

AN ABSTRACT OF THE THESIS OF

Kristina N. Schnell for the degree of Honors Baccalaureate of Science in Energy Systems Engineering and Honors Baccalaureate of Arts in Spanish presented on November 17, 2014. Title: It's Not About the School: A Societal Shift Regarding Higher Education.

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ABSTRACT

The idea of college needs to shift from being about going to a “good school” for any degree to “getting the right education” for what you want to do. I want to investigate why we should be giving access to career assessment and preferred learning tests at the middle school age. The state's 40-40-20 initiative and future Oregon employment trends support this thinking. Society's focus should be more about the skills someone possesses, and less about where the degree or certificate was earned. There is minimal life guidance for students once they have graduated, and many feel unprepared for a career and cheated out of their money if they didn't have clear career goals prior to graduation. I propose a website that would make career goal planning easily accessible for all middle school students in Oregon, with the intent that if the website was created it could be distributed and utilized by career counselors. The website would include things such as personality tests, career aptitude tests, degrees offered at each Oregon university and college, and what careers those can lead to.

Key Words: higher education, middle school, careers

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It's Not About the School
A Societal Shift Regarding Higher Education

by

Kristina N. Schnell

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I understand that my project will become part of the permanent collection of Oregon State University, University Honors College. My signature below authorizes release of my project to any ready upon request.

Kristina N. Schnell, Author

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IT'S NOT ABOUT THE SCHOOL

A SOCIETAL SHIFT REGARDING HIGHER EDUCATION

INTRODUCTION

PRE-COLLEGE CULTURE

From the beginning of junior year in high school until you are actually attending a college class, all anyone can seem to ask you is, “where will you be going to college?” This can be a stressful question even for a student who plans to be college-bound. But pressure slowly builds as everyone wants to know if you will be going to a “good school.” Students are instructed to shoot for as high as they can, to keep their options open. For students who do not excel in a traditional education path, there is a societal blanket disappointment and an associated negative stigma that the individual will not be able to adequately contribute to society in the future. This, of course, is not only untrue but also incredibly unfair to the student.

In the United States, it isn't enough to simply have a plan for higher education – you have to attend a “good,” reputable four-year university to pursue your bachelor's degree(s). This “good school” category does not include trade schools, certificates or associate degrees from a community college – all valuable and valid forms of higher education. Additionally, should you decide at any point in your collegiate career that the bachelor's track isn't for you, you are considered a failure, and subsequently drastically lower your employability in the public eye. Because of this

expectation, when students become uncertain of their future goals they find themselves choosing any degree that they do not abhor, simply to be able to say they have completed one. However, once these students graduate they often have no idea what to do with their hard-earned degree. Whether it is an obscure field of study, or there is not a clearly defined career associated to it, many college graduates are left feeling confused, cheated and upset. Often also with thousands of dollars in debt from the expensive university they attended.

STARTING IN MIDDLE SCHOOL

The American idea of higher education needs to shift from going to a “good school” to “getting an education”. This may seem subtle and overly simplistic, but in a society where the degree you receive is considered of lesser importance than having an education in the first place, this is a distinction that we can no longer afford to overlook. Higher education can be achieved through vocational training, specific certifications, an associate degree or a bachelor’s and beyond. It does not need to be defined as graduating high school and immediately enrolling in a private four-year university – the traditional path isn’t best suited for everyone. It is time to change the American definition of a successful higher education.

To accomplish this societal shift, we need to start addressing students who have not yet been pushed into the herding gates of our current education expectations. At present, once you reach high school you are encouraged to shoot for the stars – to

play as many sports as you can, take a challenging course load and excel at your studies while participating in multiple extracurricular activities and volunteering regularly. That has been elected by our society as the best way to prove to a university that you are worthy of their acceptance. Historically, we are taught to shoot for Ivy League or small private universities, and if you aren't admitted, then there are state schools to fall back on. Should that fail, you can have community college as Plan C. If you cannot conform to the teaching styles of the higher education system, there is always the military or employment at a local grocery store. It is becoming a belief that if you don't have a bachelor's degree, you will never find a job. This is what we are spoon-feeding our young people – that there is a hierarchy between various education options. This is not the case, and various training and education tracks are better suited for people with different learning styles.

THE PROBLEM

BACKGROUND

Despite changing higher education options and educational structures, our society still views its priorities much the same way that they were seen in 1636 when Harvard, the first American college, was founded (Duniway). Harvard was originally intended to train a few young Puritans to serve as the next generation of ministers, magistrates and public officials (Duniway). Anyone wanting to learn a trade, or do anything other than be a church minister or high government official went to a

practical school or apprenticed with someone already in the profession (Duniway). Even at the beginning of the American Revolution in the 1760s, records show that not even 4% of Americans attended college (Duniway). After the Revolutionary War, attending college became more of a status symbol for families that could afford to send a son to be educated, and less about what career they actually wanted to pursue. Yet options were growing rapidly, and law, medical, engineering, finance and accounting schools began to emerge as an alternative to the classic college education (Duniway). Prior to that, a particular class in one of those subjects could only be taken after attending a school such as Harvard (Duniway).

Despite a much wider variety of degree choices, we have continue with the mindset that attending a four-year university is more of a status symbol than actually going to learn a particular skill set or trade – although probably unintentionally. Older generations who did not go to college push their children and grandchildren to do so, despite their own successes without a bachelor's degree.

A SOCIETAL SHIFT

Within the past century, the professional goal was to be considered a “company man.” Today, with the Millennial generation being less interested in settling down permanently until later in life (Hess), the concept of staying at one company for the duration of your career is becoming less and less appealing. In 1960, by 30 years old 77% of women and 65% of men had cleared life's big five milestones:

completing school, leaving home, becoming financially independent, marrying and having a child; in 2010, only 13% of women and 10% of men had done so by that age (Hess). Chris Komisarjevsky says, "When it comes to the workplace, Millennials don't seem to have the same sense of loyalty to their employers as do earlier generations, particularly Baby Boomers. They keep their distance, slower to make an emotional connection. They tend to be quicker to change jobs, vote with their feet and seek a more open corporate environment." The average American life span in 2011 was 78.7 years old – compared with an average in 1970 of 70 years old (Chan). That combined with the fact that 65 is no longer the goal for retirement for most working Americans (more than 37% of workers say they expect to retire after 65, up from 14% in 1995) (Brandon), gives a few additional years that each person puts into his or her career. That is extra time to be promoted, move horizontally within the company, switch career paths, or move locations. Due to the fact that people who are closer to 65 years old project later retirement ages than younger workers (Brandon), it is likely that extending the age of retirement is a trend that will continue for future generations. The mean average retirement age in the US in 1970 was 64.7 years old (Gendell, 22). And while it dipped between then and 1995, it has since gone back up to over 65 (Gendell, 22).

