

Increasing College and Career Readiness by Exploring Green Careers

Michelle Rearick

Miami University, Advanced Inquiry Program

Abstract

In 2010, ‘green’ careers grew at a rate almost five times greater than all others careers combined. With such growth, it is of utmost importance to provide exposure to current high school students on potential careers in this field. Unlike other career fields, green careers are unique as positions can span all academic disciplines and encompass engineering, technology, mathematics, civics, art, and more. To help demonstrate this to local high school students, a lunchtime seminar series was developed in partnership with the Kettering Fairmont High School and local professionals. The series ran throughout the 2013-2014 school year, with eight presentations spanning between November and April. More than 300 students attended and the seminar series was met with positive feedback from both teachers and students.

Keywords: College and career readiness, green careers

Increasing College and Career Readiness by Exploring Green Careers

“College and career readiness” has become an increasingly popular buzz phrase over the last several years given the poor rankings of the United States in international education statistics. A 2009 study completed by the Programme for International Student Assessment (PISA) showed that out of 34 countries, the U.S. ranked 14th in reading, 17th in math, and 25th in math (Armario, 2010). These statistics are alarming as the educational shortcomings correlate with long term impacts for the U.S. economy; a study completed by Stanford University in partnership with the Organisation for Economic Co-operation and Development concluded that if the U.S. were to boost its scores by an average of 25 points over the next 20 years, it is estimated that there would be a gain of \$41 trillion in the U.S economy over the lifetime of those born in 2010 (Arthur, 2011).

Recent studies suggest that 4 out of 10 new college students are required to take remedial courses and that many employers believe that high school graduates are inadequately prepared to join the workforce (Balfanz, 2009; Roderick, Nagaoka, & Coca, 2009). How is the education system responding? Many states are implementing new programs which focus on communicating realistic expectations of college to students and their families as well as those which increase exposure to achievable career opportunities and means of professional development. Career Academies and similar Career Technology Preparation (Career Tech. Prep.) programs have increased in popularity and aim to prepare students for both college and careers. While these programs hope to provide the kind of academic preparation that will give as many students as possible the potential to attend a two or four year college, in reality, only 30% of 25-29 year-olds in the U.S. hold a bachelor’s degree (US Department of Education, 1999). These programs encourage students’ college goals and, whether or not these goals are fulfilled, also provide practical knowledge and skill to earn a living. Students who participate in such programs often cite additional benefits of participation than simply academic (Table I).

Student Statements
“The job shadow experience has really given me a better perspective on what I want to achieve in life. The academy helps you take that extra step to see if it’s really something you might want to do.”
“It really helps us figure out our future and what we want to do.”
“The academy has taught me life skills. Before, it was just about me coming home just to do homework and now it’s about me working towards something.”

Table I Student Statements on Career Academy Participation. Statements by students in the Education and Child Development Academy at Peter Johansen HS in Modesto, California. Taken from Stern, Dayton, & Raby, 2010.

Kettering Fairmont High School (FHS), the public high school serving Kettering, Ohio residents, is home to more than 2500 students—less than 25% of which participate in the Career Tech Prep program. For those students not involved, there is little exposure to career planning; the only formal introduction to life after high school comes from a college and career planning course that students are required to take their sophomore year at Fairmont. This is not uncommon; the call for education reform shows an increase in academic curricular focus and a decrease in vocational curricular focus (Stern et al., 2010). While general careers are highlighted, topics are broad and do not deal with actual professions but rather provide an overview to the field (ie engineering, journalism, medicine).

The objective for this project was to develop and facilitate a seminar series at FHS which will expose Fairmont students to potential careers, specifically those pertaining to environmental services and sustainability. The Bureau of Labor Statistics defines green jobs as those that produce goods or services that benefit the environment or conserve natural resources, or jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources (Lee, 2013). In all, so-called green jobs accounted for just 2.6% of all employment in 2011, but a comparison with 2010 data shows that these jobs grew at a rate almost 5 times faster than of all the others combined (Bureau of Labor Statistics, 2013). In comparison, only a 2.7% increase was observed for restaurants, 1.7% for manufacturing and 1.8% for healthcare, which is often seen as the fastest-growing sector (Bureau of Labor Statistics, 2013).

