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in alternative education

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A college degree will
always be an important
path to work. But it's not
the only path, or even the
best one.



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SOLUTIONS

SynED provides diverse services to higher education by implementing solutions which address employers, job seekers and education providers. Current initiatives reflect best practices based on evidence and identified goals to meet the needs of all stakeholders.

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You Can Get a Good Job Without a Bachelor's Degree

Careers in skilled services pay well. More Americans just need the right training.

“To get a good job you must have a bachelor’s degree.” This is a common myth that needs to be debunked. For years, Americans have been told that, with the decline in manufacturing, the blue-collar job that required a high school degree or less was gone for good.

The truth is that not all good jobs for people with less than a bachelor’s degree have been eliminated. Far from it. There are 30 million jobs in the U.S. that pay good wages without a B.A.: The median salary is \$55,000 with an opportunity to move up the career ladder.

But it’s important to understand that today’s good jobs are different from those of the past. Job-seekers without a B.A. in 2017 need to search

beyond traditional blue-collar sectors and look to skilled-services industries. Nationally, a gain of 4 million jobs in financial services, health services, information technology and other skilled-service industries has more than offset the 2.5 million well-paying jobs lost in manufacturing since 1991.

There is a catch: To secure these roles, workers need to get some education or training beyond their high school diploma. Much of the growth in good jobs that pay without a B.A. (including in manufacturing) has benefited workers with associate degrees or some college education -- 4.1 million since 1991.

These jobs are not isolated to just a few communities. Twenty-three states have increased



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good jobs that pay without a B.A. in blue-collar industries, including Utah where these jobs have more than doubled. Jobs in skilled services have also increased in nearly every state, more than doubling in Arizona, Idaho and Montana since 1991.

We're not saying that B.A.s are overvalued -- the degree is still one of the surest ways to gain a competitive edge in the job market and earn middle-class wages. But we cannot expect every student to attend a four-year college and get a B.A. before they start working.

College debt is at an all-time high, and students are questioning the return on their investment. Many young people will work full-time for years before getting a B.A.; others will never complete a four-year

degree at all. Those without a bachelor's degree shouldn't be consigned to a lifetime of minimum-wage jobs or miss out on a chance to be a part of the middle class.

There's an added concern: Not everyone has equal access to the jobs we're talking about. White workers have the largest share of good jobs that pay without a B.A., but the number is declining. Latino workers have a smaller share, but have seen the most growth, and black workers have the smallest share with only slight growth. Men hold the largest share of these good jobs, 70 percent, a proportion that has been consistent for 25 years. Women, lamentably, have not gained ground in the non-B.A. job market.

We can do better.

The best way to promote Americans' access to good jobs at the sub-baccalaureate level is through policies that strengthen the connections between school and work. Policy-makers should ensure that students are being exposed to career possibilities as early as middle school, and that high school students have greater access to career and technical education, work-based learning programs such as internships and youth apprenticeships, and effective career counseling that helps them get on pathways to good careers.

Across the country, we see states and cities developing innovative new approaches to prepare students for careers in in-demand fields. Colorado has started paid apprenticeships for high school students to gain real-world experience in growing sectors such as advanced manufacturing and technology. New Orleans is developing paid internship opportunities aligned with credentials that have value in the labor market. And 34 states have said they will consider some measure of career readiness in how they hold schools and districts accountable under the Every Student Succeeds Act, the new federal K-12 law.

In postsecondary education and training, leaders should use three strategies to promote the labor market value of such programs. First, they should ensure the transparency of non-B.A. college programs' economic value by investing in consumer information tools -- students should know what college will be worth. Second, governments should encourage the use of outcome-based funding models, such as the Department of Education's gainful employment rule, so that programs are awarded public and private funding based on how their graduates are doing in the workplace. Finally, policy-makers, educators and employers need to better align skills training with the needs of hiring companies. Tax incentives -- such as the tax credits for employer-provided training used by Kentucky, Virginia and several other states -- have helped to improve collaboration.

A college degree will always be an important path to work. But it's not the only path, or even the best one. The more schools, businesses and governments do to make that clear, the better off we'll be.

By Chauncy Lennon and Anthony P. Carnevale
Bloomberg Opinion

Digital Credentials & Digital Pathways Poised To Revolutionize Higher Education

According to a Welsh professor who was once honored by Queen Elizabeth, the Queen never listens to what people say to her while dispensing annual honors like knighthoods. So when it was his turn and the Queen asked him what he did to earn the honor, he replied “I murdered, ma’am, my mother-in-law at breakfast over Rice Krispies.” Per the professor, the Queen’s response was “What a good idea.”

This nutty story rang true to me. On my first visit to the University of Cambridge nearly 20 years ago, I met with the Vice Chancellor who regaled his American (and Canadian) visitors with a story about the Queen, whom he had met on several occasions, most recently when he was knighted. According to the Vice Chancellor, if you meet the Queen at Buckingham Palace, she takes a keen interest in how you got there – specifically your mode of transportation, and particularly if you took the London Underground. She wants to know the station you started at, and where you alighted (British term). And the reason she’s so interested is that she’s never taken the Tube herself.

How one gets from point A to point B is of interest to everyone – not just cloistered queens. It should be of particular interest to colleges and universities; while the destination is typically a degree, how students get there often says more about their education and competencies than the degree itself. It’s self-evident that two different pathways through the same institution or academic program can lead to very different educational outcomes. But colleges and universities have had little ability to track this until now. As Tube maps go, transcripts are pretty lousy.

For a few years, digital credentials or badges have been viewed as the essential innovation here. Digital credentials provide evidence of specific, tangible skills: cognitive, soft, and technical. And when accredited (and especially brand-name) colleges and universities issue digital credentials, it solves the central problem facing digital credentials. As the Wall Street Journal noted in an article about new providers like Udemy, Lynda and Coursera, digital credentials “don’t carry much weight in hiring yet... because managers don’t trust or recognize many of the companies and organizations behind the badges and courses.”

Digital credentials are taking off. Earlier this year, Credly acquired Pearson's Acclaim platform and solidified its market leadership in digital credentialing. (Full disclosure: My company, University Ventures, is an investor in Credly.) To date, Credly has issued tens of millions of digital credentials and demand is growing rapidly, particularly among employers, industry associations, and scale credential providers such as large IT vendors. Issuers seeking to badge specific competencies are either on or joining the Credly platform. Credly already hosts the majority of credentials most commonly requested in job postings, and more than 80% of the top IT certifications found on LinkedIn. But in addition to badging specific competencies, colleges and universities are waking up to the power of digital credentials – not just of road markers, but as ways to create new roads. We're starting to see digital credentials as building blocks of digital pathways that will shape the future of higher education.

In order to complete these digital pathways, students must produce and post work product demonstrating the sets of required skills. Portfolium pathways allow faculty to assess the work product according to pre-populated rubrics. The assessments result in the automatic issuance of badges or road markers, along with the evidence proving the achievement. And completing all of them yields a meta-badge signifying completion

of the pathway. Three additional University of Maryland campuses are launching digital pathways next month for a total of nine.