Getting hired is becoming more about the skill set you possess, rather than the degree you hold. Employers are realizing that there isn't a direct correlation between having a particular educational background and being a good fit for a job – especially after a few years of experience. Companies are finally looking for the

trade knowledge that was so common in the 1600s, and even through more recent military trainings. Every job will train you to have the necessary skills for your particular position once you are hired – the degree is simply a credential that shows you can be taught. Applicable experience, not the formal degree, often weighs more heavily in the job application – someone with a PhD in Mechanical Engineering isn't going to be as knowledgeable about fixing an engine as someone who got an associate degree in Automotive Technology.

The problem with this is that now once students have graduated college, they feel underprepared for a job that utilizes their degree. Our society provides ample pressure on high school students, prepping them to become successful college applicants, and then college has resources to help students complete their degree. There are a few career counseling opportunities during college, should you choose to seek them out, but most are personality tests and general “what type of career would you be good at” guidelines. If a high school has any career support, it is very general and directly followed by which four-year universities are known for that degree path.

Many students graduate from college feeling confused and frustrated. Numerous don't have the work experience to find a job in their field, and the type of degree they hold often doesn't matter on an application anyways. We lack a support system to catch these newly educated professionals, to help them focus on their marketable strengths. Now that they have degrees, they are expected to go forth

and conquer the world. Yet a recent graduate is still a hesitant college student at heart: unsure of themselves and what they can bring to a job.

Millennials (anyone born between 1980 and 2000) are often leaning forward, engaged, inclusive, tolerant, and support commerce lubricated by conscience (Hess). This is almost in direct opposition to the generations before them, and misunderstandings can occur between potential supervisor and the recent graduate. Many feel unprepared to begin a career – part of this is the Millennial generation not identifying with what is expected of them by older generations; the other part is simply a lack of pertinent work experience. The result of this uncertainty is often finding a temporary minimum wage job somewhere that doesn't require any educational experience – manual labor, the fast food industry, small local shops without benefits or adequate staff, etc. This hand-to-mouth mentality of working with a minimal budget is normal in college, so isn't as frightening of a first step. However, these jobs often require much more attention than recent grads think they will. To pay rent, college loans, and other life expenses that come up they work long hours – often at multiple jobs. A lack of good benefits makes people cautious, wary, and attempt to save every penny. Needing to work so hard for so many hours doesn't lend itself well to improving your resume, or to earning a certificate in a weekend class, or networking with people who could help you get placed at a solid company. People live with roommates to save money, or move back home with their parents. Graduates feel lost and trapped in a lifestyle they were promised to

avoid by going to college. Often, the distressed reaction to this lifestyle is to go back to school.

Students frequently feel that the best way to make themselves more marketable is to earn another degree. Another bachelor's, masters, a doctorate - usually staying within the unspoken higher education hierarchy. This doesn't help them gain work experience, and often sends them further into debt. There are other societal issues that follow from having so many people with significant debt – as an increasing proportion of students are defaulting on their student loans (Pathways, 5) – and needing to find a job in a very limited, specific field that may not support a stable career, that are not discussed in this paper. The end result, however, is that many people feel like they are trapped.

THE SOLUTION

WHAT IS BEING DONE

Something that would help graduates avoid this situation is to stop focusing on going to a reputable university, and as a society shift the focus to getting a certificate or degree that will help you with what you want to do in the future. For students who do attend college, they can see the trend starting to shift there. Internships are becoming a valued aspect of a successful education, and universities are starting to make them an accessible component of what they offer students. There are Career Fairs and programs designed to integrate students into the workforce. These things

are not mandatory, of course, but they are becoming more and more mainstream.

Mock interviews and resume assistance are also becoming more available, and are highly encouraged by course counselors across degree programs.

The skills you possess that would make you a good candidate for a job, as well as the connection you can make during an interview are things that college career counselors are helping students redirect their efforts towards. The flaw with this is that not all students go to college. Even community colleges are often small commuter schools, and the average student is often older, with a family and full time job. Community colleges have a harder time reaching out to students for extra activities such as professional clubs, evening workshops or career fairs. Students don't place as much value on these "extra" things when they have a full time job and life outside of classes.

Individuals who don't go to a college or university after high school get none of these trainings or opportunities. They are expected to just know how to create an acceptable resume and hope that they are extremely charismatic. This doesn't help correct the common incorrect employer assumption that someone without a university-refined resume is less educated.

WHAT WE CAN DO

As a society, we need to remember that the school you went to – whether it is Harvard, the University of Oregon, or Central Oregon Community College – is less important than what you learned while you were there. We need to make sure that we provide our citizens with trainings and educational opportunities to keep them here, filling the jobs we have at home. As a state, we can focus on that as well to avoid “Brain Drain,” where the smartest and most talented people leave because they believe there are better opportunities for them elsewhere. The state has a vested economic interest in students that they can then keep here once they start their careers (see Figure 1).

