



EXCELLENCE ★ INNOVATION

Interim Superintendent: Matt Doyle, Ed.D.

Board Members: Rich Alderson • Jim Gibson • Carol Weise Herrera • Rosemary Smithfield • Cipriano Vargas

September 27, 2017

Dear Sir or Madam:

On behalf of Vista Unified, I am writing to thank you for your participation in the Talent Cities Program. During the 2016-17 pilot over 120 Vista Unified students were able to explore local business opportunities and expand their vision of themselves in the world of work.

Attached please find a report summarizing the talent pipeline data collected during the pilot. We are eager to hear your feedback and look forward to working together to provide you insight into future talent.

Also included are info-graphics highlighting the successes from the pilot, keys to a successful Talent Cities experience and a Teaching Progression walks teachers through the learning progression.

The purpose of Vista Unified School District is to inspire every student to persevere as a critical thinker who collaborates to solve real world problems.

**Superintendent's Office**

1234 Arcadia Ave., Vista, CA 92084 • Ph: (760) 726-2170 Ext 92002 • Fax: (760) 758-7838 • [www.vistausd.org](http://www.vistausd.org)



# Vista Talent Cities

*A Smart Cities Solution to Regional Talent Strategy*



Summary of Early Pilots in San Diego County: Vista, CA  
July 2017

With thanks and gratitude for your leadership...



## Abstract:

The challenge in education is engagement and relevance. Students often find themselves confused about how their classes connect to the real world of work; more often than not leading to disengagement. This challenge follows students' into college and the workplace.

For schools, the goal has been to graduate students ready for college primarily, with a nod to career. For employers and entrepreneurs, the goal is access to ready-talent. For chambers of commerce and workforce development agencies, the goal is the matching of talent supply and demand to ensure that businesses are attracted to the region and empowered to grow. The disconnect between these goals is typically addressed retroactively after students have graduated high school (even college), after a business posts a job opening, after workers are let go.

The solution to this disconnect or "talent-gap" is to create a talent development pipeline that aligns to the needs of businesses and entrepreneurs. In other words, shift the focus of students in the K-12 setting towards building a skill set that prepares them for success in the world of work; with higher education positioned as a step towards their ultimate career. This changes the typical statement "college and career" to "career through continuous learning in higher education and beyond." This new model, called Talent Cities, was developed by Gerri Burton from New Learning Ventures

## Key Points:

- There is a globally recognized need for public-private partnership solutions, like Talent Cities, to solve education-to-employment gaps and fuel talent pipelines for future economic growth. Following the first convening on the topic of Talent Cities by the local Chamber of Commerce, **there was immediate agreement to conduct a pilot. Participation grew 4x both in the number of employers and students from the first to second pilot.** In addition to the Chamber of Commerce, the San Diego Workforce Partnership, **a County-wide workforce agency, has already agreed to support the solution.**
- **Asked to evaluate their 21<sup>st</sup> Century Skills, middle school students can be reflective and insightful in their comments.** One cohort offered over 200 comments – 20 per individual -- describing strengths and areas in need of improvement. **The areas in need of improvement identified by students matched the same areas that employers, across America, expressed were hard to find. According to Burning Glass research, which is used by the US federal government, the primary areas of organization, communication and patience.**
- In the first cohort, **over 55% of the students showed movement as defined by interest in high priority sectors.** Across cohorts, a minority of students expressed interest in starting their own businesses. Of those that did express interest in entrepreneurship, some expressed that they might start their own business later after employment first. Across cohorts, the majority of students who expressed a career goal, prior to visiting high priority sector companies, identified traditional career choices: doctor, lawyer, engineer and at the same time, expressed a lack of knowledge around high priority sectors. **Across cohorts, students expressed a lack of knowledge about high priority sectors.**
- Principals expressed interest in direct training of teachers by employers **enabling teachers to better understand high priority sectors and to link classroom lessons to those sectors.**
- Employers expressed interest in the talent pipeline data that will be created by the Talent Cities solution and anecdotally began to suggest skills that were of interest to them, including Empathy. **As a next step, employers will be asked to review the Talent Pipeline and edit according to the talent needs of their companies.**

