RE DEFINING THE GOAL

THE TRUE PATH TO CAREER READINESS IN THE 21ST CENTURY



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AUDIOBOOK ILLUSTRATIONS & RESOURCES

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INTRODUCTION:

Over-Educated Yet Under-Employed



In the most recent chart of this kind, we see that someone with a professional degree earns about \$92,000 more a year than simply graduating from high school and \$74,000 more a year than completing a two-year degree. Many of my friends and I wanted more earning potential, so naturally, we continued our education in pursuit of a four-year degree.

INTRODUCTION:

Lateral Thinking and Real World Solutions



To understand out of the box thinking, we can look at the Nine Dots Puzzle. To complete this puzzle, you are to connect the dots by drawing four straight lines that pass through each of the nine dots one time without ever lifting your pencil.

At first, the puzzle doesn't seem solvable because people can't use straight lines or don't see beyond the





WRONG





People erroneously assume that the pencil lines must stay within the confines of the square area defined by the dots. If they realize they can go beyond the dots, the puzzle is very easy to solve.

It seems that we can get very stuck in our ways. We don't deviate from our normal route and only see the same options that have always worked. Though this is helpful in many situations, when you have a problem that is simply not getting solved, doing the same things over and over again to fix it is not the answer.

CHAPTER 2:

100 Go In But How Many Come Out?

When asked, students report that they did not like school, could not get along with the teachers or peers, felt that they didn't belong, couldn't keep up with the work, and had failing grades. These are things that schools can address to meet the needs of their students. However, other reasons are also present that have nothing to do with the school, but with the life of the student. These reasons include things such as needing to work, losing a family member, medical problems, or becoming a caregiver.

The top reasons students drop out of high school

REASON FOR STOPPING SCHOOL	PERCENT OF TOTAL DROPOUTS
I was kicked out or expelled	0.6%
Pushed or pulled out of school	0.6%
Family issues or problems	0.8%
Lost a family member or friend	0.8%
Financial issues and work	1.2%
Teacher and school problems	1.2%
School environment	1.4%
Residential or school instability	2.0%
Mental health issues	2.1%
I was bullied	2.2%
Physical or other medical problems	2.7%
I was a member of a gang	3.5%
I got pregnant/gave birth	10.8%
I got into drugs	11.6%
I was held back	14.2%
No one cared if I attended	17.7%
I had to make money to support my family	19.0%
School wasn't relevant to my life	20.3%
I became a caregiver	25.9%
I was bored	25.9%
I was failing too many classes	27.6%
SOURCE: GradNation.org	TECHINSIDER

When looking at the following graph, two reasons that strike me as most telling are "I was bored" and "School wasn't relevant to my life." These two reasons, which may very well be related since boredom often rears its ugly head when classes don't feel relevant, account for almost 50% of drop outs, or 15 of the 100 freshmen that enter into high school. Being held back or failing too many classes accounts for another 32% or another 10 students. If schools could help students be successful in something that was relevant to them, even if they did nothing else, it appears that the dropout rate could be dramatically reduced from 31% to only 6%.

CHAPTER 2:

100 Go In But How Many Come Out?



The question should be, "If you start with 100 ninth-graders, how many of them are gainfully employed by the time they are 28?" Shouldn't that be the ultimate goal? While every state and county will have specific numbers that vary slightly, the overall trend is true across America today. With the current

paradigm, approximately 7 students out of every 100 stay in high school, graduate from high school, immediately enter into post-secondary education, graduate successfully, and secure gainful employment. That is one leaky funnel.

Current circumstances show that we should not simply direct our youth to get a 4-year degree in "something" under the false pretenses and unrealistic expectations that it will lead to success. The obtainment of a 4-year university degree can be valuable in a number of ways, but it is no longer the golden ticket to financial success that it was for prior generations.