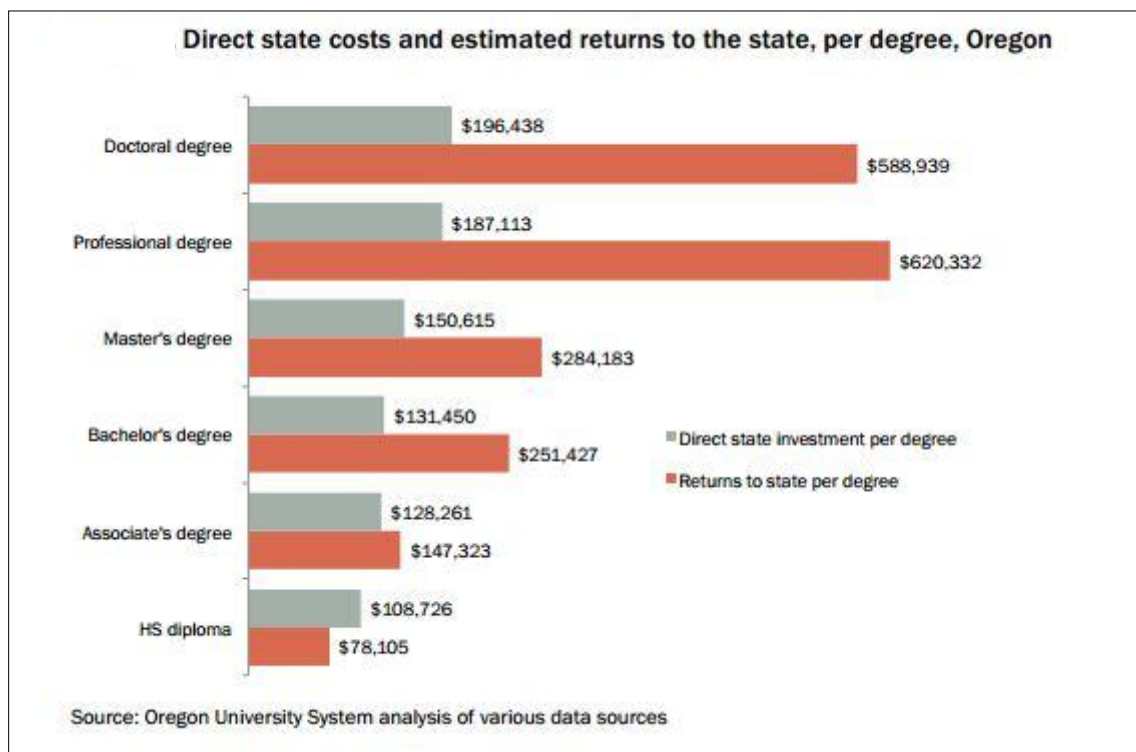


Figure 1: Direct state costs and estimated returns to the state, per degree, in Oregon (Pathways, 10)

We want to make sure that within Oregon, citizens feel like they can find work and have a valid education that can help them be successful in the jobs that are available here. Currently, Oregon is an in-migration state (Nelson), which means we have more people from other states moving here than we have leaving. This does not, however, demonstrate total movement – for example, between 2007 and 2011 there was a net in-migration of 1,228 for managers; yet 5,832 management workers moved out of the state, while 7,060 workers moved in (Nelson). There is no ability to know how much talent we lose as a state from this sort of movement across all occupations.

As a society, we need to increase the value we currently associate with a trade school or vocational education. Plumbers, electricians, and mechanics are just as important to the function of our society on a daily basis as doctors, engineers and teachers, and often have a higher salary. Oregon's *Pathways to Progress 2014-15 Strategic Plan* (also known as *Oregon's 40-40-20 Plan*), is a step in the right direction. The plan set the goal that as a state, Oregon will have 40% of its population holding a bachelor's degree or above, 40% holding an associate degree or postsecondary certificate, and the remaining 20% holding a high school diploma or equivalent by 2025 (Pathways, 7). This is especially important because employers "report that there are too few qualified applicants for jobs that require skills that can be obtained with postsecondary education programs, including many programs that do not entail the investment of time required to earn two-year and four-year degrees" (Pathways, 9). A few difficulties with this plan include that it is

really hard to reach out to the high school dropouts who are now adults (Pathways, 16), and we cannot retain the young driven students who want to go to a renown Ivy League school on the East Coast. Our young people have been spoon-fed for years that leaving to go to one of the “good schools” is the ultimate education track you can select for yourself, if you can get in. This entire mentality needs to shift, so we can keep that talent here, and students won’t feel like they are accepting a lesser opportunity by going to a state school.

MY ANSWER

In order to change this mentality before high school, when students are really starting to prepare for what they want to do professionally, we have to start earlier. Not that middle school is where we need to start preparing kids for the rest of their lives, simply that we need to STOP telling them that they need to go to a four-year university to be successful. Middle school is a time when students are learning how to be more independent, and are figuring out who they are as an individual. By telling them that they can do anything they want, INCLUDING becoming a farmer, or an artist, or someone who teaches English abroad, we are empowering them when that sort of personal choice is most important.

Between the ages of 7 and 11, children are in the period of cognitive development where they become increasingly skilled at understanding logical and concrete information (Cherry). Just after this, in middle school (which is approximately ages

11 to 14) would be the ideal time to reach out and engage students – after they are able to focus on multiple aspects of a problem and understand things from different viewpoints (Cherry). If we can support a “growth mindset,” we empower young students to believe their abilities can be improved with effort, strategy and mentoring, instead of believing in innate ability (Dweck). Students with a growth mindset are drawn to challenges, and persist despite setbacks – something that can also be traced back to receiving “process praise” as children, where they are complimented on their effort or strategies (Dweck). This sort of encouragement can help students persevere to achieve the goals they set for themselves at an early age.

In high school, many students are already preparing for their next educational step. If they want to go to a four-year university, there are certain requirements that they need to take prior that could look different for someone who wants to attend culinary school. We need to teach young people that any selection they choose, including NOT attending a four-year university, is a good one. They simply need to know what it means to make the selection they do. What options will be available for them? Where can they go to find answers after high school, should they not be at a university where life-skill education is becoming mainstream? Students who struggle with the traditional education system need to know that after high school, they can still continue their education without needing to attend more-of-the-same, and be successful. One week of a pertinent workshop is more useful than an entire term of a subject you will never use again. Not to mention it is probably more

affordable. But individuals also need to not be punished for this on the back-end by employers looking at resumes, which is why it also needs to be a mass societal shift.

It is extremely difficult to change the opinion of an adult who believes they already know the right answer. By focusing our efforts on younger generations, we can put in motion the shift in beliefs about post-high school education. I believe that by integrating the idea that all educational tracks are equal in value, just different, at the middle school level we can make the biggest impact on their future. My proposal is to provide a website with pertinent information about ALL Oregon schools, facilitated by a school counselor or particular teacher that all students would be required to visit or work with at least once each year. This website would have links to existing free Myers Briggs and Career Assessment tools, and supply information about degrees offered, education prices, and career options available through different tracks. By focusing students on what they are good at, in addition to how they learn best and how they prefer to work, it can help them apply their efforts to getting where they want to be AFTER their education – not exclusively on how to get into a “good school.”