Pilot Conditions: Vista, CA

Vista Unified School District in North San Diego County offered some excellent conditions for a Talent Cities pilot:

- San Diego County has an aggressive economic development plan which seeks to compete with Silicon Valley for innovative and entrepreneurial talent offering young talent more affordable living conditions and a world-renown lifestyle.
- San Diego County has identified eight high priority sectors. Workforce agencies, such as the San Diego Workforce Partnership, are aggressively providing educational information and apprenticeship opportunities around these sectors in high schools and post-secondary institutions.
- Vista Unified is a globally recognized transformative learning environment which has engaged in change management practices for three years – an increase in trust, social capital and resilience has been documented. One hundred percent of the district’s 30 schools have accepted and are engaged in the Personal Learning Challenge. The advanced stage of Personal Learning has led the district to define Personal Learning 2.0 which includes Talent Cities and other key programs.
- Recently, the school district has announced the opening of a new International Center for Education Research and Practice (ICERP) in partnership with the UCSD Graduate School of Education and the San Diego Workforce Partnership. ICERP is resident on the Vista Unified campus.
- School district partners include Qualcomm and Google. The district is heavily invested in design thinking and the maker space movement.
- Vista Unified leadership has a close and highly credible working relationship with the local Chamber of Commerce.
- The school district educates 22,000 students per annum – demographic breakdown below:  
  
*58% qualify for free lunch, 24% English learners, 10% homeless, 60% Hispanic, 28% white, 4% African American, 3% Asian.*
- Vista Unified also includes one of the County’s largest adult-education programs with an additional 20,000 students enrolled each year.

In 2012, New Learning Ventures, collaborating with Oracle Education UK, set out to consider the possibility of 'Talent Cities'. Like Smart Cities, Talent Cities would use virtual connectivity and data-driven analytics to prompt a new dialogue between educators and employers. The new dialogue would proactively seek to close the education-to-employment gap and the skills mismatch bemoaned by so many employers in high priority sectors.

NLV quickly realized that Talent Cities would do more. In accomplishing its goals, Talent Cities would radically disrupt the common understanding of vocational education, internship/ apprenticeship and grading. It would enhance today's career and technical education model with multi-stakeholder cultures of career exploration, college and career options, transferability of skills, and lifelong learnability for accelerated workplace and societal changes. Talent Cities, like its parent genre Smart Cities, is designed to create the fluid and efficient movement of talent fueling talent mobility and economic growth.

Throughout this brief, we reference the results of two initial pilots recently held in San Diego County. These early pilots indicate the potential for significantly positive results which can be achieved when we re-engineer the talent development process, proactively creating a diverse talent pool ready to take on accelerated workplace and entrepreneurial challenges.

While San Diego County represents our first pilots, the need for Talent Cities is global. Talent development and utilization is its own social, geographic and political divide – resident in some countries and truly absent in others. Talent Cities seeks to close this divide. The urgency for Talent Cities is further highlighted by the current evolution of jobs from those of the past to those of the future.

Here we describe the path to building a Talent City. Similar to Smart Cities solutions, Talent Cities are, by definition, data-driven continuous improvement ecosystems. Well-designed, they provide a closed feedback loop that focuses on the individual facilitating their shift from education to employment and lifelong learning in a seamless motion driven by data-driven insights and increasing opportunities. This is the fundamental shift of Talent Cities. In the Talent Cities paradigm, individuals are supported by insights to their own growth and capabilities. These insights are used to help guide them seamlessly across learning, doing, and more learning. Talent Cities replace cultures of segmentation, silos and linear thinking with cultures of exploration, options, learnability and skills/knowledge transfer.