If majors provide depth or verticality to higher education, Portfolium's skills-based digital pathways are horizontal, cross-cutting current academic offerings. It's a meta-layer that creates a much-needed lattice. Tennessee has bought into the concept of digital pathways. The Tennessee Department of Education will be using Portfolium across its K-20 system. This year, the TNPortfolium platform will utilize the ePortfolium functionality, but the intention is to enable digital pathways across the entire system, starting in 2019-20.

Digital pathways are a response to higher education's crisis of employability. Underemployment is plaguing new college graduates in terms of frequency, acuity, and persistence. Many students are trying to hedge their

Digital credentials provide evidence of specific, tangible skills: cognitive, soft, and technical.

“The narrative of each student’s educational journey is a story that must be told, and digital pathways can be instrumental in helping to tell that story.”

employment bets by double majoring. A Vanderbilt study on double majors found that double majoring was up significantly at almost all colleges and universities, with some schools reporting that as many as 40% of students are pursuing more than one major. But double majoring may be the equivalent of making two one-dimensional bets when what’s needed is a second dimension. Why not combine a degree in computer science with a globalist pathway, or a degree in sociology with a professional pathway? At a time when employers are increasingly seeking strange and wondrous new blends of skills for hybrid jobs, digital pathways are a logical solution.

As pathways evolve, students will be able to chart their own pathways through their universities’ vast intellectual and academic resources. Just as the best way to lay out pathways on college quads is to first see where students walk, enlightened schools will take input from students as they chart their digital pathway map. And with more and more students

motivated by an employment imperative, many of these pathways will lead directly to good first jobs.

But digital pathways won’t only be of use to employers. Digital pathways address the very human need for narrative. They do a better job of telling the story of your educational journey than a flat transcript – a story you’ll not only want to tell prospective employers, but also friends, significant others, your children, and probably also yourself. What did your educational journey mean to you?

Ryan is the Co-Founder and Managing Director of University Ventures. He is the author of *College Disrupted: The Great Unbundling of Higher Education* (2015) and the upcoming *A New U: Faster + Cheaper Alternatives to College*. Prior to UV, Ryan led the Education & Training sector at Warburg Pincus where he was the founding Director of Bridgepoint Education (NYSE: BPI), one of the largest online universities in the United States.

Summary of Digital Badge Provider Comparison at College of the Canyons

As a part of the College of the Canyon's Digital Badge Initiative, the implementation team decided to conduct a side-by-side comparison of the 2 leading Digital Badge Providers in order to make an informed and knowledgeable decision of which platform their institution would use. By requesting in-depth demonstrations from Acclaim and Badgr, College of the Canyons was not only able to visually experience the platform, but they had the opportunity to have meaningful conversations about what their needs were compared to what the provider could offer in terms of functionality and features.

During the demonstrations, the College of the Canyons team was able to specify key issues and essential information that they wanted to implement in conjunction with their Digital Badge Provider. They were able to discuss what they envisioned as best practices for the badge earner, issuer and employer experience. Having the ability to gain insight into the functions and features of both platforms provided clarity of what the team would like to accomplish at College of the Canyons.

Common Core Features

Both Acclaim and Badgr are certified in OpenBadges V2.0 – and are leaders in the Digital Badging Platforms. Acclaim has one goal: “to help individuals move forward professionally. Through Acclaim, job seekers tell the full story of their professional lives with credible information. Employers easily evaluate and verify the qualifications of job applicants. Credentialing bodies, academic institutions and professional organizations ensure their program's integrity online”. Badgr is a free and open source achievement recognition and tracking system used to issue, organize, and share Open Badges. With Badgr, you can create as many Issuers and Badges as you like and there is no limit on the number of badges you can award.

Acclaim and Badgr offer similarities and common features – such as: including a badge creation and authoring tool, as well as having comprehensive and full feature APIs. Both providers create digital badges that include underlying data describing the accomplishment – that can be instantly verified and exported and shared through various platforms. The

main differences between the two providers are the volume of customer base and the distinguishing features they offer.

Customer Base

Acclaim's customer base includes millions of individuals; and enterprise leaders, education institutions, certification providers, and associations like IBM, Microsoft, the American Council on Education, the Association of International Certified Professional Accountants (AICPA), and Southern New Hampshire University. Thousands of colleges use Acclaim and Credly (who Acclaim recently merged with). The vast majority of Badgr's customer-base is rooted in Education. Badgr has over 1,000 active Canvas integrations and there are many schools and organizations not using Canvas that also use their free services at Badgr.io. Badgr is used in over 38 countries around the world. There are over 50 schools in California using Badgr, over half of which are colleges and universities.

Distinguishing Features

Acclaim's focus on Labor Market Insights is a key distinguishing feature, as well as their Industry and Certification partners. Since Acclaim's goal

is to turn learners into earners, "the badge earner can use their badge and its associated skill tags to search for jobs by job title, location, employer, and salary range. And if you find a job you're interested in, you're just a few clicks away from applying".

Whereas, Acclaim focuses on Employment – Badgr's key distinguishing feature is Badgr Pathways – "with Pathways, badges from any Open Badges compliant platform can be stacked together in alignment with competency frameworks. Learners have an easy-to-understand map view of where they are in a curriculum. And just like they can share badges, learners can share their Pathway progress - including the steps that they have not yet completed. This allows a learner to share the directionality of their journey, not simply the credentials they already have".

“Acclaim focuses on the result and merit of the badge. Badgr highlights the learner’s progress along the way – the badge is seen as a motivational tool and a form of praise.”

In Summary

A summary of what the College of the Canyons team learned through the demonstration was: Acclaim focuses on the result and merit of the badge. Badgr highlights the learner's progress along the way – the badge is seen as a motivational tool and a form of praise. As a result of the Digital Badge demonstrations, the team was able to make an informed decision on which provider best suited the needs of their students, faculty and institution as a whole. The team was 100% confident in their decision-making process due to the fact that they

were able to experience each platform as both the issuer and earner, as well as partake in conversations with the digital badge providers about specific issues and requests pertaining to their individual needs as a college. The demonstration process proved to be effective, informative and provided confidence and assurance to the team about their chosen provider to host their college's digital badge program.

For a more detailed comparison of the two vendors, please see the included spreadsheet on the following pages.