THE WEBSITE

What makes this an important option for middle school students is that they are the most technologically advanced generation the world has ever seen. After being introduced to this website at school, they can log in any time, customize it as they

wish, and make adjustments to their career plans as many or as few times as they desire. It doesn't have to be an active career counseling tool, but it gives them the option to consider what the best track is for them on a personal level, without the assumption of hierarchy, and to revisit it as often as they choose. Even if they decide to never look at the website other than when they are first introduced to it, at least the subject would be presented in an unbiased, individualized form.

As a younger person, I would have loved to have access to one site designed to point me to all the answers to my questions. Hindsight is always 20x20, and you never know what you don't know until looking back upon it later. However, I would have felt much more prepared in my decision if I had known what options were available to me – not just the options other people told me were best as a “good student” who had “so much potential.” I was always told to shoot for a “good school.” So I took all the right prep classes, but never really knew what I was passionate about. I selected a state school for the general degree path I chose, only to find out that I had no idea of the scope of my interest. I went to register for engineering, and when prompted for which one, all I could do was stare blankly and ask, “there is more than one?”

This website could be used as a supplement to school counseling, should the school choose to do that. The site would be free to the student, and by creating an individualized account it would add privacy. The hope is that it would be available to every student in the Oregon school system, at the middle school level. The site would be accessible to students outside of the school system as well, home-

schoolers for example, it just wouldn't be mandated through anyone. If students don't find the site important until they are in high school, that is still a success on our part for helping them think about the best option for them to be victorious. The biggest goal is to shift the idea from going to a "good school", to "getting an education" at an early age, so that in high school students can feel comfortable selecting any option that they think is the best fit for them. We want students to have the opportunity to be aware of the variety of options they have, and to validate the choices of students who do not identify with a traditional advanced degree path.

EXPLANATION OF DESIGN

The website itself would have information such as career descriptions, education paths that can get students there, which Oregon schools have those education paths, and relevant secondary careers that are related and could give them options later in life. The site would have an app-like interface and be designed to be simple and user-friendly, yet complete, and provide a number of paths to get to the same career results. For example, you can teach English with or without a Masters in Teaching – it just depends how long you want to do it for, and where in the world you want to be located. A flowchart on each personal home page would provide an easy visual action plan on how to accomplish the career goals they choose, and could help students navigate back to any part of the website. The following sections explain the content and basic structure that I think would be helpful for students interacting with this site – however, it would be very important to engage a focus group of

middle school students in this design process, as it will be designed specifically for them and their use.

Because this is a website aimed at middle school students, the first questions upon logging in for the first time will ask simple things such as favorite subject and what type of learner they are (kinesthetic, visual or auditory). This can help guide students towards an education path that would be better suited for their learning style. There is no need to reinvent the wheel, so the site would also have 2-3 links on each subject directing students to other noteworthy sites with more information. The idea is for this website to be a sounding board for students to start thinking about their career goals before graduating high school.

CREATING YOUR PROFILE

The first time you ever visit the website, you are asked to create your login and answer a series of questions. This includes a work environment quiz and a VARK learning style preference (visual, aural/auditory, read/write, or kinesthetic) quiz, which will be stored within your profile's current action plan for you to reference later.

WORK ENVIRONMENT QUIZ

- Indoors vs outdoors
- With people vs with information

- Travel vs in an office
- With hands vs with mind
- Alone vs in groups
- During the day vs at night
- In busy places vs in quiet places
- Wearing a uniform vs wearing street clothing
- Making things vs selling things
- Communication with words vs utilizing math skills
- 12 months per year vs seasonally
- Consistent schedule vs variable schedule
- Give directions to others vs take direction from others
- With humans vs with animals
- Under pressure vs without deadlines

This quiz could help students focus on different types of careers:

- Realistic - for "doers"
- Investigative - for "thinkers"
- Artistic - for "creators"
- Social - for "helpers"
- Enterprising - for "persuaders"
- Conventional - for "organizers" ("For Middle School Students")

The free VARK quiz is available online (www.vark-learn.com/english/page.asp?p=questionnaire) and has a good breakdown summary of your results after you answer the questions. Again, this website is intended to direct students to existing resources, not duplicating existing content. The website can then supply suggestions and helpful tips for how students can be most successful with their learning style. For example, visual learners can turn notes into pictures, charts, or maps; avoid distractions provided by doorways, windows, etc; focus on the big picture before learning the details; color code new concepts in their notes and use flash cards to study vocabulary, and more ("Three Learning Styles").

There would also be an introductory welcome page, which explained the purpose of the website to the reader, and provide options for those who are not ready to make a decision yet; there are many useful ways to spend a gap year, if the intent is for life experience and self-discovery.

The image below is a general outline for what the Profile page of the website would look like, and the content that would be in each section. Each color would be its own app-like button, leading to more information or connecting the student to outside resources.

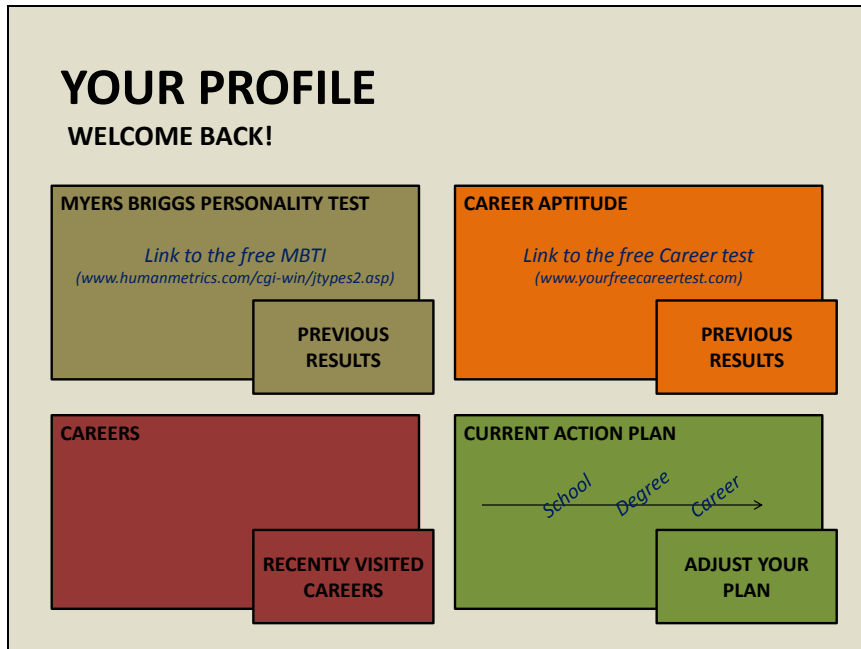


Figure 2: Example of the Profile page on the website

The Profile page would have information about your Myers Briggs personality test (top left) and Career aptitude test (top right) histories, which students would be requested to complete the first time they log into the website, as a structured baseline for them to consider. A direct link to the Careers page would be available from this page as well, in addition to a save-able “Current Action Plan” (bottom right) where students can bookmark their favorite career path options.