The EducationQuest Foundation, a resource for teachers and students, categorizes careers into six broad career fields: business, marketing, and management; human services and

education; health sciences; agriculture, food, and natural resources; communication and information systems; and skilled and technical science. These categories are then subdivided into additional clusters and include specifics like finance, hospitality and tourism, architecture and construction, and arts, A/V technology and communications (Figure 1) (EducationQuest Foundation, n.d.). The main goal of this project is to convey that the green jobs span many academic disciplines and that to become involved in this rapidly growing field, one does not have to be actively involved in science or research.



Figure 1 EducationQuest Foundation Career Diagram (EducationQuest Foundation, n.d.)

Method

The Green Career Series (GCS) was held at Kettering Fairmont High School over the course of the 2013-2014 school year. Eight presentations were held between November 2013 and April 2014 during the students' designated lunch period. To accommodate Fairmont's large student body (2500+ students), there are three, mixed-grade lunch periods each day. Each

professional led the same GCS presentation for each of the three lunch periods to provide all students, whether in 9th grade or 12th grade, the opportunity to participate in the program.

Coordinating each presentation

Given the nature of this project, significant collaboration was required between individuals at Fairmont High School, as well as between the professionals who presented. Two projects leads at Fairmont were selected (Table II) to aid in communicating with teachers about upcoming presentations, to hang advertising material on ‘Know-it-all Walls’, as well as to ensure conflicts did not exist on presentation days (e.g. testing dates, field trips, early dismissal days). Presentations were made to students in a large atrium at Fairmont, so the Facilities Coordinator at Fairmont was also contacted to make reservations for tables, chairs, and AV equipment. The Interactive Media teacher was also contacted in advance. Presentations were filmed by a junior to fulfill the student’s class portfolio requirements, but also to be made available on the school’s website for those students who were unable to attend the presentation. The videos will also be archived and will be made available to teachers who are interested in presenting them to their classes at a later date.

<i>Name</i>	<i>Position Held at Fairmont High School</i>
Patricia Fife	Science Department Chair
Amy Webb	College and Career Planning teacher
Hank Jackoby	Facilities Coordinator
Laura Hutchens	Interactive Media teacher
Dan VonHandorf	Head Principal

Table II Primary Collaborators at Kettering Fairmont High School. The individuals listed provided the most support at the school to ensure the success of the GCS.

The professionals brought in to speak (Table III) were contacted primarily via email. Some professionals were recommended by Fairmont science teachers, several were already within my professional network, and others were found using online queries for local professionals. Professionals were given loose guidelines for presenting, and were instructed to touch on the following general questions: what is your position and what do you do on a day-to-day basis?; how does your career fall within the scope of ‘green’ careers or environmental services?; what type or education or technical training have you received that has led you to this

position?. Professionals were informed that formal presentations were not required, to speak for 18-20 minutes and allow time for student questions.

<i>Session</i>	<i>Date</i>	<i>Name of Presenter</i>	<i>Company or Organization</i>
1	9 NOV 2013	Chris Decker	BioGreenChoice, LLC
2	14 JAN 2014	Todd Hone	Celina Water Treatment Plant
3	30 JAN 2014	Kjirsten Frank	Miami Valley Regional Planning Commission
4	12 FEB 2014	Casey Burdick	Ohio DNR, Forestry Division
5	5 MAR 2014	Josh Jones	Heapy Engineering
5	5 MAR 2014	Emily Khrenovi	Heapy Engineering
6	25 MAR 2014	Dave Hurtubise	University of Dayton Research Institute
7	9 APR 2014	John Spurlin	Wright-Patterson Air Force Base
8	30 APR 2014	Michelle Rearick	The Habitat Environmental Center

Table III Primary Collaborators within the Professional Community. The individuals listed provided valuable presentations to Fairmont students pertaining to the work they do on a daily basis and what education or technical training they have received.

Day-of work

Throughout the series, my main responsibility on the day of each presentation was to serve as a facilitator. Upon arriving at Fairmont, I would greet our guest speaker and help ensure they were set up for their presentation. With the start of each new lunch period, I would introduce our speaker to the students and present the topic to be covered. Concluding the presentation, I would thank students for attending, ask them to fill out a short, anonymous survey, and inform them of the next upcoming session.

Assessing the success of each presentation

Students were asked to complete an anonymous survey following each presentation (Appendix A). The main goals of the survey were to determine to grade distribution of students in attendance, to determine if lunchtime presentations are an effective way to reach students, to assess whether students learned something new, and to gauge if the presentations were beneficial in terms of planning for their futures. Survey responses were compiled and grouped per session. After the last session, an additional survey (Appendix B) was distributed to students for

assessment of the success of the GCS as a whole and contained several open-ended questions for students to write in their thoughts.