North Carolina's Future Ready Occupational Track: An Equal Alternative

One state that seems to be appropriately trying to undo the "college for all" educational planning for high school students is North Carolina. Students entering the 9th grade can determine to take one of two tracks: Future-Ready Core for those wanting to attend a 4-year university and Future-Ready Occupational for those going directly to a career or gaining further education leading to a career through the community college system or other educational opportunity. Here are the requirements for either pathway:

	North Carolina					
Content	Future-Ready Core	Future-Ready Occupational				
English	- 4	4				
Mathematics	4	3				
Science	3	2				
Social Studies	4	2				
*World Language	0	0				
Health and PE	1	1				
Electives	6	6**				
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You'll note that one significant difference is that Future-Ready Occupational students can gain four CTE courses to expand their employability skills as opposed to university-bound students who receive none. The NC Board of Education website states:

"Over the past few years, the State Board of Education has changed graduation requirements to better reflect the skills and knowledge students need for success in the workplace, and in community colleges, colleges, and universities. Our goal is for students to be prepared for whatever they want to do after high school graduation."

CIE.	U.	
Fine Arts	0	0
Total	22	22

*2 credits are required of admission into the UNC system **Includes Occupation Prep I, II, III, IV which includes 300 hours of school-based training, 240 hours of community-based training, and 360 hours of paid employment

This demonstrates that viable alternatives can co-exist. California should consider doing something similar to allow students a choice instead of the default A-G prescription. North Carolina is off to a great start and the first graduating class with these new standards was just in 2015. At the time of publication the numbers are not out yet determining how many students used which pathway. Conversations with educators in North Carolina, however, leads one to believe that having two equal and viable alternatives for students to choose will open up academic options and expand student success statewide.

North Carolina's Future Ready Occupational Track: An Equal Alternative

In 1960, when taking into account all jobs in the American economy, 20% required a 4-year degree or higher, 20% were technical jobs requiring skilled training, and 60% were classified as unskilled. But what's the right percentage to meet the labor market demand for tomorrow? In 2018, Harvard University predicts only 33% of all jobs will require a 4-year degree or more while the overwhelming majority will be middle-skilled jobs requiring technical skills and training at the credential or Associate's Degree level.



Well-intentioned attempts to send more and more students straight to the university will not change the types of jobs that dominate our economy, nor will a "college-for-all" mentality mask these labor market realities. As mentioned, the "college for all" rhetoric that has been so much a part of the current education reform movement is often interpreted as "university for all." This message needs to be significantly broadened to, "a post-high school credential for all."



Bachelor's degree or more

Source: March CPS data; Center on Education and the Workforce Forecast of Educational Demand of 2018, as reported in Pathways to Prosperity (Harvard University, 2011)

Students at various educational levels have left school without employable skills, setting them up for failure, and costing them and taxpayers millions. At the same time, the labor market is desperate for highly-trained, skilled technicians.

The 1:2:7 Ratio

The US Bureau of Labor and Statistics says the jobs on the following chart will be the fastest growing jobs from 2014 to 2024. Of these jobs, only three require more than a 2-year degree.

America's Fastest Growing Occupations

Forecasted growth in U.S. occupations from 2014 to 2024



Additionally, baby-boom workers are retiring and leaving lots of openings for millennials. For instance, there are 600,000 jobs for electricians in the country today and about half of these are occupied by soonto-retire boomers. This could be a big opportunity for the millennial generation. In general, the U.S. is going to need a lot more pipe-fitters, nuclear power plant operators, carpenters, welders, utility workers and more. The problem is that today's students aren't getting the type of training needed to fill these positions. The hope of many educators is that by encouraging university education, the number of university-trained workers will increase, and thus it is assumed that the demand for their services in the workplace will increase as well. Unfortunately, this is not so. The whole pie may get bigger as the labor force and the economy grow, but the ratio will not change. The reality is there will not be more professional jobs available within the labor market as some professional jobs are replaced by technology and others are being outsourced.

The Highest Paid Game

Looking at the 1:2:7 ratio, many people agree but still believe that they should be one of those getting the high degree while leaving "others" to do the dirty work. Once again, we have brainwashed our students into believing that the careers making the most money are those that require a 4-year university degree or more (such as a Master's degree). My suspicion is that you may still be relying too heavily on that idea as well. To prove my point, let's play a little game. Following is an income ranking questionnaire. It is based on the State of California's labor market, but is similar across the United States. Look over the 10 career titles below and rank them in order of their wage/earnings, with number one being the highest income earner, and 10 being the lowest:

Income Ranking (1-10)

_____ Air Traffic Controllers

_____ Dental Hygienists

_____ Electrical Power-Line Installers/Repairers

Diagnostic Medical Sonographers
 Elevator Installers & Repairers
 Geographer
 Market Research Analysts
 Writers and Authors
 Community & Social Service Specialists

Mental Health Counselors

No really, go back and do it. Rank them one through ten.