	ACCLAIM/CREDLY	BADGR
FEATURES:		
Does the platform include a badge creation and authoring tool?	Yes	Yes
Does the platform include open interfaces that can be readily integrated with existing credentialing processes?	Yes - comprehensive APIs	Full feature API - Can connect to other databases. Can print digital badges
Do the digital badges include underlying data describing the accomplishment, or are they easily reproducible static images?	Yes - underlying metadata	Yes - use open badges - bakes data into badge (not static)
Can the embedded data fields encapsulate the organization's requirements and can they be customized to meet other objectives?	Yes	Generally yes - other "add on" features available - alignments, tags and narratives.
Does the platform track and communicate expiration, as well as cluster continuing education courses that can be leveled up into a certification?	Yes - this can be added through the "Recommendations" column	Expiration dates are forth coming; clustering courses to level up into a certification is possible with Badgr Pathways.
Does the workflow align with the organization's volume and frequency requirements? (Sample workflow outline)	Yes - refer to Acclaim Case studies.	Need more info on what COC is looking for (idea of how many students to start with initially) - they can provide assistance - each college's structure is different.
How is the digital badge profile to be shared and communicated to both the issuer and the industry?	https://www.youracclaim.com/share-badges	Badge sharing features within Canvas and via a user's Badgr backpack. Instant badge verification using Badge-Check.io
Does the platform track badge analytics such as "clicks" and sharing?	Yes	Paid upgrade feature for analytics - currently looking into "clicks". Badger Pro- additional admin control. Can award badges outside on canvas -
Is the Platform -Open Badges 2.0 Certification?	Yes	Yes
API Integration	Yes	Yes
Integrates with Canvas	Credly does - Future Roadmap for Acclaim (in the works)	Yes
Instant Verification of Badge	Yes	Yes
OBI (Open Badge Infrastructure)	Yes	Yes
Ability to export Badges	Yes	Yes
Ability to import Badges from other platforms	No (Future Roadmap feature 2019)	Yes
Offer Badge earners - real time Labor Market insights and job openings.	Yes	No
Pathways Feature	No - college can tailor this through "Recommendations"; Features to connect learning algorithmically as well as through institution-defined pathways are coming in 2019	Yes
Connection to Commercial Certifications	Yes	Not at time of demos

	ACCLAIM/CREDLY	BADGR
After hours support	Yes	Various support packages offered
Mobile App	Acclaim is a responsive web service and plays well on all devices	Yes
PROFESSIONAL SERVICES OFFERED:		
Program Design	Yes	Offer customized services such as software development, badge design and system design consultation.
Visual Design	Yes	
Development & Support	Yes	
Program Launch	Yes	
Onboarding & Training	Yes	Training programs offered - based on needs of college
Strategic & Advisory	Yes	
ADDITIONAL INFORMATION:		
Platform's customer base	Including millions of individuals; and enterprise leaders, education institutions, certification providers, and associations like IBM, Microsoft, the American Council on Education, the Association of International Certified Professional Accountants (AICPA), and Southern New Hampshire University.	Concentric Sky is firmly rooted in EdTech and they make their money developing custom software packages and apps, including Badgr with other systems. They have over 50 schools in California using Badgr, over half of which are colleges and universities. The vast majority of Badgr's customer-base is rooted in Education. Over 1,000 active Canvas integrations and there are many schools and organizations not using Canvas that also use our free services at Badgr.io. Badgr is used in over 38 countries around the world.
Educational entities using Product	Thousands of colleges use Credly and Acclaim	Over 50 schools in California using Badgr, over half of which are colleges and universities
Additional Features	Labor Market Insights and connections to related jobs	Pathways Feature & Badger Pro
Additional Comments	Industry & Certification Partners	With Badgr, you can create as many Issuers and Badges as you like and there is no limit on the number of badges you can award.
Resources	https://cdn2.hubspot.net/hubfs/2629051/Credly_Employer_Engagement_Field_Guide.pdf?submissionGuid=7c2520db-26c6-472c-bbf8-f10fa9e2529d	https://www.concentricsky.com/articles/detail/introducing-badgr-pathways
Case Study	https://www.cccs.edu/wp-content/uploads/documents/CCCS-Digital-Badging-Taskforce-Whitepaper-11.12.14.pdf	https://www.concentricsky.com/articles/detail/community-badges-for-engagement-and-learning
Website	https://www.youracclaim.com/	https://info.badgr.io/
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Faculty Development & Digital Credentials



Dr. Susan Manning is the Chief Success Strategist at Credly. Susan strategizes with clients on how to design and implement amazing digital credential systems.

Having worked in this space for nearly 20 years, this is a good time for me to reflect on significant influences in faculty development in recent years. I have focused my comments in three broad areas.

Before we get to those trends, it's worth remembering that the quality of faculty is often what makes or breaks the educational experience for learners. Faculty who are well versed in pedagogy and tools and who have the heart for the work change the world. Investing in one's faculty should be a priority for both the institution and the individual. The following trends give a glimpse as to why.

Accessibility, Inclusion and Open Educational Resources (OERs)

Without question, social and political trends have moved us toward inclusion. Faculty are expected to create content that is accessible to all. It's not only about Section 508 and legal requirements but making instruction accessible to all types of learners. This applies to on-ground and face-to-face instruction, as well as online learning. Universal Design for Learning (UDL) has opened us to the possibilities that there are pedagogies and instructional strategies that benefit students with disabilities, and those without, equally.

Furthermore, creating an inclusive and safe environment, which is one of the guidelines in UDL, drives a good deal of what happens in higher education environments today. Although diversity training may have been prevalent in the 1980's, we've come a long way toward understanding the many different nuances of who are students are. This includes gender identification, immigrant status, socioeconomics and survivorship in many forms.

Open Educational Resources (OERs) were not available in the recent past, and yet these also impact faculty development. For example, California, Oregon, Texas and Washington are leading the way toward affordable textbook adoption. The Washington State Board for Community and Technical Colleges (SBCTC) and the Washington Community & Technical Colleges Student Association (WACTCSA) partnered to conduct a survey of students. One key finding: “The cost of course materials appeared to have influence on students’ decisions on their enrollment to varying degrees. A significant number of students have borrowed the required materials from someone else (57%), many have taken fewer classes (37%) or gone to class without required materials (44%).” Faculty need resources to help them select (and author) appropriate materials for course creation and to help students manage the challenges.

Online Everything and Pedagogy

No one can argue the growth of online education in the past 15 years. Even traditional faculty who do not teach online are likely to maintain course materials and resources in a centralized course management system. At the very least, faculty interact with technology by way of entering grades in a student information system, or creating their own handouts (remember the days of departmental secretaries typing up resources for professors?).

For those teaching online, the need to reskill and stay abreast of technology is a constant force. Knowing how to shift to learner-focused instruction and which pedagogies are most successful are hallmarks of a well-trained faculty.

Our Students Have Changed

We knew the demographics of students were going to change. We saw adults return to school as online learning became more popular. We anticipated more graduate students when the economy got rough and job seekers experienced greater competition. However, we may not have been ready for such a dramatic change in student communication styles. Before we fully understood Millennials, Generation Z arrived. Their communication patterns and tools are quite different from what we’ve experienced in higher education previously. Faculty need to know how to reach all learners, and this will continue to be a challenge as technology evolves.

So where do digital badges come in?