Ultimately, Smart Cities solutions are intended to provide smart services to improve the lives of citizenry. This is also true of Talent Cities. Here is a partial list of anticipated services and benefits:

- Real-time talent data to attract businesses and foreign direct investment
- Closing of the education-to-employment gap
- Resolution of the skills mismatch
- Ready talent for start-ups
- Talent skilled for new, diverse industry training
- Talent pool characterized by agility, flexibility and lifelong learner agency
- Lower recruiting, onboarding and training costs for businesses
- Easier matches between strengths, interests and careers
- Equitable exposure to the world of work for youth of lower socio-economic classes, women, refugees
- On and off ramps to career pathways
- Access to/for the gig economy

- Better talent retention and overall talent risk management
- Virtual global 21C skills deployment and entrepreneurial experience for students
- Career and college choices based on strengths, interests and exposure – not exclusively grades
- Closer cooperation between public and private sector around human capital
- Proactive discussions and data-driven policy discussions to ensure quality talent flow
- Storytelling around success stories to inspire young people
- Verifiable lifelong talent profiles aggregating all training experiences
- Greater student agency and education completion.

Smart Cities solutions are, of course, disruptive. They seek to use technology and data analytics to re-engineer traditional processes. The same is true of Talent Cities. It holistically re-engineers the education, workforce development and lifelong learning process to work proactively and synergistically enabling alignment to help individuals achieve success and countries to achieve economic development.

Three themes define the essence of this re-engineered solution:

- Talent pipelines are created and nurtured in real-time rather than post-time
- Data driven learner insights enable individual “choice with insights”
- High priority sector HR leadership and collaboration address the future of talent in partnership with educators.

Each Talent City will, no doubt, look different reflecting the culture, education system and economic development plans of the host city. Some basic elements are common, specifically the need for a multi-stakeholder solution. The education and employment silos of the past are the anti-thesis of the Talent Cities approach.

# Talent Cities

## The Student Experience



A child growing up in a Talent City will acquire the 21st century skills and dispositions that prepare them for the world of work.



- Lifelong learning marked by transferrable certification

- Post-secondary jobs and internships that align with career interests for accelerated growth

- High School choices based on insights

- Middle school exposure to high priority sectors and personal strengths, interests to guide choices

- Quality early education to stimulate interest and curiosity

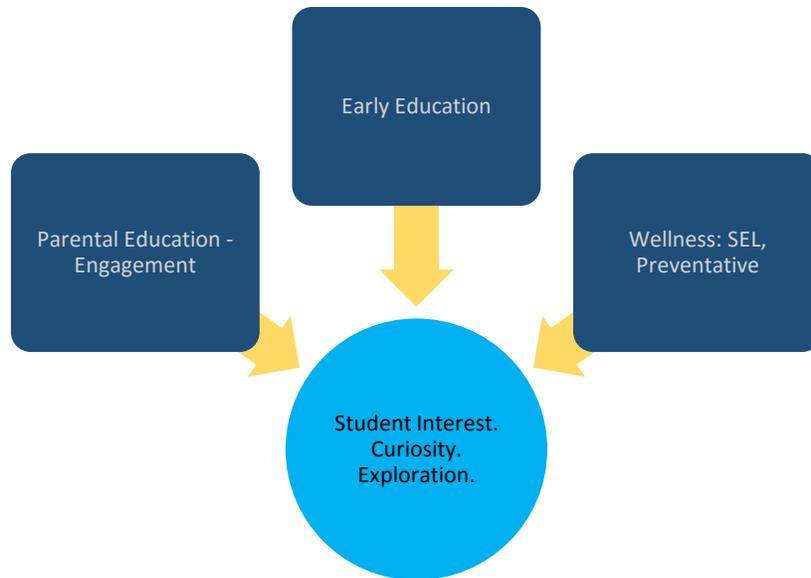
## Building Talent Cities

Like Smart Cities, Talent Cities begin with the commitment of multiple stakeholders, led by government and non-government agencies at the point of convening. Each actor plays a key role in the umbra-design.