CAREERS

The Careers page is the focus that we would like students to leave thinking about. Therefore, it should be the main focus of all of their interactions with the website –

everything is about helping them get to a career (instead of ending with a degree they don't want to work with).

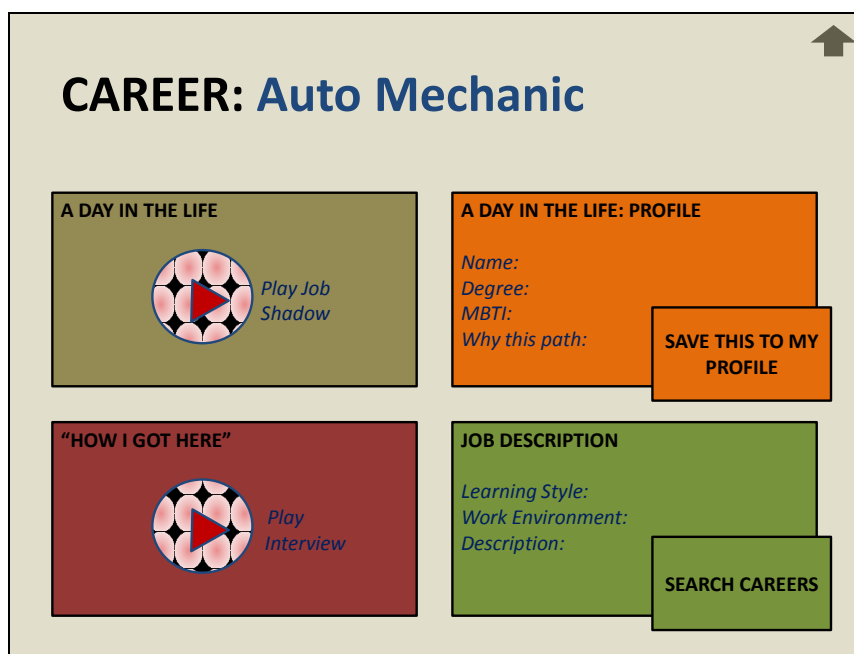


Figure 3: Example of the Career page on the website

The Career page will have interactive videos and articles to help engage students with different learning styles. The top left will have a short two or three minute (shorter than a YouTube music video) job shadow video, where students can see “a day in the life” of someone in the career path they selected. Just to the right of the video will be an autobiographical profile of the person in the job shadow – including who they are, what degree they earned to perform that work, their MBTI (which they would take for this purpose when they agree to be filmed for the website), and why they chose the career and degree they did. Below that would be a job description for those who would rather read about a job, along with the Learning Style of the person in the interview and how they would describe the work (whether

it was for a "doer," a "thinker," a "creator," a "helper," a "persuader," or an "organizer"), how they would describe their work environment (referencing the quiz that the student would have taken upon their introduction to the website), and an actual job description article. The second video (in the bottom left) will be a short two or three minute interview with the same person as in the job shadow, explaining directly how they got to where they are today – what degree they have, why they chose it, what education they completed to get there, what extracurricular activities they did or internships they had beforehand – all of the little bits of insight showing what went into a career. They could also talk about where they would like to go next, if they don't feel like they are done building their career yet. The entire point is just to give some insight and framework for a few of the different education options that are available through different Oregon schools.

Students will be able to then save this Career to their profile's "Current Action Plan" if they like what they see about a particular job (in the orange section). If it isn't exactly what they are looking for, they can continue to search other careers (in the green section) or go back to their profile (the little black home button in the top right).

DEGREES

We want to emphasize that the degree is more important than the school (not the other way around). Therefore the focus of this website will be on choosing a career,

and then figuring out which degree can get you there. Which schools have that degree is the last step in the website's flow structure.

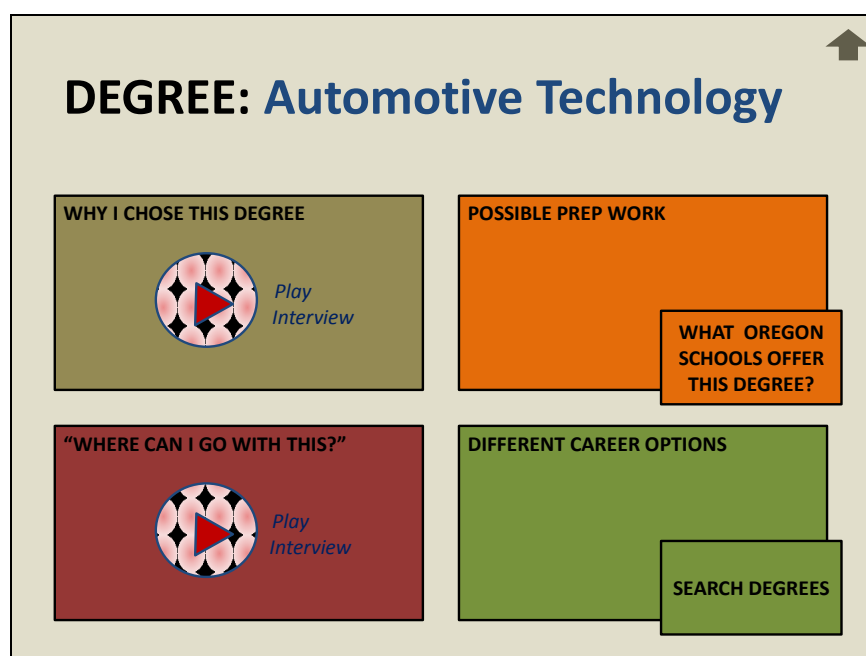


Figure 4: Example of the Degree page on the website

The Degree page allows students to search degrees from the little green pull-down box in the lower right. Once a degree is selected, the page will populate with interviews of a student currently in the education system (top left) and someone who is currently in the field with this degree (bottom left). The intent of the interviews is to give students a short two or three minute video clip in order to provide some perspective on what this education path really entails, in the middle and afterwards. Should they find this truly interesting, the possible prep work they could do for the degree is available in the orange section (top right), as well as a general list of what coursework the degree itself entails (taken from a school's webpage that has that degree). A link to the Schools section of the website is also

available in the orange section, linking directly to a list of what Oregon schools offer that degree. Should the student not be interested in the degree after all, they can search a new degree, or research the career that was in the “Where Can I Go With This” interview through the Careers page.