I’ll be honest, faculty development and badging could be completely separate issues. Innovative institutions that value a highly skilled faculty offer many forms of professional development. It may be an in-house, hands-on session or a subscription to a service that reaches beyond the campus. Regardless, a portable, digital credential system can be a tool for recognizing faculty who are engaged and committed.

As a faculty member, I was proud to display my latest “achievement” as I learned new strategies and concepts. My three-month-old badge probably said more about me than the 30 year old doctorate to my students, as it validated that I wasn’t teaching stale information, but kept abreast of topics that were relevant to them.

The bottom line is that institutions that support and offer faculty development programs need a way to create a system of recognition. Badges can do that. Badges can recognize achievement and competencies in a portable and transparent way, thereby informing other stakeholders (e.g. students, parents, alumni) of the commitment to a quality experience for the student.



Employers Eager to Hire Try a New Policy: ‘No Experience Necessary’

“Inexperienced job applicants face better odds in the labor market as more companies drop work-history and degree requirements.”

By Kelsey Gee

Companies are lowering the bar on degree and work-history requirements for many jobs.

Across incomes and industries, the lower bar to getting hired is helping self-taught programmers attain software engineering roles at Intel Corp. and GitHub Inc., the coding platform, and improving the odds for high-school graduates who aspire to be branch managers at Bank of America Corp. and Terminix pest control. “Candidates have so many options today,” said Amy Glaser, senior vice president of Adecco Group, a staffing agency with about 10,000 company clients in search of employees. “If a company requires a degree, two rounds of interviews and a test for hard skills, candidates can go down the street to another employer who will make them an offer that day.”

Ms. Glaser estimates one in four of the agency’s employer clients have made drastic changes to their recruiting process since the start of the year, such as

skipping drug tests or criminal background checks, or removing preferences for a higher degree or high-school diploma.

Cutting job-credential requirements is more common in cities such as Dallas and Louisville, where unemployment is lowest, Ms. Glaser said, as well as in recruiting for roles at call centers and warehouses within logistics operations of retailers such as Walmart Inc. and Amazon.com Inc. In the first half of 2018, the share of job postings requesting a college degree fell to 30% from 32% in 2017, according to an analysis by labor-market research firm Burning Glass Technologies of 15 million ads on websites such as Indeed and Craigslist. Minimum qualifications have been drifting lower since 2012, when companies sought college graduates for 34% of those positions.

Long work-history requirements have also relaxed: Only 23% of entry-level jobs now ask applicants for



three or more years of experience, compared with 29% back in 2012, putting an additional 1.2 million jobs in closer reach of more applicants, Burning Glass data show. Through the end of last year, a further one million new jobs were opened up to candidates with “no experience necessary,” making occupations such as commerce analyst, purchasing assistant and preschool teacher available to novices and those without a degree.

It all marks a sharp reversal from the immediate aftermath of the financial crisis, when employers could be pickier. Economists say job requirements were harder to track then, because many companies didn't post positions publicly and many résumés weren't delivered electronically.

Now, recruiters say, the tightest job market in decades has left employers looking to tamp down hiring costs with three options: Offer more money up front, lower their standards or retrain current staff in coding, procurement or other necessary skills. Rodney Apple, president of SCM Talent Group LLC in Asheville, N.C., said if companies won't budge on compensation, experience or education requirements, he walks away. “We tell them, ‘I'm sorry, but we can't help you fish for the few underpaid or unaware applicants left out there,’” he said. SCM finds workers for dozens of small and midsize companies seeking supply-chain managers and logistics and warehouse operators across the U.S. Mr. Apple said talent shortages are

more extreme than he has seen in nearly 20 years of recruiting. Average wages have climbed steadily in the past year, but rising prices of household goods have made those pay raises less valuable to workers, keeping pressure on employers to increase salaries or re-evaluate their target hire.

To attract more entry-level employees, toy maker Hasbro Inc. divided four marketing jobs, which it previously designed for business-school graduates with M.B.A.s, into eight lower-level positions. The new full-time roles included a marketing coordinator, retail-planning analyst and trade merchandiser, all involving more routine activities supporting higher-level staff in the division. Hasbro hiring managers originally sought candidates with a two-year degree for the jobs but ultimately dropped any college requirement, a spokeswoman said. The Pawtucket, R.I. company received more than 100 applications and hired nine people. The new shift, called “down skilling,” bolsters a theory articulated by Alicia Modestino, a Northeastern University economist: When more people are looking for work, companies can afford to inflate job requirements to find the best fit—and did so as unemployment spiked in 2008.

As college graduates and mid-career professionals raised their hands for jobs as hotel managers and bookkeepers after the recession, hires with more

qualifications took a larger share of positions normally filled by the 75 million U.S. workers who lack a college degree.

After the recession, Terminix raised the bar for over 1,000 pest-control branch- and service-manager positions to require a two-year degree or a bachelor’s degree. In January, it reversed course and made degrees “preferred” but not mandatory, said Betsy Vincent, senior director of talent acquisition.

Anthony Whitehead worked for five years as a Terminix branch manager in Florida before he was promoted to regional director in early July. That position now accepts candidates with college degrees or equivalent experience, helping Mr. Whitehead clinch the role despite his earlier decision to enter the military instead of college. Mr. Whitehead, 35 years old, said his approach to jobs requiring a degree has been “apply anyways if I have the right experience, and then have the education conversation if I need to,” he said, acknowledging his luck in working for companies like Terminix with flexible requirements.

A lot of employers are loosening college requirements even as the proportion of Americans with a bachelor’s degree continues to rise. Bank of America Corp. currently has 7,500 job openings world-wide and fewer than 10% require a degree, said spokesman Andy Aldridge. Mr. Aldridge said a surprising number

of jobs could be filled by non-graduates, including most of the bank's tellers and employees handling customer-service and fraud-protection calls from cardholders.

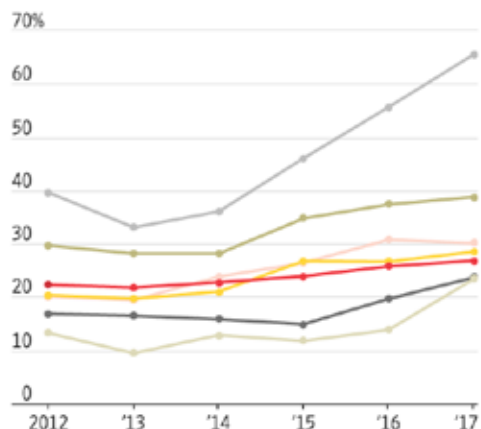
In June, the bank unveiled plans to hire 10,000 more retail workers from low-income neighborhoods over the next five years, with or without degrees, said Chris Payton, head of talent acquisition.

Not every company is relaxing requirements: Economists say positions that require high levels of technical expertise, such as information security, still need advanced knowledge.