Results

More than 300 students attended the Green Career Series (GCS). Seniors (12th grade) and sophomores (10th grade) made up the largest portion of the audience per session, with an average attendance of $60\% \pm 4\%$ and $21\% \pm 4\%$ respectfully (Figure 2). A wide variety of student academic interests were represented; while science was most commonly cited as one's favorite subject, all other academic disciplines were represented at each GCS seminar, including art (including music, dance, and theater), mathematics, technology, social studies (including history, civics and government, economics, and geography), and English (including reading and language arts) (Figure 3). An overwhelming amount of students ($97\% \pm 1\%$) agreed that the time of day in which the presentation was offered was a key factor in their ability to attend. While students often cited "to receive class credit or extra credit" as the reason for attending (data not shown), $93\% \pm 3\%$ of students agreed that they learned something new by attending the seminar.

A small number of final surveys were obtained from students, predominantly seniors. Student feedback was very positive. All students agreed that attending one or more seminars in the series was beneficial in terms of planning for their futures and that the content of the program met student expectations.

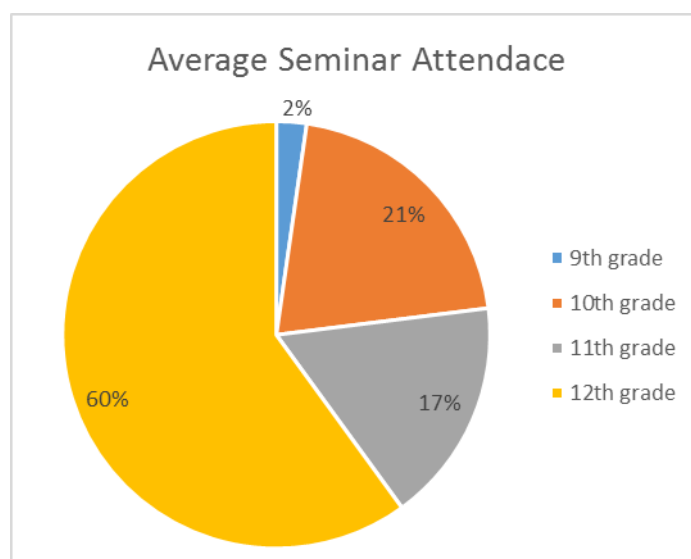


Figure 2 Distribution of Seminar Attendance by Grade. Students in 10th and 12th grade accounted for the largest portion of students in attendance at each GCS seminar.

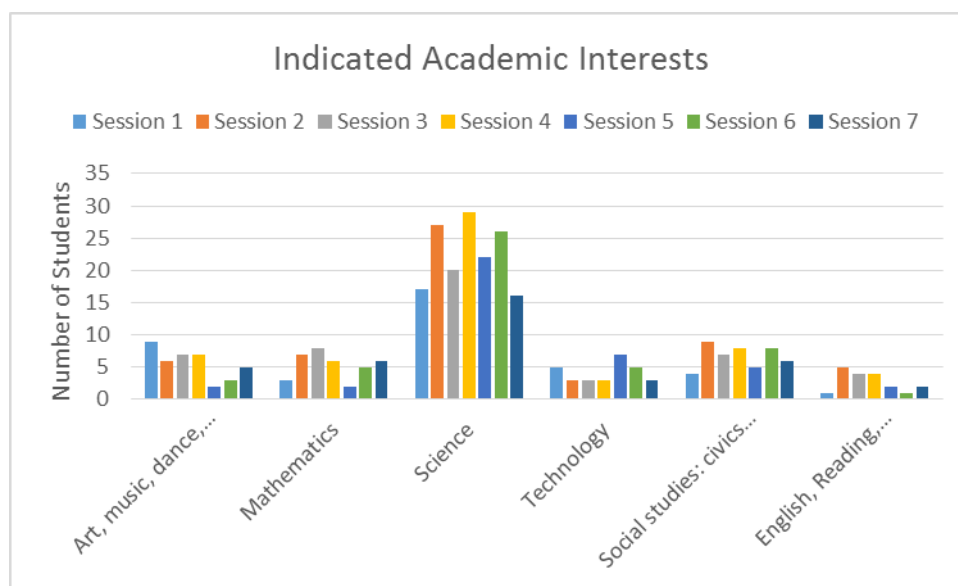


Figure 3 Distribution of Academic Interests. While science was most commonly cited as students' favorite subject, all other academic disciplines were also chosen. It should be noted that some students indicated interest in more than one subject.