SCHOOLS

The School page should be the least emphasized of any of the resource information pages. The school should really just appear to be a means to an end – location, cost and teaching style will end up playing a role when the student actually makes their decision, however, it isn’t what we want them to be researching initially.

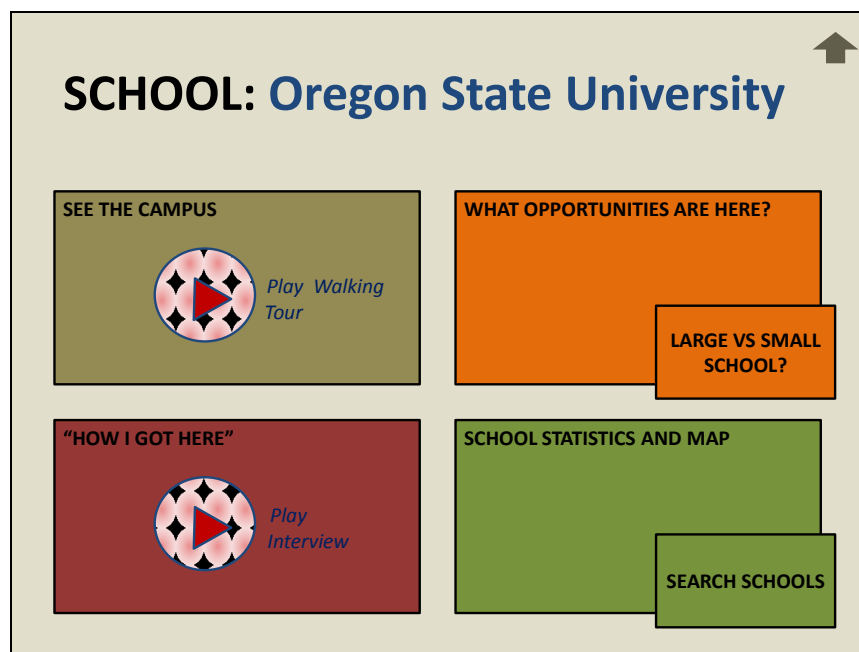


Figure 5: Example of the School page on the website

The schools page allows the student to take a walking tour of the campus through a short guided video (top left), and it will also have an interview of a student sharing “How I Got Here” – focusing on what career they want and the degree they are working on, and how the school they selected can help them accomplish that.

Along the right side of the page would be written articles about “What Opportunities Are Here” for the specific school selected, and a small side article comparing large and small schools, and private and public schools. Some of these comparisons include:

THE DIFFERENCE BETWEEN SCHOOLS

Large	Small
<ul style="list-style-type: none"> • More research opportunities 	<ul style="list-style-type: none"> • Smaller class sizes
<ul style="list-style-type: none"> • Large, Lecture-based classes 	<ul style="list-style-type: none"> • More group work, hands on learning
<ul style="list-style-type: none"> • More involvement opportunities 	<ul style="list-style-type: none"> • Tighter
<ul style="list-style-type: none"> • More funding opportunities 	<ul style="list-style-type: none"> • Strong advising system
<ul style="list-style-type: none"> • More educational and personal support 	<ul style="list-style-type: none"> • Professors teach most courses
<ul style="list-style-type: none"> • Anonymity 	<ul style="list-style-type: none"> • Chance to really connect with instructors
<ul style="list-style-type: none"> • Wider variety of degrees 	
<ul style="list-style-type: none"> • Well stocked libraries 	

<ul style="list-style-type: none"> • Variety of housing 	
<ul style="list-style-type: none"> • Well funded sports programs 	
<ul style="list-style-type: none"> ○ Things to Consider <ul style="list-style-type: none"> • Better to know what you want, and be able to seek it out • Intro classes have hundreds of students - this can be exciting or overwhelming • Many classes are taught by teaching assistants, not faculty • Lots of red tape... taking classes outside of your major can take multiple administrative signatures 	<ul style="list-style-type: none"> • Things to consider <ul style="list-style-type: none"> • Not as many degrees, but can sometimes design your own • Limited work and research • Less structured activities, such as sports, clubs or Fraternity and Sorority life

Table 1: The difference between large and small schools ("Sizing Up Colleges")

Public	Private
<ul style="list-style-type: none"> • Supported by state funds 	<ul style="list-style-type: none"> • Smaller
<ul style="list-style-type: none"> • More grants 	<ul style="list-style-type: none"> • Offer more financial assistance
<ul style="list-style-type: none"> • More research 	<ul style="list-style-type: none"> • Less red tape
<ul style="list-style-type: none"> • Cheaper for in-state students 	<ul style="list-style-type: none"> • More personal attention
<ul style="list-style-type: none"> • Often more well known 	

Table 2: The difference between public and private schools (Rubenstone)

At the bottom right would be a link to the school website and some basic statistics about the school (such as university size, average class size, tuition cost, public or private, and if there are religious associations). It would also have a list of majors offered at that facility, and be able to connect each one to the appropriate Degrees page on the website. Oregon schools include:

OREGON SCHOOLS

Community Colleges (Public, 2 yrs)	Location
Blue Mountain Community College	Pendleton
Central Oregon Community College	Bend
Chemeketa Community College	Salem
Clackamas Community College	Oregon City
Clatsop Community College	Astoria
Columbia Gorge Community College	The Dalles
Klamath Community College	Klamath Falls
Lane Community College	Eugene
Linn-Benton Community College	Albany
Mount Hood Community College	Gresham
Oregon Coast Community College	Newport
Portland Community College	Portland
Rogue Community College	Grants Pass
Southwestern Oregon Community College	Coos Bay