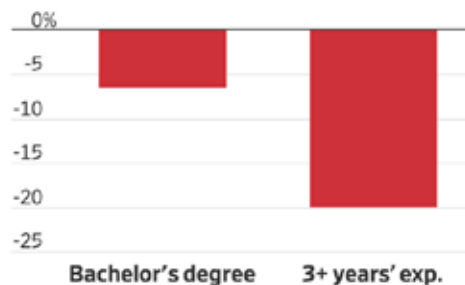
The tech industry has been quick to dismiss credentials like a bachelor of arts degree as irrelevant, especially in emerging fields such as data analytics, where demand for talent has risen faster than universities can churn out new graduates.

'No Experience Required' job postings

- All
- Warehouse worker
- Mechanic
- Preschool / Childcare teacher
- Logistics manager
- E-Commerce analyst
- Medical transcriptionist



Change in the number of job postings between 2012-18* that require college or prior work history



*2018 is from Jan. 1-June 30 only
Source: Burning Glass Technologies

California Mayors Cyber Cup Creates Partnerships Between Government, Education, and Industry for Cybersecurity Career Pathways



What's the best part about winning a competition? The trophy, of course. But in the case of the California Mayors Cyber Cup, the winning teams took just as much pride in giving the trophy as they did in receiving one.

The California Mayors Cyber Cup are regional competitions across California that allow high school cyber teams to compete for their city to bring home the coveted perpetual trophy. More than 160 middle and high school students from across California and across the socioeconomic spectrum participated last spring.

The competitions are organized by the California Cyberhub and principally funded by the California Community Colleges, Information and Communication Technology / Digital Media sector. They are a product of collaboration between business, government, and educational partners.

Much like the students collaborating to solve cyber challenges, these groups are working together to ensure that students from all backgrounds have access to the tools that will prepare them to fill the demand for cybersecurity workers in California.

The winning teams from each event went on to compete in the statewide California Cyber Innovation Challenge at Cal Poly San Luis Obispo.

Keith Tresh, commander of the California Cybersecurity Integration Center in the California Governor's Office of Emergency Services, said he was impressed by the students he saw at the event and that the need for well-trained cybersecurity professionals has never been greater.

"It's really cool to see that this generation is looking at this kind of work and excelling at it," Tresh said.

“Cybersecurity is an insurance policy, and people are now realizing that if you don’t have that insurance policy in place, it can have a dramatic impact on a company.”

As the name suggests, the California Mayors Cyber Cup includes buy-in from mayors across the state. Rocklin Mayor Ken Broadway said it’s critical for the government to support cyber competitions alongside local business and education partners.

“Having Sierra College host the Greater Sacramento California Mayors Cyber Cup in Rocklin was an honor,” Broadway said. “Tech skills are in high demand and preparing our students for high-paying careers that meet the cyber needs of business and government through an innovative program like this is imperative.”

Cybersecurity education is a priority for the California State Assembly, with select members as key partners with the California Cyberhub in creating and promoting events like the California Mayors Cyber Cup.

Assemblyman Kevin Kiley attended the California Mayors Cyber Cup event in Sacramento and said the event helped make the community aware of cybersecurity threats and how to solve them through education and collaboration.

“The California Mayors Cyber Cup fosters the next generation of cybersecurity professionals by bringing together students with leaders

California Mayors Cyber Cup Results

Sacramento

1. Jesuit High School Team R-4808N, Carmichael
2. Monterey Trail Team 3, Elk Grove
3. Naval Sea Cadets, Sacramento

Orange County

1. Troy High School InSecT DesTROYers, Fullerton
2. Troy High School Team 1, Fullerton
3. Valencia High School, Valencia

Inland Empire/Desert

1. M.L. King High School Jr. NROTC Team 1, Riverside
2. M.L. King High School Jr. NROTC Team 2, Riverside
3. Canyon Springs High School Team 1, Moreno Valley

Central Valley

1. Turlock High School, Turlock
2. CART, Clovis
3. Dinuba High School, Dinuba

Assemblyman Kevin Kiley claims the MAYOR'S CUP makes communities aware of cybersecurity threats and how to solve them through education and collaboration.

in government and industry,” Kiley said. “This collaborative approach ensures a holistic understanding of security challenges while promoting community wide awareness of cybersecurity issues.”

The California Cyberhub, one of synED’s initiatives, is supporting this effort by serving as a central resource for training, events, and other best practices in cybersecurity education.

To build on the momentum created by the California Mayors Cyber Cup and ensure that students remain engaged with cybersecurity, the California Cyberhub promoted cyber camps and competitions

held throughout the summer. As a new school year begins, cyber competitions will continue leading up to the 2019 California Mayors Cyber Cup in March.

Teachers, government officials, parents, and other community members are encouraged to get involved with this important effort to help fill the ever-growing demand for skilled cybersecurity professionals throughout California.

To learn more about the California Mayors Cyber Cup and the California Cyberhub, visit ca-cyberhub.org.



Virtual Labs as a Service (LaaS) for California's South Central Coast

A proof of concept is underway in the South Central Coast Region (SCCRC) to embrace and actuate the California Community College Chancellor's Strong Workforce Program objectives to increase enrollment and facilitate more completions. Stakeholders throughout the region are working together to bring cloud-based labs to eight community colleges through design by the regional director of Information and Communication Technologies and Digital Media (ICT-DM) in collaboration with synED and Cal Poly San Luis Obispo's new Digital Transformation Hub. The region spans Northern Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties.

This effort allows students to access labs for a variety of Information Technology (IT) and cybersecurity classes at any time and from anywhere. It also significantly reduces faculty workload by implementing the Learning Tools Interoperability (LTI) integration with Instructure's Canvas learning management system, used by all eight colleges, and making labs available for collective use. This, in turn, allows faculty to serve more students and increase the number of trained professionals in the workforce to fill the thousands

of open IT positions in California and across the United States.

Embarking on projects like this represents an opportunity for community colleges to combine financial and intellectual capital to solve shared problems in a cohesive and mutually-beneficial way. Further, according to Herbert and Wigley (2015), the development of a student's experience (related to computer networking skills, including networking security) must address both problem-solving and soft skills (such as teamwork). Virtual labs integration within coursework achieves this goal.

Background

After considering extensive research, Kam, Gogolin & Emerick in 2014 determined that "Cybersecurity education requires learners to acquire knowledge through hands-on activities and authentic learning, whereby real-life scenarios are investigated and acted upon."

Traditionally, students have practiced computer networking and security skills at a centralized physical lab (and equipment) or a limited virtual lab appliance at their educational institution. Physical

labs and college-based data centers have high costs associated with the maintenance and repair of the hardware and software. Further, researchers noted that the cost limitations for a physical lab and college-based data center should include personnel, electricity, and other physical environmental costs.

An external service providing a turn-key virtualized environment that is identical to the corresponding physical environment will decrease the need for high-cost physical labs, yet provide open virtualized environments that let students experience the real-life scenarios that so critical in educating for technical careers. Virtual lab platforms must serve students with on demand, 24x7x365, access to a virtual lab environment from anywhere there is an internet connection. Virtual labs must also represent the full functionality of a real-world setting.