Discussion

The Green Career Series (GCS) was developed in hopes to help educate Kettering Fairmont High School students about potential jobs that focus on environmental services and sustainability. While it is difficult to quantify the success of this project as a whole, it can be analyzed when broken into focus areas. Over 300 students attended seminars over the course of the series, with attendance growing per session as the series progressed. Survey results show that the audience consisted primarily of seniors and sophomores with their average attendance per session amounting to over 80% ($60\% \pm 4\%$ and $21\% \pm 4\%$ respectfully). These results were anticipated in part because students are required to take a college and career planning course as sophomores and because as seniors are the closest to graduating, they have college and careers on their radar in order to effectively plan for their futures.

The GCS was the first seminar series to ever be offered at Fairmont during the students' lunch period. During initial planning stages of the GCS, both morning and afternoon time slots were considered as well. But, according to a 2004 survey, 79% of middle school and high school students in America participate in activities after school as well as on the weekend (Duffett,

Johnson, Farkas, Kung, & Ott, 2004). As student attendance would be voluntary, the project leads agreed that running a program either before or after school would likely be unsuccessful. To confirm this, students were asked if the time of day the program was offered played a significant role in his/her ability to attend; this was met with overwhelming agreement—97% \pm 1% of students stating that their attendance was dependent on the time of offering. This format has also been recognized as successful from other Fairmont teachers. Lunchtime presentations are a great way to reach students without having to pull anyone out of class and I was notified that several teachers have taken on this format for presentations that fit with their own curriculum.

Reflection & Philosophy

I was inspired to lead this seminar series at Fairmont High School for two main reasons. First, because previously there has been little to no effort (mainly due to manpower restrictions) to reach high school aged students in environmental education and conservation. Current education efforts are only offered to Kettering students grades K-5. The second reason is much more personal; I attended FHS from 2002-2006 and during my time there I had absolutely zero exposure to career planning. At that time, a college and career planning course was not required. I knew that I was good at math and science, but had little idea of what I wanted in my future besides something pertaining to those subjects. I didn't declare a major until the end of my sophomore year of college, and even then, I still changed a few more times before settling into a degree in general biology. A few years after my undergraduate graduation I changed my mind again and switched to a new career field, one still centered on science, but more social: informal science education.

I wanted to convey to students through this series that, despite what society leads us to believe, deciding “what you want to be when you grow up” is not necessarily straightforward. We continue to learn about ourselves and grow into the person we are meant to be throughout the course of our lifetimes. The knowledge we gain and the experiences we have help mold us into these people.

While the GCS is informal, we are starting the “after high school” conversation and perhaps that is the most important step. This program provided students with great exposure to potential careers and local professionals. Should they choose, these students can forge relationships with the professionals, perhaps gaining the ability to complete an internship. The

series also offers potential opportunities for teachers to build relationships with local experts in their fields. Since the start of the series, several relationships and new collaborations have been brought to my attention. Chris Decker of BioGreenChoice LLC, has partnered with Pat Fife, an AP Biology teacher. The two collaborated and developed a project for the AP Biology class where students tried to develop conditions to degrade BioGreenChoices' compostable products the fastest. Another presenter, Kijrsten Frank, works as an urban planner for the Miami Valley Regional Planning Commission. During her visit, a history teacher, Scott Byer, came to introduce himself, share his class syllabus, and proceeded to invite Ms. Frank to come and speak to his students on another occasion.

My main role throughout the GCS was to serve as a facilitator and liaison between local professionals and Fairmont High School, as such, I feel that my leadership role was often one behind the scenes. I did present at the final session of the GCS, however, and it is through this presentation that I can describe the leadership style used. Of Goleman's (2000) presented styles I believe that most often I find myself taking on the affiliative and coaching style of leadership. Working in a position that has close ties with my community, I try to create a positive atmosphere which embodies the phrases, "people come first" and "try this." This held true for the career series as well. As mentioned above, I wanted to convey to students that we continue to grow as individuals as we experience the world around us and that they should not feel intimidated if they aren't sure exactly where they would like to end up.

