomedical illustrations "pop" when AWE instructor Kristin Labby and students don 3-D glasses.

## Awakening Interests

CTD's [Accelerated Weekend Experience \(AWE\)](#) programs are designed specifically to introduce students to possible areas of study, so it seemed logical to ask one of our AWE instructors, Kristin Labby, what originally piqued her interest in science and what techniques she uses to spur the curiosity of AWE students. Her "story" dovetails with many of Paula Kosin's suggestions — from early exposure to shadowing to working hard.

I became interested in biochemistry when I was taking AP chemistry and AP biology courses in high school. My teacher had research experience testing and optimizing sunscreens. She shared those details and I found them fascinating. I also visited a research lab at the Medical College of Wisconsin, and participated in a protein-modeling program at Milwaukee School of Engineering (MSOE). While at the University of Wisconsin-Madison, I became involved in several research programs, in organic chemistry and plant pathology (studying a protein that recognizes pathogen presence and turns on immune response in plants!). I loved the teaching and tutoring work I was doing, so I decided to pursue a PhD to eventually teach at the college level.

My graduate advisor at Northwestern University was Professor Richard Silverman, creator of the drug Lyrica. I learned a lot during my PhD from Prof. Silverman as well as the other scientists I worked with at Northwestern. During my year as a National Science Foundation GK-12 fellow in the Reach for the Stars Program at Northwestern, I served as "Scientist in Residence" at Nettelhorst Middle School in Chicago. This got me interested in K-12 science education, and closing the

knowledge gap between researchers and the community. One regret I have during my scientific training is not learning how to program. Computer programming will be an important skill for many jobs. That said, I'm never too old to learn something new!

I have worked with CTD's Family Conference and Accelerated Weekend Experience, creating biochemistry workshops for students in grades 5 through 8 based on my PhD research work. I incorporate exciting science ideas and fun technology used by researchers worldwide. For example, in my AWE workshop, my goal is to help students understand what they are seeing when they look at "cool" biomolecule illustrations. I also teach them how to use open-access scientific software to render their own images of protein structures. Along the way, we discuss how protein structure dictates function, using some really excellent examples, like hemoglobin, marveling at the remarkably complex and specific functions of biochemistry systems. 3-D models on loan from the MSOE add a tangible aspect to protein structures, too, so not everything is technology based.

Scientific research work can be tedious and frustrating because experiments often fail. It takes true passion and commitment to be a scientist, but it is also fascinating and rewarding. I strive to make advanced research concepts more accessible to students so they begin to understand, and want to pursue, science beyond the textbook.

In addition to a fun weekend making science pictures on the computer, I hope students understand what it means to be a scientist, and perhaps gain confidence that they can understand "hard" science topics and use a program that real scientists use in their research work. ●



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## NEWS, DATES & OTHER IMPORTANT CTD INFORMATION

**Free Seminars for Parents!** On Saturdays in February, CTD and The Family Institute will host sessions on key issues from schooling to social emotional needs. [www.ctd.northwestern.edu/sep/program/sep/parent-seminars/ev](http://www.ctd.northwestern.edu/sep/program/sep/parent-seminars/ev)

**Northwestern University's Midwest Academic Talent Search (NUMATS)** provides research-based assessments to identify exceptional academic ability and tailored resources to develop talent areas.

**Register by:**

March 4 to take ACT® on April 12  
April 1 to take SAT® on May 3

CTD's **Summer Program** provides rigorous, academic adventures that give gifted students the opportunity to delve deep into a subject of intrigue, build upon their strengths and connect with peers. Commuter and residential programs are available for students age 4 through grade 12 at sites across Chicagoland. Applications are now being accepted.

The **Civic Education Project** combines service-learning with study and reflection. Students in grades 7 through 12 engage with social issues first hand. Sessions are held in major urban sites across the country.

Applications now being accepted for Spring and Summer.

**Gifted LearningLinks (GLL)** offers rigorous online courses for all ages. Nine-week enrichment courses for students in K through grade 8 start on April 1. Credit bearing honors, honors elective and AP® courses begin on the 15th of every month.

**Weekend Enrichment Programs** engage students age 4 through grade 9 in hands-on, in-depth activities. The wide variety of advanced and unique courses range in duration from a single weekend to six consecutive Saturdays.

**Upcoming Conferences:**

**Educator's Conference**, April 11, 2014 in Evanston, IL. **Dr. Shelagh Gallagher**, a nationally recognized expert in gifted education and curriculum development, will focus on Meeting Common Core Goals through Problem-Based Learning. [www.ctd.northwestern.edu/outreach/educatorsconference](http://www.ctd.northwestern.edu/outreach/educatorsconference)

**CTD's 2014 Opportunities for the Future Conference for Gifted Students and Their Families**, June 28, 2014 in Evanston, IL. [www.ctd.northwestern.edu/outreach/familyconference](http://www.ctd.northwestern.edu/outreach/familyconference)

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Center for Talent Development has been accredited as a nonpublic supplementary school by the North Central Association Commission on Accreditation and School Improvement (NCA CASI) since April 1, 1994. NCA CASI is recognized by the U.S. Department of Education and has more than 100 years of experience in improving educational quality.



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