Cini and Krause (2014) suggested that higher education (including community colleges) will discard the “assembly model of one-size-fits-all” used over the past 150 years, due to online educational environments, which include virtualized environments.

The re-set of discarding the ‘sage on the stage’ to the educator as collaborator discards the typical silos of higher-education learning, and will further

redefine higher education in coming years because of the following significant aspects (Cini & Krause, 2014):

- Demographic trends: Enrollments will soften until at least 2020, necessitating institutions to seek creative ways to ensure that courses survive at institutions by using online and virtualized environments.
- Tuition cost: Students cannot afford higher tuition and will become more resistant to increased costs. As a result, they will become smarter shoppers for relevant education, which will have an impact on how colleges offer courses to students, including online and virtualized courses.
- Continued proliferation of Internet-technologies: Accelerating and converging technology trends will provide new student training opportunities that students will progressively be required by employers, especially in the IT field.
- Trends towards competency-based education: Competency-based education will allow students to leverage their prior experiences to attain their desired certificate and degree goals in an adaptive manner, suggesting that courses must offer real-life case scenarios.

Project History

The groundwork for the SCCRC virtual labs project began from observing other regional implementations of shared labs that were hosted on a designated college campus. Although a valid solution, campus-hosted labs are constrained by campus hardware investment, in-house technical support, third-party software licensing at individual colleges, limited support hours and campus security burden.

The SCCRC region desired to approach Labs as a Service (LaaS) where there is no college physical location overhead, 24x7 support for faculty and students, third-party licensing bundled within the lab course, and a service level agreement (SLA) in place for availability and security.

Paula Hodge, Regional Director and Deputy Sector Navigator for ICT-DM in the South Central Coast Region, came to that role after a successful career as an IT director in the corporate world. She saw an opportunity to use cloud technology to overcome the “build it over buy it” preference that tends to be prevalent across higher education.

Hodge learned about Cal Poly’s Digital Transformation Hub (DX-Hub), a new collaboration with Amazon Web Services (AWS) designed to help nonprofit organizations solve technical challenges

through innovation. The virtual lab project proved to be a perfect initial project for the group to take on.

The project is being coordinated by synED, a non-profit organization dedicated to promoting innovation in education at all levels, through research and providing higher education professional services to facilitate the development of new models of curriculum, industry alliance, service, and delivery.

Jerry Buckley, Chief Instructional Officer at College of the Canyons, sees the conversations happening around this project as reminiscent of the discussions that took place as the first computer labs were being built in the 1990s. Virtual labs provide a great opportunity to completely reimagine how students engage with technology on and off campus.

“This opens up educational resources to students and to faculty, who now have access 24/7. You couldn’t say that five years ago,” Buckley said. “There will still be computer labs, but they will become more specialized and represent a different set resource to a different group of students.”

Process

The DX-Hub’s implementation process is modeled after Amazon’s Customer Obsession, Design Thinking, and The Working Backwards Process. This called for the formation of a “two-pizza team,” having

no more than 10 members that work with relative autonomy that could be nimble and make decisions quickly to rapidly innovate.

The core group met for an initial half day “customer empathy” session followed by an all-day intensive planning session in February 2018 to define what the final solution would look like. This, in turn, defined the project’s goals and worked as a guide to develop a plan for evaluating and selecting a virtual lab vendor.

Focusing on the finished solution allowed the team to delve into the heart of the problem they were trying to solve by selecting appropriate technology, rather than choosing a technology first then finding a problem for it to solve. Free from bureaucratic constraints, the team was able to create a vision for better serving students, enabling faculty while still being institutionally and financially sound.

The two-pizza project team included:

- Paula Hodge, ICT-DM Deputy Sector Navigator, South Central Coast Region
- Ed Garcia, IT faculty, Moorpark College
- Mike Rose, Chief Technology Officer, Ventura Community College District
- Jim Bowen, IT faculty, Antelope Valley College
- Rick Shaw, Chief Technology Officer, Antelope Valley College

- Angel Cardenas, IT Faculty, Santa Barbara City College
- Scott Young, Director/CFO, synED

Following the DX-Hub process, synED provided research to locate vendors that most closely aligned with the team’s design. Three top vendors were identified through a request for proposal (RFP) process. In addition to a demonstration, each vendor provided evaluation access to the team for unscripted testing and evaluation of the service. This process took place over the course of two months – lightning speed in higher education.

Practice Labs was selected as the winning vendor in May 2018. Practice Labs stood apart from its competitors because of its integrations with Canvas and other learning management systems. LTI integration allows for seamless communication between systems and gives students access to all of the tools they need in one place with a single sign-on. In addition, it substantially saves time for faculty in managing their classes and grading students work.

Team members appreciated the structure of the process and the speed with which it enabled them to make decisions, particularly when it came to evaluating vendors and making a final selection. Mike Rose, Chief Technology Officer for the Ventura Community College District, said the vendor

selection process helped solidify the plan put in place during the planning sessions.

“It was one of the times we felt like we made the most movement and really helped us get our arms around what we were going to do,” he said.

Outcomes

Early results from the virtual labs proof of concept are positive. The pilot project will continue throughout the coming academic year. If this proof of concept is successful, the virtual lab service can be expanded to include other sectors and K-12 schools.

Throughout the testing and early implementation process, Practice Labs has proven to be much more than a service provider. The company has existing relationships with CompTIA, Microsoft, Cisco, and VMWare and allows students to earn certifications alongside their classroom instruction.

The organization has provided excellent support to faculty throughout the proof of concept phase. Like any new software implementation, things did not go perfectly during testing, but the project team felt that Practice Labs proved to be a business partner and not just a vendor. Their virtual labs solution aligns with creating virtual Labs as a Service (LaaS) and any challenges that have been encountered thus far, are being addressed without additional cost.



Community College IT student accessing a class lab from a coffee shop.

Although the project is still in its initial phases, the team can already see the potential for breaking down the barriers that divide colleges with resources from those without. Virtual labs will put everyone on the same playing field. The project also shows the power that can be realized when community colleges work together to solve challenges that are greater than the sum of their parts.

Ed Garcia, an IT faculty member at Moorpark College, began using virtual labs in his courses this summer and has already been able to increase his class capacity from 25 students to 40 without adding any additional lab space, hardware and work to his already full plate. He estimates that his workload will be reduced by half, which will allow him more time to focus on training adjunct

instructors and developing the curriculum for a new associate degree in cybersecurity.

“I really believe this is a new digital divide because the training is at a whole new level of sophistication and student confidence and experience will be off the charts,” Garcia said.

Utilizing a virtual lab service has the potential to bring equality of access to community colleges across the region. Smaller colleges and those in economically-disadvantaged areas can offer their students first-rate opportunities without incurring any additional overhead. Since access to labs is browser-based and requires relatively low-cost computers, colleges may also be able to shift funds from maintaining physical computer labs into purchasing inexpensive laptops, tablets, or other devices that students can use to complete virtual labs – something that will benefit students who are not able to purchase these devices on their own.