- All parents need to understand and engage in the possibilities of new forms of learning, new options for post-secondary and new careers.
- Educators and employers need to engage in meaningful, positive dialogue around talent needs offering ways for students from all backgrounds to equitably explore options, understand their own interests and be exposed to the world of work.
- Schools need to move forward on student-centricity and personal learning.
- Governments need to set the conditions for Talent Cities to blossom.

*Talent Cities emphasize high quality early childhood care...*

Let's begin with the roles of parents and educators at the very beginning – what we call 'pre-school' – in some countries, initiating at pre-natal. Unfortunately, this is where the divide begins in the youngest of years. While recent neuroscience findings tell us that the early years of development hold great potential for learning, many children do not have their first school experience until Kindergarten. The loss of learning is only surpassed by the loss of socialization and opportunities for exploration and interests. **At the earliest of ages, children who explore more develop a greater sense of interests driven by curiosity – and curiosity is a key driver of lifelong learning.**



The divide that begins in pre-school continues to grow in elementary and middle school. In private and public schools alike, upper and upper middle-class parents begin to expose their children to the world of work. Lower income students may not benefit from working-parents-as-role-models as frequently. The world of work is a greater mystery for those students that need a lighted pathway the most.

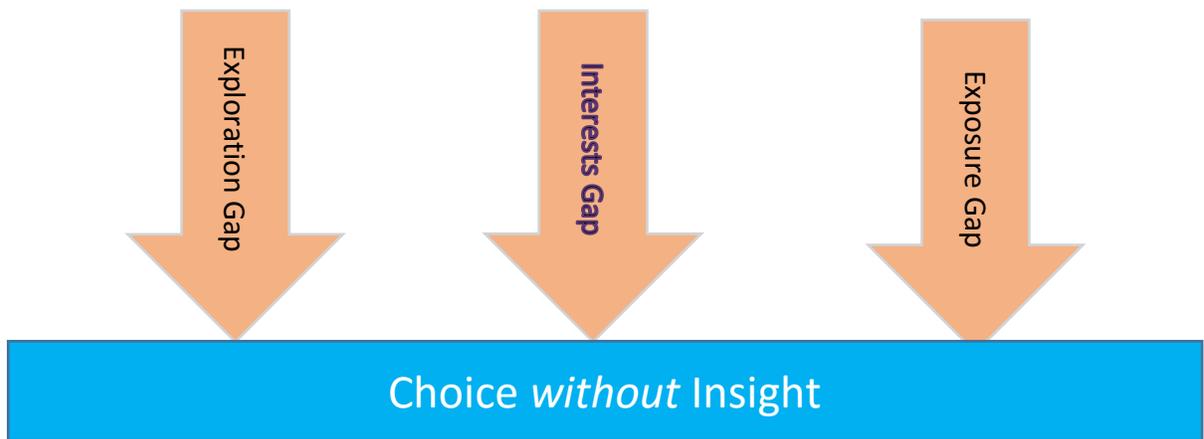
The upper end of the socio-economic spectrum can be problematic as well. Well-meaning parents want their children to follow in their footsteps, to attend the best schools and to take on traditional professions like doctors or lawyers.

*In the second Talent Cities pilot, Spring 2017, in North San Diego County, over eighty students participated. When asked to define their career of interest, those that answered with specificity said, "doctor, lawyer, or engineer" by a large majority.*

*As one student said, "I really don't know what the high priority sectors are and I am interested to find out."*

At neither end of the socio-economic spectrum is there a dedicated focus on students' own interests nor the jobs of the future. Consequently, we typically see three inter-related gaps progress, without address, through primary school, middle school and on to high school:

- The exposure gap describes lack of equitable exposure to high priority sectors and often represents gender bias.
- The exploration gap describes lack of opportunities to explore the world of work and necessary skills.
- The interest gap describes a lack of self-awareness about personal interests and strengths and how this understanding can guide work and career interests.