Tillamook Bay Community College	Tillamook
Treasure Valley Community College	Ontario
Umpqua Community College	Roseburg
Public Oregon University System Schools (Public, 4 yrs)	Location
Portland State University	Portland
Oregon State University	Corvallis / Bend
University of Oregon	Eugene
Western Oregon University	Monmouth
Southern Oregon University	Ashland
Oregon Institute of Technology (Oregon Tech)	Klamath Falls
Eastern Oregon University	La Grand
Public Oregon University System Schools (Public, 3 yrs)	Location
Oregon Health & Science University	Portland
Private Universities	
Concordia University	Portland
Corban University	Salem
Gutenberg College	Eugene

Lewis and Clark College	Portland
Linfield College	McMinnville
Marylhurst University	Marylhurst
Oregon College of Art & Craft	Portland
Pacific Northwest College of Art	Portland
Pacific University	Forest Grove
Reed College	Portland
University of Portland	Portland
For-Profit Colleges	Location
Art Institute of Portland	Portland, 4 yr
ITT Technical Institute	Portland, 4 yr
Le Cordon Bleu College of Culinary Arts	Portland, 2 yr
Pioneer Pacific College (career college)	Wilsonville / Springfield, 2 yr
University of Phoenix: Oregon	Tigard, 4 yr
Religious Colleges (Private, 4 yrs)	Location
George Fox University (private and seminary)	Newberg
Mount Angel Seminary (Men only seminary college)	St. Benedict
Multnomah University (Bible & seminary college)	Portland
New Hope Christian College (Bible college)	Eugene

Northwest Christian University	Eugene
Warner Pacific College (Church of God)	Portland
Willamette University (United Methodist Church)	Salem

Table 3: Oregon schools ("College Search")

Oregon has no major military bases, so people move out of state for that profession

U.S. Armed Forces:

- Army
- Navy
- Air Force
- Marine Corps
- Coast Guard

There would also be a map identifying where in Oregon the school was, which would populate on every school's page for a visual perspective.

biggest difficulty is that this information is not easily summarized anywhere – you have to spend a few evenings asking Google the right questions to find the informative, unbiased answers you are looking for. As a young student, you don't always know what questions you should be asking yet. The purpose of this website is to connect students to exactly the information they need, and supply links for more detail if they are interested. It would be a sounding board for general post-high school education information, and have some necessary opportunity awareness information delivered in an unbiased form.

WHY THIS NEEDS TO HAPPEN

Middle school is the best time to reach these students in order to effectively change how the current American education system is perceived. In that way, they can start asking the right questions early, and not have their uncertainty later clouded by adults who are trying to help push them to the top of the perceived hierarchy. If it can be brought to the student's awareness in a non-committal, interesting (yet simple) form, we have the best chance for empowering students at an early age to really pursue a career in something they will enjoy, and not just go to a four-year university because they feel like they need to figure things out there.



Figure 7: Growth vs. replacement job openings in Oregon (Turner, “Show Variety”)

Projected job growth in Oregon by 2022 is shown in the graph above. This is something to keep in mind when students are looking at professions as well, since the ultimate goal will be getting hired on somewhere, and this would be about the job market when these middle school students are finishing their higher education goals. Together, all of American society can help these students find successful careers by supporting their choice at an early age, whether that would require a military degree, a four-year bachelor’s degree, a two-year associate degree, or any other variation.

One of the main points from *Oregon’s 40-40-20 Plan* is that “a lack of skilled, highly-educated and creative workers can quickly handicap a state’s economy and, eventually, retard its innovation and slow its growth” (Pathways, 10). If we can get

student to believe in themselves and their abilities, their career path is all equally relevant. For example, Science, Technology, Engineering and Math (STEM) careers – which are some of the highest paid positions – employ students with all types of higher education (see Figure 9). The path a student chooses does not determine their success or even the level of pay they can eventually achieve.

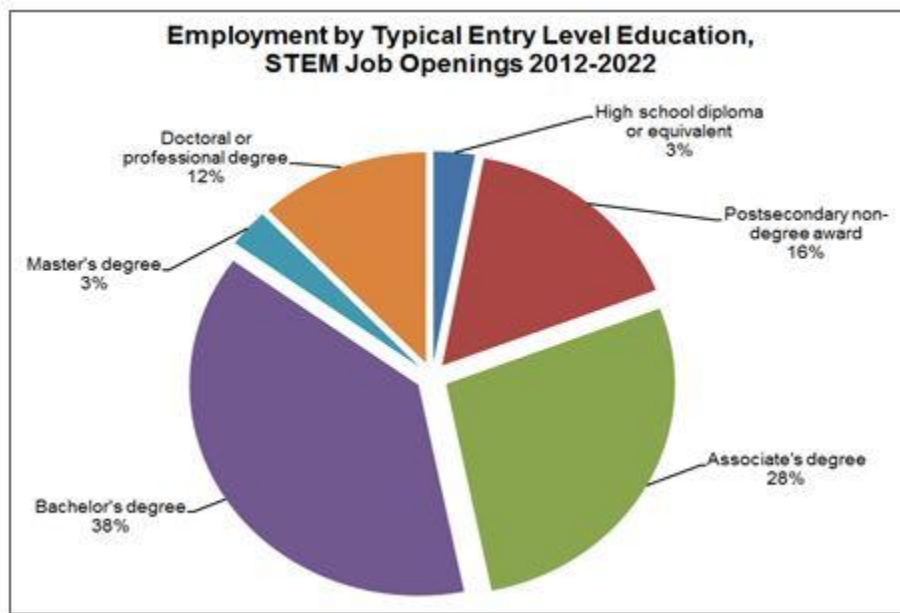


Figure 9: Employment by typical entry level education, STEM job openings (Turner, "STEM Jobs")