Mark Peterschick, an IT instructor at Allan Hancock College, said virtual labs provide a critical missing piece necessary for students to complete A+ certification. Students can work at their own pace and gain the skills necessary to complement what they learn in the classroom and ultimately become workplace-ready technicians.

As ironic as it might seem, virtual labs may provide more real-world experience than physical labs due to the changing nature of IT work. Hodge has seen this transformation first hand over the course of her career.

“It requires significant overhead and capital expense to provide entry level training so that someone knows what a router looks like,” Hodge said. “But when you go into the real world, most likely an individual won’t see what a router looks like; they’ll manage it virtually.”

Next Steps

The proof of concept in the South Central Coast Region will continue through the end of the 2018-19 academic year. If successful, the project team will begin the RFP process for a long-term production contract for all eight of the region’s colleges.

One of the barriers to getting there is convincing faculty at those colleges that this change, while it will require extra work from them up front, will lead to the better outcome for their students. Jim Bowen, an IT faculty member at Antelope Valley College and member of the project team, can appreciate this hesitation but thinks the benefit to students in terms of convenience and flexibility is well worth it.

“They might be frustrated if it doesn’t work perfectly the first time or embarrassed if they have to learn something new,” Bowen said. “When things get tight, people don’t drive to community colleges and our enrollment declines. With tools like this, students can do their classes and labs from home, from Starbucks, or wherever they are.”

Hodge would like to make virtual labs available to high school students to further expand the pathway toward IT and cybersecurity careers. Placing labs in the cloud removes the burden of hosting them from resource-strapped schools and provides access to students who might not have been able to engage with them otherwise. This is important for ensuring that underserved communities have access to the tools necessary to fill the IT job openings throughout California.

Beyond high school students, Hodge sees virtual labs as a tool to help anyone who is looking to

sharpen their IT skills in a convenient and accessible way. If successful in IT labs, virtualization technology can be used for everything from Quickbooks labs for business students to anatomy labs for nursing students.

“One of my roles as a deputy sector navigator is to bring in the tools that the faculty need as they educate someone on new technical skills and competencies,” Hodge said. “I am in awe of the faculty and want to provide all of the tools they need to serve students, employees, and employers.”

Additional Information

For more information on the virtual labs project, contact:

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About South Central Coast Regional Consortium

There are eight-member South Central Coast Regional colleges whose service areas encompass the south central coast of California including all of Ventura County, north through Santa Barbara County, to San Luis Obispo, east to the northern end of Los Angeles County in Santa Clarita and onward into the Antelope Valley, over 9,000 total square miles. Home to over 2.2M people, this region is characterized by small and mid-sized metropolitan communities and expansive rural areas.

South Central Coast Regional Consortium Member Colleges & CEOs

Allan Hancock College, Santa Maria
(Kevin G. Walthers, Ph.D.)

College of the Canyons, Santa Clarita
(Dr. Dianne G. Van Hook)

Antelope Valley College, Lancaster
(Edward Knudson)

Moorpark College, Moorpark
(Luis P. Sanchez, JD, LL.M.)

Cuesta College, San Luis Obispo
(Jill Stearns, Ph.D.)

Oxnard College, Oxnard
(Cynthia E. Azari, Ed.D.)

Santa Barbara City College, Santa Barbara
(Dr. Anthony E. Beebe)

Ventura College, Ventura
(Dr. Damon Bell, Interim President)

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Do More in Less Time with Compression Planning[©]

“Have you ever heard of ‘Death by Planning Session?’ That’s when committees take 6 weeks to come up with a solution and 18 months later they’re still at it.”

The 7-step visual Compression Planning system helps leaders who feel like they are drowning in an ocean of quicksand due to all the useless, boring and unnecessary planning sessions and meetings they get trapped in. (<http://www.mcnellis.com>)

Imagine that you could spend two hours in a planning meeting and come away with a project plan and a communication plan. Sounds too good to be true, right? Compression Planning, a style of project management, makes it possible and synED is ready to bring it to California’s Community Colleges.

Jerry McNellis created Compression Planning in 1974 after spending years observing efficient boards and advisory groups across business, government, and education. He knew there had to be a better way for these groups to accomplish their work without losing time or money in the process.

The Compression Planning method involves a two-hour, highly-facilitated planning session lead by a certified facilitator. The facilitator uses storyboards

to encourage visual thinking and discourage people from getting bogged down in language. The session also covers who needs to know about each step of the project plan — something that groups often overlook during the planning process.

SynED Project Manager Lee Yarborough attended a Compression Planning training session over the summer and is excited about what the system can do for higher education, which is notorious for scope creep and committees that are too large to be productive.

“You walk away with a detailed action plan and a communication plan that would have taken six months to plan in other systems,” Yarborough said.

Compression Planning sessions are restricted to 8-12 attendees, which forces everyone in the room to participate and share their ideas and work through differences of opinion quickly to reach consensus and move on to the next phase of the planning process.

Compression Planning helps key leaders leverage their collaborative time so they make better decisions faster - which leaves more time for strategic thinking and better results.

Yarborough will use Compression Planning to help the Inland Empire create a plan for bringing virtual labs to its community colleges, much like the South Central Coast Region is currently doing.

“We were asked to bring a real project with us to the training, so I took the Inland Empire virtual labs project,” Yarborough said. “Now that I’ve finished the training, I can’t wait to get started and put Compression Planning to use.”

Compression Planning has been used across higher education from large public institutions to private liberal arts colleges. In a testimonial on the Compression Planning website, Morris Beverage, President of Lakeland Community College in Ohio said:

“We were hired by an area university to help with a problem they were stymied with. They tried to develop a specific program for two years, but they kept going around in circles.

With one Compression Planning session, they were finally able to generate action steps that they had struggled to come up with for two years.” Pamela Jira of Zane State College in Ohio used Compression Planning to solve a problem that is familiar to colleges across the country:

“Sometimes faculty members have an idea of what they want to do, and they’re not really sure how to make it specific. How do they make it into a form that we can apply for a grant and fund their idea? One group I did Compression Planning with involved four cooperating organizations who wanted to help girls get more interested in science. We received a four-year grant for \$800,000.”

For more information on Compression Planning, visit mcnellisco.com or contact: Yarborough at lyarborough@syned.org.

GRIT

The Power of Passion and Perseverance

“... persuasive and fascinating ...”

Grit: The word has mouth feel. It sounds like something John Wayne would chew on. Who wouldn't want grit? Wusses. Forget 'em.