The Highest Paid Game

How do you feel about your choices? Were you able to easily rank them in order of how much each occupation earns? Try it again with this second listing. Rank these ten jobs in order of their wage/earnings, with number one being the highest income earner, and 10 being the lowest:

First-Line Supervisors of Police/Detectives
 Radiation Therapists
 Power Distributors & Dispatchers
 Logistics & Distribution Managers
 Computer Network Support Specialists
 Soil and Plant Scientists
 Anthropologists & Archeologists
 Athletic Trainers

How well do you think you did with this second set? Most people actually struggle with this exercise because we never actually spend time learning about the real wages of different occupations in our local region. We may have preconceived notions about what jobs pay better than others, but our beliefs are often shaped by our personal experiences and not necessarily labor market data. I have completed this activity with thousands of educators and parents over the years. When asked to rank them, most intelligent folks can't rank these 10 occupations in the correct order. So, don't feel bad if you don't get them right.

— Music Directors & Composers
— Radio & Television Announcers

Well, unless you have listed them in the order they appear, one through 10, you are wrong. These occupations are already listed in the correctly ranked order based on their average annual wage in California. And now, let's look at the final piece of the puzzle. Write down to the right of each occupational title what you think is the needed education level for each of these jobs. You may use a clean version of this activity on Appendix C. For those that want a little help, a completed questionnaire with wage answers and education required is included for you in Appendix D.

What Current Data Shows

In 2013, College Measures worked to link student data with wage data in five states in hopes to help people make wise decisions about postsecondary education. Some of the results were surprising to the mainstream public, but are exactly what millennials have been learning by experience for years.

	Certificates Less than 1-year	Certificates of 1 but less than 2-years	Associate's Degree	Bachelor's Degree	Master's Degree
2008	265,454	183,483	732,432	1,554,843	625,002
2012	337,870	286,825	1,017,446	1,778,598	754,229

Comparison of Credentials Awarded in U.S. from 2008 and 2012



One of the results was that short-term higher education credentials are worth as much as long-term degrees. In fact, institutions of higher learning granted almost as many certificates and 2-year degrees compared to universities granting 4-year bachelor's degrees. These subbaccalaureate credentials are the fastest growing segment in educational awards offered. What is even more interesting is that the average first-year earnings of associate's degree graduates are higher than the earnings of those with bachelor's degrees. For instance, Texas graduates with a technicaloriented Associate's degree will earn \$11,000 more the first year than someone with a bachelor's degree.

WEBSITE LINKS AND RESOURCES

Here are some additional resources, many of which are free. They are each a great place

start for teachers, parents, and students alike.

SELF-EXPLORATION

Career InfoNet Skills Profiler: This allows students to choose from seven different skill groups including basic skills, social skills, complex problem-solving skills, technical skills, system skills, resource manage- ment skills, and desktop computer skills. http://www.careerinfonet.org/skills/skills_list.aspx

Dream Catcher: Identify your purpose in life and achieve your career dreams through eight interactive lessons. Each lesson includes great videos and motivations, as well as an online tool to connect with other students with similar career interests. https://www.dreamcatcherprogram.com/

ISeek Skills Assessment: Lets your students rate themselves on 35 skills and see which occupations match those skills. http://www.iseek.org/careers/skillsAssessment

O'Net Online Skills Search: This allows students to choose skills from six different skill groups including basic skills, complex problem-solving skills, resource management skills, social skills, systems skills, and technical skills. https://www.onetonline.org/skills/

Work Preference Inventory: Twenty-four questions will assess your student's work style. http://www.careerperfect.com/services/free/work-preference/

PERSONALITY ASSESSMENTS

CA CareerZone Interest Profiler: Occupational interests are identified through a series of questions about work activities that some people do on their jobs. Based on the aforementioned Holland Code, it includes comprehensive information on over 900 occupations. https://www.cacareerzone.org/ip/