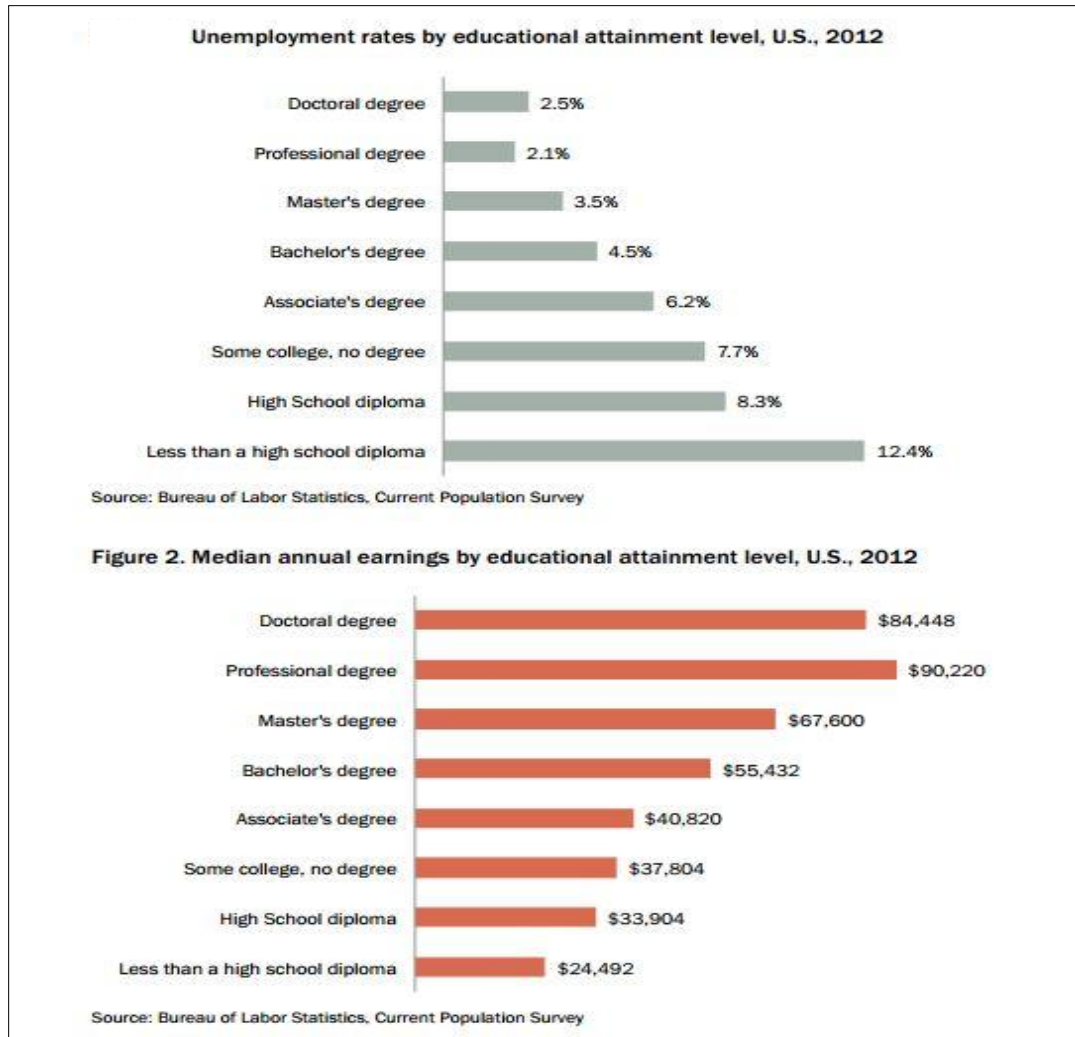


Figure 8: Unemployment rates by educational attainment level (Pathways, 8)

I cannot express how important it is to have an educated population – from economic returns from educated students (Figure 1), to lowered fear of unemployment (see unemployment rates by education in Figure 8 above).

Empowering students at a young age to focus on their end results, instead of getting into an expensive, reputable school, is one of the most effective ways to make a difference. Because it's not about the school – it's about a societal shift regarding higher education.

BIBLIOGRAPHY

- Brandon, Emily. "The Ideal Retirement Age - US News." *US News Retirement*. US News & World Report, 10 June 2013. Web. 05 Oct. 2014.
- Chan, Amanda L. "U.S. Life Expectancy Ranks 26th In The World, OECD Report Shows." *The Huffington Post*. Huffpost Healthy Living, 21 Nov. 2013. Web. 05 Oct. 2014.
- Cherry, Kendra. "Cognitive Development in Middle Childhood." *About Education: Psychology*. About.com, n.d. Web. 11 Oct. 2014.
- "College Search." *Big Future*. The College Board, 2014. Web. 11 Oct. 2014.
- Duniway, Bob. "A Brief History of Higher Education in America." *Winning the College Game*. N.p., 2006. Web. 24 Aug. 2014.
- Dweck, Carol. "Why Do Women Fail?" *Leading Women*. CNN Opinion, 30 July 2014. Web. 08 Sept. 2014.
- "For Middle School Students." *My Child's Future*. POI, n.d. Web. 11 Oct. 2014.
- Gendell, Murray. "Trends in Retirement Age in Four Countries, 1965-95." *Monthly Labor Review* 121.8 (1998): 20-30. *US Bureau of Labor Statistics*. Web. 5 Oct. 2014.
- Hess, Scott. "Millennials: Who They Are & Why We Hate Them." TEDxSF. San Francisco. June 2014. *YouTube*. Web. 03 Oct. 2014.
- Komisarjevsky, Chris. "Millennials Are Defining the Workplace." *The Huffington Post*. TheHuffingtonPost.com, 26 Aug. 2014. Web. 08 Sept. 2014.
- Nelson, Jessica. "Migration Patterns in the Past 5 Years." *Oregon Employment Department*. OLMIS, 2014. Web. 11 Oct. 2014.
- Pathways to Progress*. Manhattan, IL: Manhattan Chamber of Commerce, 1994. *Oregon.gov*. Higher Education Coordinating Commission, March 2014. Web. 24 Aug. 2014.
- Rubenstein, Sally. "Private Versus Public Colleges." *Ask The Dean*. College Confidential, n.d. Web. 11 Oct. 2014.
- "Sizing Up Colleges: Big vs. Small." *Big Future*. The College Board, 2014. Web. 11 Oct. 2014.

"The VARK Questionnaire." *VARK: A Guide to Learning Styles*. VARK, 2011. Web. 02 Nov. 2014.

"Three Learning Styles." *Bepko Learning Center*. Indiana University - Purdue University Indianapolis, 2002. Web. 09 Oct. 2014.

Turner, Brenda. "10-Year Occupational Projections for STEM Jobs." *Quality Information, Informed Choices*. State of Oregon Employment Department, 22 Sept. 2014. Web. 09 Oct. 2014.

Turner, Brenda. "10-Year Occupational Projections Show Variety in Oregon's Economy." *Quality Information, Informed Choices*. State of Oregon Employment Department, 21 Apr. 2014. Web. 03 Nov. 2014.