Angela Duckworth, the psychologist who has made “grit” the reigning buzzword in education-policy circles, would surely recoil at any association between it and Wayne's outmoded machismo. Duckworth is a scholar you have to take seriously. She has been featured in two best-selling books (“How Children Succeed,” by Paul Tough, and “The Power of Habit,” by Charles Duhigg), consulted by the White House and awarded the MacArthur “genius” fellowship for her work on this obviously desirable trait. At the University of Pennsylvania's Duckworth Lab, grit is gender-neutral. It's self-control and stick-to-it-iveness. The two big ideas about grit that have made Duckworth famous are first, that it predicts success more reliably than talent or I.Q.; and second, that anyone, man or woman, adult or child, can learn to be gritty.

Nonetheless, the word has a cowboy kick, and that's not necessarily a bad thing. It harks back to America's pioneering days. It took grit to light out for the territory, as Huck Finn might have said. The notion that talent is born, not made, is the modern-day version of the caste system those Americans were fleeing. The cult of genius reinforces passivity and dampens ambition. “If we think of genius as something magical, we are not obliged to compare ourselves and find ourselves lacking,” Nietzsche wrote in a passage quoted by Duckworth in her new book, “Grit: The Power of Passion and Perseverance.”

— Malcolm Gladwell, New York Times bestselling author of The Tipping Point, Outliers, and Blink and degree requirements

Giving character training to the underprivileged will not level America's increasingly Dickensian inequalities, of course, but Duckworth's ideas about the cultivation of tenacity have clearly changed some lives for the better.

Grit, on the other hand, is egalitarian, or at least a less class-based indicator of future accomplishment than aptitude. Measurable intelligence owes something to genetic endowment but also depends heavily on environmental inputs, such as the number of words spoken to a child by her caregivers. The development of grit does not rely quite so much on culturally specific prompts. Moreover, grit appears to be a better engine of social mobility.

Giving character training to the underprivileged will not level America's increasingly Dickensian inequalities, of course, but Duckworth's ideas about the cultivation of tenacity have clearly changed some lives for the better. Duckworth has worked closely with influential figures in the education-reform movement, like the founders of the KIPP (Knowledge Is Power Program) charter school network, which now has 183 schools in 20 states. She helped them devise the tough-love or "no excuses" pedagogical approach increasingly common among charter schools, which holds students to high standards and employs stern disciplinary methods meant to cultivate good habits. Thanks to her, social and emotional education appears on public school lesson plans throughout the country. There's even

a movement to test schools on how well they teach these noncognitive skills, as they're called, although it must be said that Duckworth strongly opposes this. She argues that any test of character worth giving is too subjective to standardize, and too easy to game.

In this book, Duckworth, whose TED talk has been viewed more than eight million times, brings her lessons to the reading public. My guess is you'll find "Grit" in the business section of your local bookstore. As marketing strategies go, it's not a bad one, although the conventions of the self-help genre do require Duckworth to boil down her provocative and original hypotheses to some rather trite-sounding formulas.

If this book were a Power Point presentation, as it surely has been, the best slide would be the two equations that offer a simple proof for why grit trumps talent: $\text{Talent} \times \text{effort} = \text{skill}$. $\text{Skill} \times \text{effort} = \text{achievement}$. In other words, "Effort counts twice." My grandfather, an immigrant, knew this. He would have called grit Sitzfleisch. (Malcolm Gladwell, in his best-selling "Outliers," called it the "10,000-hour rule.") Moreover, you don't just need Sitzfleisch. You need focused Sitzfleisch. Thirteen-year-old Kerry Close logged more than 3,000 hours of practice to become



Angela Duckworth

Author of *GRIT: The Power of Passion and Perseverance*

the National Spelling Bee champion, but that wasn't the reason she won. Close's competitive edge came from her fearless approach to practicing. At her tender age, she had the guts to identify and fix her mistakes, over and over again.

I'm a person who takes to her bed when forced to confront her own failures, so I was daunted by Close and the other indefatigable people — "grit paragons" — profiled by Duckworth: West Point cadets who endure a grueling rite of initiation; a woman who overcame cerebral palsy to become one of the most successful comics in Britain. I got the lowest possible score on Duckworth's Grit Scale, and dropped right onto my fainting couch. But there is hope for me yet. Duckworth offers what amounts to a four-step program, the last step of which is to overcome pessimism by cultivating what her fellow psychologist Carol Dweck calls a "growth mind-set." I just have to

complete Steps 1 through 3 first: (1) identify a burning interest; (2) practice it a lot; and (3) develop a sense of higher purpose, by which Duckworth means I must believe that my passion will improve the world.

Step 3 strikes me as the least plausible of the four, even though Duckworth offers evidence that people who think their pursuits contribute to the well-being of others are more likely to meet their "top-level goals." Success is heartwarming, but does not always make the world a better place. One paragon of "purpose-driven grit" is Kat Cole, the child of a cash-strapped single mother, who rose from a waitressing gig at Hooters to become president of the Cinnabon bakery chain. Cole's Horatio Algeresque tale may inspire readers, but her philosophy of giving back will not awaken anybody's altruistic instincts. "If I could help companies, I could help brands," she asserts. "If I could help brands, I could help communities and countries." This is corporate sloganeering, not an ethical stance. At 880 calories and 36 grams of fat apiece, Cinnabon buns help no one.

The feebleness of this example exposes a flaw in this book and, to a lesser degree, in Duckworth's doctrine: A focus on grit decouples character education from moral development. Duckworth never questions the values of a society geared toward winning, nor does she address the systemic barriers to success. She is aware of the problem, and includes the necessary to-be-sure paragraph. "Opportunities — for example, having a great coach or teacher — matter

tremendously,” she writes. “My theory doesn’t address these outside forces, nor does it include luck. It’s about the psychology of achievement, but because psychology isn’t all that matters, it’s incomplete.” She concludes with a section praising the writer and MacArthur fellow Ta-Nehisi Coates for being “especially gritty,” though I wonder how Coates, who has written extensively about structural racism in America, might feel about being used to exemplify her up-by-the-bootstraps ethos.

You can’t blame Duckworth for how people apply her ideas, but she’s not shy about reducing them to nostrums that may trickle down in problematic ways. On the one hand, some of the “no excuses” charter schools that her research helped to shape have raised math and literacy scores among minority and poor students. On the other hand, a growing number of scholars as well as former teachers at those schools report that some of the schools, at least, feel more like prisons than houses

of learning. Schools that prize self-regulation over self-expression may lift a number of children out of poverty, but may also train them to act constrained and overly deferential — “worker-learners,” as the ethnographer Joanne W. Golann calls them. Meanwhile, schools for more affluent children encourage intellectual curiosity, independent reasoning and creativity. Ask yourself which institutions are more likely to turn out leaders. Perhaps an approach to character training that’s less hard-edge — dare I say, less John Wayne-ish? — and more willing to cast a critical eye on the peculiarly American cult of individual ascendancy could instill grit while challenging social inequality, rather than inadvertently reproducing it.

Judith Shulevitz, a contributing opinion writer at The Times, is the author of “The Sabbath World: Glimpses of a Different Order of Time.”

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The quarterly review of innovative applications in alternative education

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