Jung Typology Test: Helps identify one's lifestyle preferences, personality strengths, and suitably aligned career choices. http://www.humanmetrics.com/

Myers-Briggs Type Indicator (MBTI): This personality test builds upon Jung's typologies and is one of the most reliable and trusted. It has been selected by the nation's top colleges to help with career development and is backed by scientific research. This test will help your students understand themselves and how they interact with others. It will help them identify their preferences in four areas: where they focus their attention, how they take in information, how they make decisions based on the information, and how they deal with the world. The original test costs \$49.95, however, a free version can be found at: https://www.truity.com/test/type-finder-personality-test-new

Keirsey Temperament Sorter (KTS-II): This test is similar to the MBTI. However, it breaks up the MBTI's 16 types into 4 basic categories: Artisans, Guardians, Rationals, and Idealists. http://www.keirsey.com/sorter/register.aspx

Inner Heroes: This test is a combination of the MBTI and the KTS-II http://www.innerheroes.com/quiz.asp

Big Five Personality Test: Once called All About You, this tests measures personality as it applies to careers.

http://www.outofservice.com/bigfive/

DiSC: Helps your student learn how they respond to conflict, their motivations, their stressors, and how they solve problems. http://discpersonalitytesting.com/free disc-test/

ColorCode: Identifies driving core motives, helping students understand why they do what they do. https://www.colorcode.com/free_personality_test/

CAREER EXPLORATION

Occupational Outlook Handbook: This online handbook allows students to look at jobs based on groups, areas, growth, education, and pay. For each job, the student can see what they do, the work environment, the education needed, the pay, the job outlook, and similar occupations. http://www.bls.gov/ooh/

Holland Code Career Test: Helps students identify career interest among six themes: realistic, investigative, artistic, social, enterprising, and conventional. Offers a list of suggested careers based on the profile.

https://www.truity.com/test/holland-code-career-test

ASVAB Multiple-choice test that helps a student identify which Army jobs are best for them. The entire test is done through a military recruiting office, but sample tests can be found online. https://www.4tests.com/asvab

California Career Zone: A career exploration and planning system designed for students. This site has information on over 900 occupations. It has many profiler tests, as well as career videos, and job openings.

https://www.cacareerzone.org

California Career Center: This is a career planning website helping students find an education plan with many different options. It will help your students develop career self-management skills.

https://www.calcareercenter.org/

Road Trip Nation Stories told by people in a myriad of occupations help create the resources that will show your students the many different careers and possibilities available. http://roadtripnation.com

Dirty Jobs: A Discovery Channel series with Mike Rowe. He assumes the duties of the job he profiles for the week, helping students gain an appreciation for the many different jobs available and what makes people happy in those jobs others consider "too dirty." http://www.discovery.com/

Whodouwant2b.com: Though focused on California, this is a good site to help students determine courses to take and career options. http://whodouwant2b.com/student/pathways

The Support Personnel Accountability Report Card: The SPARC online tool enables school site student support teams to create a unique, publishable document highlighting the impact their staff and programs are having on student career and college readiness. www.sparconline.net

O*Net Online: At O*Net, a student can enter a work title, look up careers by expected job growth, by career cluster, by green economy sector, by industry, by job family, by STEM discipline, and by education, experience, and training necessary. As jobs are located, O*Net provides information about the tasks, tools, technology, knowledge, skills, abilities, work activities, work context, job zone, education, credentials, interests, work styles, work values, related occupations, wages, employment, and job openings. https://www.onetonline.org/

Gingiks YouTube Channel: Videos of people with interesting jobs all shot by high school students. https://www.youtube.com/channel/UCgS_1_CtAfdr2JJtKI6vi8w

Career One Stop: U.S. Department of Labor website with career exploration tools, occupational videos, labor market and wage data, and job searching resources. http://www.careeronestop.org/

Career Surfer: This mobile application is a tool for beginning career exploration and planning. Students can explore careers on their mobile devices by viewing snapshots of the more than 900 occupations detailed on the California CareerZone. Career Surfer is a free download from the Apple App Store or Google Play.

https://www.calcareercenter.org/Home/Content?contentID=404

For more information and learning resources please visit:

www.KevinJFleming.com