This leadership self-reflection has created a positive sense of self within me. It has helped me re-realize that I can influence someone's life in a positive way every single day. That my actions do not need to be extravagant and Earth-shattering—a simple smile to a stranger. Any action, no matter how small, can be the tipping point in someone else's life; we need to become less caught up in the process of 'how' to be leaders and instead put our thoughts and passions into actions.

Conclusion & Next Steps

As a whole, I believe this seminar series was tremendously successful for its inaugural year. To date, no formal plans have been made to continue the series during the next school year, in part due to a transition in administration (head principle and science department chair). In passing, we have discussed the potential to shift the focus of the career series to a different career category (human services, manufacturing, government and public administration) so that

theoretically a student at Fairmont could have four years of exposure to different types of careers. I love this idea and I think it would be beneficial across the board. I am not sure what my involvement in the series might be should the focus shift. Originally, we had also planned to host a career expo in which additional professionals would man a table and parents and students could wander around exploring different career options. Time constraints did not allow this expo to take place this year, but potentially could occur next year.

Leading the GCS at Fairmont HS also sparked interest in green careers at Van Buren Middle School, one of two middle schools in Kettering. I was invited to present on this topic to 6th, 7th, and 8th graders on two separate days in May of 2014. In total, approximately 100 more students were exposed to information on the growing career field of green careers. These presentations were really an added bonus, and I was so pleased to hear that the GCS created such a positive buzz throughout the district.

References

- Armario, C. (2010). Wake-up call: U.S. students trail global leaders. NBC News. Retrieved May 4, 2014 from http://www.nbcnews.com/id/40544897/ns/us_news-life/#.U2qy0PldUTU.
- Arthur, T. (2011). America falls behind in the education race. CollegiateTimes. Retrieved May 3, 2014 from http://www.collegiatetimes.com/opinion/columnists/article_8b4bb773-4004-59c0-bdb3-634134b242fa.html.
- Balfanz, R. (2009). Can the American high school become an avenue of advancement for all? *The Future of Children*, 19(1), 17-36.
- Duffett, A., Johnson, J., Farkas, S., Kung, S., & Ott, A. (2004). All work and no play? Listening to what kids and parents really want from out-of-school time. Public Agenda. Retrieved April 30, 2014 from http://www.publicagenda.org/files/all_work_no_play.pdf.
- EducationQuest Foundation. (n.d.). www.educationquest.org.
- Employment in green goods and services—2011. (2013). Bureau of Labor Statistics. U.S. Department of Labor. Retrieved May 6, 2014 from <http://www.bls.gov/news.release/pdf/ggqcew.pdf>.
- Goleman, D. (2000, March-April). Leadership that gets results. *Harvard Business Review*, 78-90.
- Lee, D. (2013). Green jobs grow four times faster than others. LA Times. Retrieved May 5, 2014 from <http://articles.latimes.com/2013/mar/19/business/la-fi-mo-green-jobs-20130319>.
- Roderick, M., Nagaoka, J., & Coca, V. (2009). College readiness for all: the challenge for urban high schools. *The Future of Children*, 19(1), 185-210.
- Stern, D., Dayton, C., & Raby, M. (2010). Career Academies: A proven strategy to prepare high school students for college and careers. Career Academy Support Network. Retrieved May 4, 2014 from <http://files.eric.ed.gov/fulltext/ED524061.pdf>.
- U.S. Department of Education. (1999). Digest of education statistics 1999. Washington, D.C.: National Center for Education Statistics, U.S. Department of Education. Retrieved May 6, 2014 from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000031>.

Appendix A

Thank you for taking the time to complete this survey. Your answers will be completely anonymous. The data will not be published, but may be shared with associates with The City of Kettering Parks, Recreation, and Cultural Arts Department as well as within Kettering City Schools. This survey should only take about five minutes of your time.

What grade are you currently in?

Ninth (9th)Tenth (10th)Eleventh (11th)Twelfth (12th)

Have you attended a Green Career Series seminar before?

Yes

No

What academic subject are you most interested in?

- ☐ Art, music, dance, drama/theater
- ☐ Mathematics
- ☐ Science
- ☐ Technology
- ☐ Social studies: civics and government, history, geography, economics
- ☐ English, Reading, Language arts

Which statement best describes the reason you attended the seminar?