These three gaps, left unaddressed, lead to an even bigger gap at the secondary and post-secondary levels where choices and tracking begins. In most countries, at this point, students are selecting academic vs. vocational and that selection is most typically based upon grades, parental expectations and family social standing -- in other words, *'Choice without Insight'*. Further, choices are growing with new options including internships, apprenticeships, private schools, public schools, gap years, CTE, dual credit, service learning, summer jobs, summer learning experiences, early college, virtual learning, MOOCs, certifications, community college, college visits, etc. The result is a random experience in which students make selections that may or may not be the best possible and the consequence of that randomness is felt by employers who are at the receiving end of a skills, interest and capabilities mismatch.

*Initiating in 2020, Chicago high school students will not be awarded a diploma unless they can demonstrate a post-graduation plan. Per Mayor Rahm Emanuel, "A K-12 model was relevant 10, 15, 20 years ago. The city of Chicago is moving toward a pre-K to college model."*

*Per Rahm Emanuel, "I guarantee you the kids in Chicago will be better prepared for the future than any other child. Every other school system today leaves it to chance."*

*In Chicago, an estimated 18% of ninth-graders graduate high school and go on to earn a bachelor's degree within 10 years of starting high school, according to a 2016 study by the University of Chicago's Consortium on School Research.*

*Equitable, Informed, Meaningful Choice....*

**What is needed is an equitable approach to insightful choice beginning in the earliest of grades, but most clearly in middle school.** Why middle school? Research repeatedly tell us that middle school is the greatest point of impact before decisions are made to drop-out, or join a gang, or follow the path of least resistance, rather than a dream. Middle school is the time to ensure that students see the relevance of school by seeing themselves in a future that benefits society and economic development. Smart Cities solutions use data about individuals to match them with choices they might find of interest. Amazon Prime is a good example. Recommendations are made based on previous purchases. Algorithms match individuals to what they need on a variety of levels in a variety of combinations. This same data, in the aggregate, impacts the totality of the offerings changing it to meet demand. **And the demand for an algorithm-based approach to moving human capital forward is increasing.** College students seeking

internships at companies including Goldman Sachs and Unilever will be asked to participate in a series of activities that provide data. Even at this early stage, the use of analytics is creating a more efficient process, more universal approach and potentially better matches.

*Per recent Wall Street Journal article, In Unilever’s Radical Hiring Experiment, Resumes are Out and Algorithms are In: “To diversify its candidate pool for early-career roles that are a fast track to management, Unilever has ditched resumes and traditional campus recruiting. Its new process relies on algorithms to sort applicants and targets young potential hires where they spend much of their time: their smartphones. The company has made more than 450 hires across the globe this way since the fall of 2016. Its experiment provides a glimpse of a tech-fueled future of recruiting in which humans write job descriptions and make the final decisions, but software and algorithms do the rest. Goldman Sachs Group Inc. and Wal-Mart Stores Inc.’s Jet.com have begun using similar digital tools to hook young workers and broaden their candidate base. Unilever says hiring has become faster and more accurate—80% of applicants who make it to the final round now get job offers, and a similar number accept—and saved on recruiting costs, too, though Mr. Clementi wouldn’t say how much. Applicants hailed from more than 2,600 colleges for positions in the U.S. and Canada, tripling the numbers of schools in its previous applicant pool.”*