- ☐ I enjoy learning about new topics pertaining to science
- ☐ To receive specific information pertaining to green careers
- ☐ To receive general career planning information
- ☐ To receive general higher education information
- ☐ To received class credit or extra credit

On a scale of one to five, one being strongly disagree and five being strongly agree, please rate the following: (circle your choice)

	Strongly Disagree					Strongly Agree				
The time of day that the seminar was offered was a key factor in my ability to attend.										
The presenter was engaging and interesting.	1	2	3	4	5					
I learned something new.	1	2	3	4	5					
I am interested in learning more about this career field.	1	2	3	4	5					
I am interested in attending another seminar in the green career series.	1	2	3	4	5					
I feel that attending a seminar(s) in this series has been beneficial to me in some form or another in terms of planning for my future.	1	2	3	4	5					

Appendix B

Thank you for completing this survey. Your answers will be completely anonymous. The data will not be published, but may be shared with associates with The City of Kettering PRCA as well as within Kettering City Schools. This survey should only take about five minutes.

What grade are you currently in?

Ninth (9th) Tenth (10th) Eleventh (11th) Twelfth (12th)

Have you attended a Green Career Series seminar before?

Yes No

On a scale of one to five, one being strongly disagree and five being strongly agree, please rate the following:

The time of day that the seminar was offered was a key factor in my ability to attend.	Strongly Disagree				Strongly Agree			
	1	2	3	4	5			
I learned something new.	1	2	3	4	5			
I feel that attending a seminar(s) in this series has been beneficial to me in some form or another in terms of planning for my future.	1	2	3	4	5			

If you attended more than one seminar, which was your favorite? Why?

- 1) Chris Decker, BioGreenChoice LLC
- 2) Todd Hone, Celina Water Treatment Plant
- 3) Kjirsten Frank, Miami Valley Regional Planning Commission
- 4) Casey Burdick, Ohio DNR—Forestry
- 5) Josh Jones / Emily Krehnovi, Heapy Engineering
- 6) David Hurtubise, UD Research Institute
- 7) John Spurlin, Wright Patterson AFB Environmental Attorney

Did the content of the program meet your expectations?

What information did you find most helpful for planning for your future?

If a similar lunchtime seminar series was offered next year but focused on a different sector of industry (human services, manufacturing, government & public administration, health science, etc), how likely would you be to participate?

Strongly Disagree

Neutral

Strongly Agree

1

2

3

4

5

6

7

8

9

10

Please share any additional thoughts.

Appendix C

Green Career Seminar Series—2013-2014

Thank you again for participating in this year's Green Career Series. I hope that the information you've learned will benefit you in some form or another, even it's just to let you know that you don't want to pursue a certain career within this field. Below is a list of this year's speakers. Don't be shy—please contact them with any questions you may have about the work they do on a daily basis. These people may even be resources for job shadowing or future internships!

Chris Decker, BioGreenChoice LLC
cdecker@biogreenchoice.com

Todd Hone, Celina Water Treatment Plant
cwtp.asstsupt@celinaohio.org

Kjirsten Frank, Miami Valley Regional Planning Commission
kfrank@mvrpc.org

Casey Burdick, Ohio Department of Natural Resources—Forestry Div.
casey.burdick@dnr.state.oh.us

Josh Jones, Heapy Engineering
JDJones@heapy.com

Emily Krehnovi, Heapy Engineering
EMKrehnovi@heapy.com

David Hurtubise, University of Dayton Research Institute
david.hurtubise@udri.udayton.edu

John Spurlin, Wright Patterson Air Force Base Attorney
john.spurlin.1@us.af.mil

Michelle Rearick, The City of Kettering
rearickml@gmail.com

Advice from this year's speakers is included on the following pages.

1) What advice can you give students in terms of planning for their futures, attending college, or being successful in the workplace?

- You really only need to answer two questions: Is it the right thing to do? Can you make money doing it? By all means obtain as much education as you can now but don't think that it ends after college. You will spend the remainder of your career continuing to be a learner. The study skills and habits you're forming now in high school will carry with you the rest of your life. Don't waste the opportunities and privileges that have been provided. Don't forget to have fun along the way and enjoy what you're doing.
- Use your high school and college years to find your lifelong vocation; something that you enjoy and can get paid to do it. Keep in mind that this vocation may last fifty years! Once you have found that vocation, master it as best you can. If that means attending a trade school or college, then by all means get that education. Do not wait for someone to call you and offer you a job. It doesn't work that way. Your interpersonal skills are as important as your education. Get along with everyone and be a great listener. In many occupations your people skills are as important as any other skill you possess.
- Don't do anything you can't see yourself enjoying; it won't be worth the money. Realize that many people succeed in making good livings in career areas that are not known to be particularly profitable. I think a main key to their success is the passion they have for their work.
- Sometimes, it may be better to get a degree in something "general", like general biology or chemistry, than to narrow your focus in the field. Keep your options broad for as long as possible. You can always use experience or additional education to hone in on what you are most interested in. Be wary of specializing too much when you are young; this might limit your professional market.
- Keep at it when it's tough – keep trying new things until you find your way through the project or problem. Keep at it until you find a way that works for you. What you learned at home may or may not serve you in college or in your work. Be nimble and open to new ways of doing things. What you learn on your first job may frustrate you, so find the next job that will fit you better. Don't give up, because the long haul (and college/career is a long haul) is worth doing well. Don't get down on yourself, but use that frustration to find a new solution.
- Cut yourself some slack. I always scheduled myself for one extra class a semester, so I could drop my least favorite (whatever class that turned out to be) and still have a full schedule. It feels good to shed the unpleasant/unnecessary and move forward where your strengths are.

- “Incrementalism” is a city planning term – meaning that you build a city in small increments; one block or building project at a time, added together over years of work to make a new city out of the old. Go ahead and Design Big Changes, but be prepared to build them in small steps. I’m not saying ‘mosey out of the starting gate,’ but slow and steady does win the race. Your career will be 40 years long. And that’s a good thing.

2) What information do you wish you would have learned in high school about planning for your future?

- Where you attend school doesn’t hold as much weight as people believe. Your GPA and work / volunteer experience will mean to potential employers than if you went to a big name school. Don’t spend the extra money.
- I was not as strong in the math field in high school and thought that engineering was out for me. I gravitated toward the sciences which has helped in my career, but I wish I had been more confident knowing that I could do whatever I was willing to work hard for. I have done fine in the math courses I have taken during my college career and beyond. Don’t be afraid of something just because someone told you that you couldn’t do it or because you perceive yourself to be less than you are. You are a winner!
- High school is a great time to discover what you like to do. Use the time in school to explore as many different types of classes as you can. Of course math, science and English are important. Try to also take electives that might help you figure out what you would like to pursue after high school. Talk to adults in your family and neighborhood about what they do for a living. The more information you have, the more confident you will be in your choice of studies or job after high school. Take the SAT and ACT multiple times your junior and early senior years. Most colleges will take your best scores from multiple tests when determining whether to accept an individual
- It is okay if you don’t know quite what you want to do. Even if you graduate with one degree, you can still go back to school if you decide that wasn’t the right path. I have met many people who have taken that route and they ended up being more valuable because of their extensive knowledge in various fields.
- I didn’t know in High School what my college major would be – so I left myself lots of room, found a program that gave me gen-ed classes until I was ready (at the end of my Sophomore year) to make better informed decisions. By then I’d found new subjects I was very interested in, and willing to devote myself to their study. The classes I liked in High School weren’t the best predictors for what I enjoyed most in College – for example I had great history teachers in high school, and struggled with science. But in college, I found some great science and later engineering teachers, and became a science TA. Who knew?? Leave yourself room to grow and change.

3) Do you have anything else to share with students?

- Continue to be a reader and absorb as much as possible. We need critical thinkers and problem solvers out here along with the inventors that America is known for all across the world. Rise to the challenge and meet tomorrow's problems head on! Don't ever give up and good luck in wherever your path takes you.
- Don't automatically believe anything you're told without investigating the truth. Don't just take someone's word for it, be more noble and honorable and less lazy by investigating.
- Develop good habits in high school. Here are some examples: Develop good sleeping and eating habits. Develop good study habits. Stay healthy and exercise. Get involved in at least one extracurricular activity involving community service; college admissions departments look favorably on this.
- Work during the summer. Again, employers and colleges like to see that you have a strong work ethic.
- Take as many English, science and math classes as you can possibly stand. Include a speech class.
- College can be very expensive, even at state schools. If at all possible graduate in four years so during year five you are making money instead of paying for tuition. Attending a community college during years one and two is a great way to save money. If you take this route, make sure your credits will transfer to the college you plan on attending afterwards.
- If college is not in your future, find a trade that you enjoy. There is a demand for trades that is not being met today. Attend a trade school or find a program that teaches you a trade while on the job.
- Rule number 1: Keep learning.
- Learn to manage your money early!!! Don't wait for that when you are 30 and old and boring. Get on it.