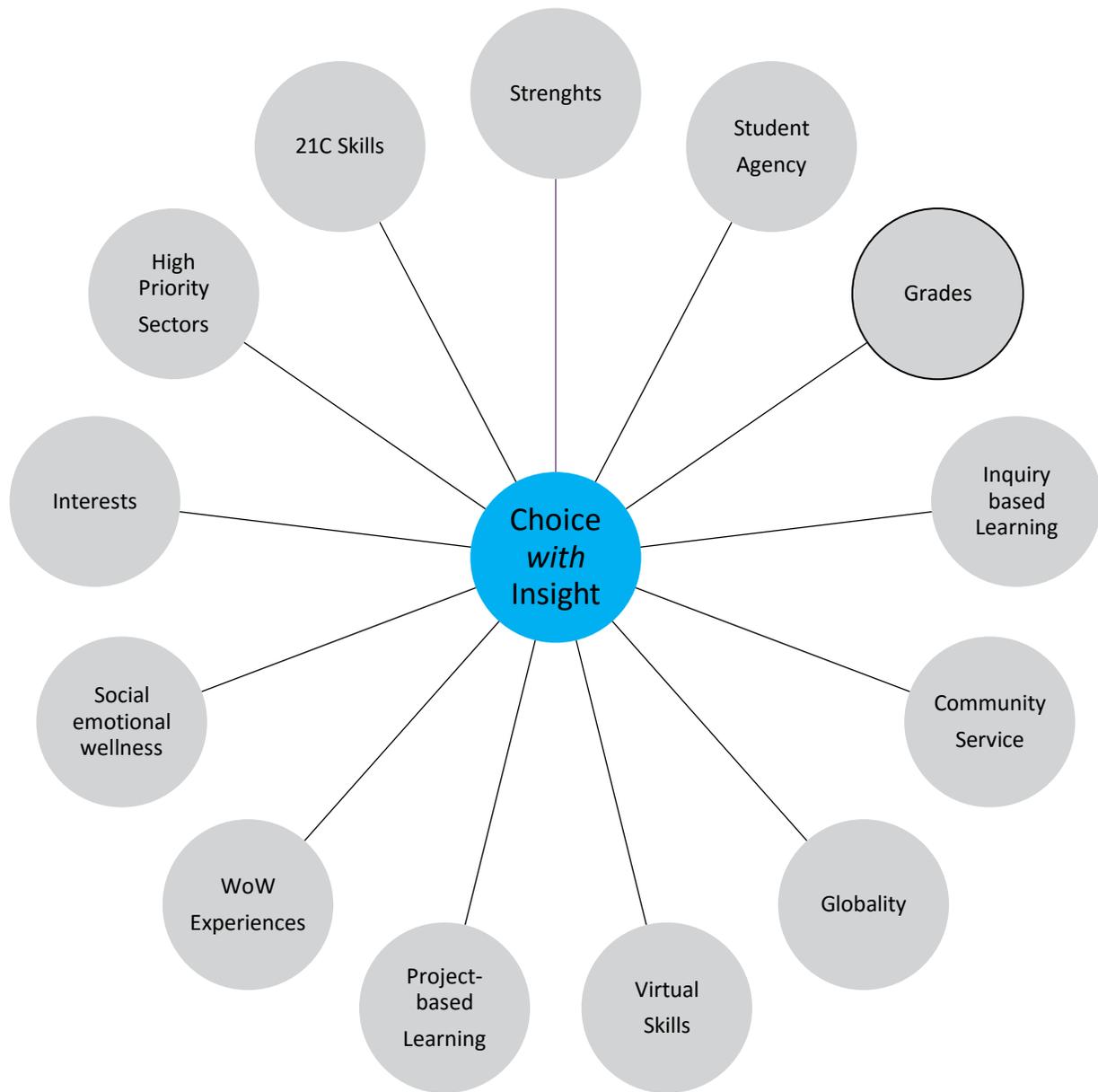
*The Talent Profile is the heartbeat and the “entry ticket” to Talent Cities...*

Everyone understands the value of a passport. It is the identifying documentation that allows movement. Digital, smarter passports enable faster processing, tracking and customized access. Smart toll booth passes work the same way in cars. They help the individual get to their destination more quickly. Unfortunately, education has lacked such a mechanism. The report card or transcript – standard issue at the end of every grade – falls short as a vehicle of talent mobility. The matrix below shows the difference between a report card and a talent profile:

<b>Report Card</b>	<b>Talent Profile</b>
Emphasis on grades	Emphasis on skills and grades
Assumes “sit and get” learning	Assumes project-based learning
Assumes teacher direction	Assumes inquiry-based, guided learning
Complements traditional learning	Complements personal learning
Deficit-based	Strengths-based
Interest neutral	Interests-based
Designed for K12 usage	Designed for lifelong usage
Stored via paper and electronically	Digital design and cloud storage for transferability
Emphasis on classroom experience	Emphasis on community/employer experience
Emphasis on education centered curriculum	Emphasis on high priority sector economy
Emphasis on individual	Emphasis on teamwork
Emphasis on “inside the school”	Emphasis on global, virtual experiences
Verified by approved assessment	Verified by external assessments

<p>Summative assessment</p> <p>Input provided by educators</p> <p>Simple summative analytics</p> <p>Institutional focus</p> <p>Assumes career or college</p> <p>Inherent bias toward academic track</p> <p>Excludes students who perform at the lower end of the academic scale</p>	<p>Real-time formative assessment</p> <p>Input provided by educators and employers</p> <p>Smart algorithms; predictive analytics</p> <p>Student focus</p> <p>Assumes lifelong learning</p> <p>Enables mix-and-match with embedded CTE</p> <p>Includes all students based on strengths</p>
---	---

The Talent Profile aggregates data from a number of categories. Algorithms for data analytics are based on educator and employer input as well as validated assessment tools. Placing the learner at the center, the Talent Profile complements personalized and transformative learning.



<b>Talent Profile Element Base</b>	<b>Definition</b>
Strengths/Interests/ Social Emotional Wellness	Verified assessment tools from CPPI, etc. <i>See page 16 for a sample of data as part of the Talent Cities experience.</i>
Student Agency	Assessed by teacher as student leadership in a personal learning environment (STUDENT AGENCY = LIFELONG LEARNER AGENCY)
Grades	Grades reflect the formative assessment process as well as summative assessment
Community Service	Listing of community service projects (in and outside of school meaning that a faith-based community service project can be added here)
Globality	Global travel, global cultural exchange, global problem solving. Global can be physical or virtual and include programs like Global Nomads or Talent Bridges
Virtual Skills	Virtual skills deployment will be a key feature of the future world of work for students. Selecting teams, making presentations, navigating time zones, delegating work assignments, virtual communication, etc.
Inquiry based Learning	Assessed by teacher as students research high priority sectors and find answers to questions (INQUIRY BASED LEARNING = CURIOSITY)
Project based Learning	The movement toward project-based learning offers opportunities for including badges, STEM maker spaces, STEM labs (PROJECT BASED LEARNING = ACCOMPLISHMENT)
World of Work Experiences/ High Priority Sectors	Listing of all high priority sector experiences including those outside of school.
21C Skills	While there is general global agreement around 21 <sup>st</sup> C Skills (creativity, critical thinking, teamwork, communication, etc.) there are regional differences. This is an area where employer input is key. In the San Diego County pilots, the 21 <sup>st</sup> C Skills were defined by the San Diego Workforce Partnership. (21 C SKILLS = READY, AGILE WORKFORCE)

The US State Department has created a new program for college students called Virtual Foreign Service eInternship offering over 300 programs to students around the world. Students engaging will experience virtual problem solving as they intern for the State Department.

### *Some Powerful Results from the first pilots....*

Here are some initial results from the first Talent Cities cohort in December 2016 and April 2017. The first stat is among the most important, because it shows the impact of exposure to high priority sectors on the thinking of middle school students. The survey is intended to determine if students see and find of interest, new career and job options. Students are asked to take a quick survey on the way to and from the employer site.

**55%** of students demonstrated “movement” from pre-survey to post-survey indicating that the Talent Cities experience and exposure to high priority sector companies resulted in new interest in a high priority sector and/or new types of jobs.

This second stat was surprising – asked to self-evaluate their own 21stCentury Skills prior to engaging company visits, students were very sincere in self-reflection and generous in their comments. Over 200 comments were received from the first cohort of twenty students. Students, it seems, understand and appreciate the importance of 21stCentury Skills.

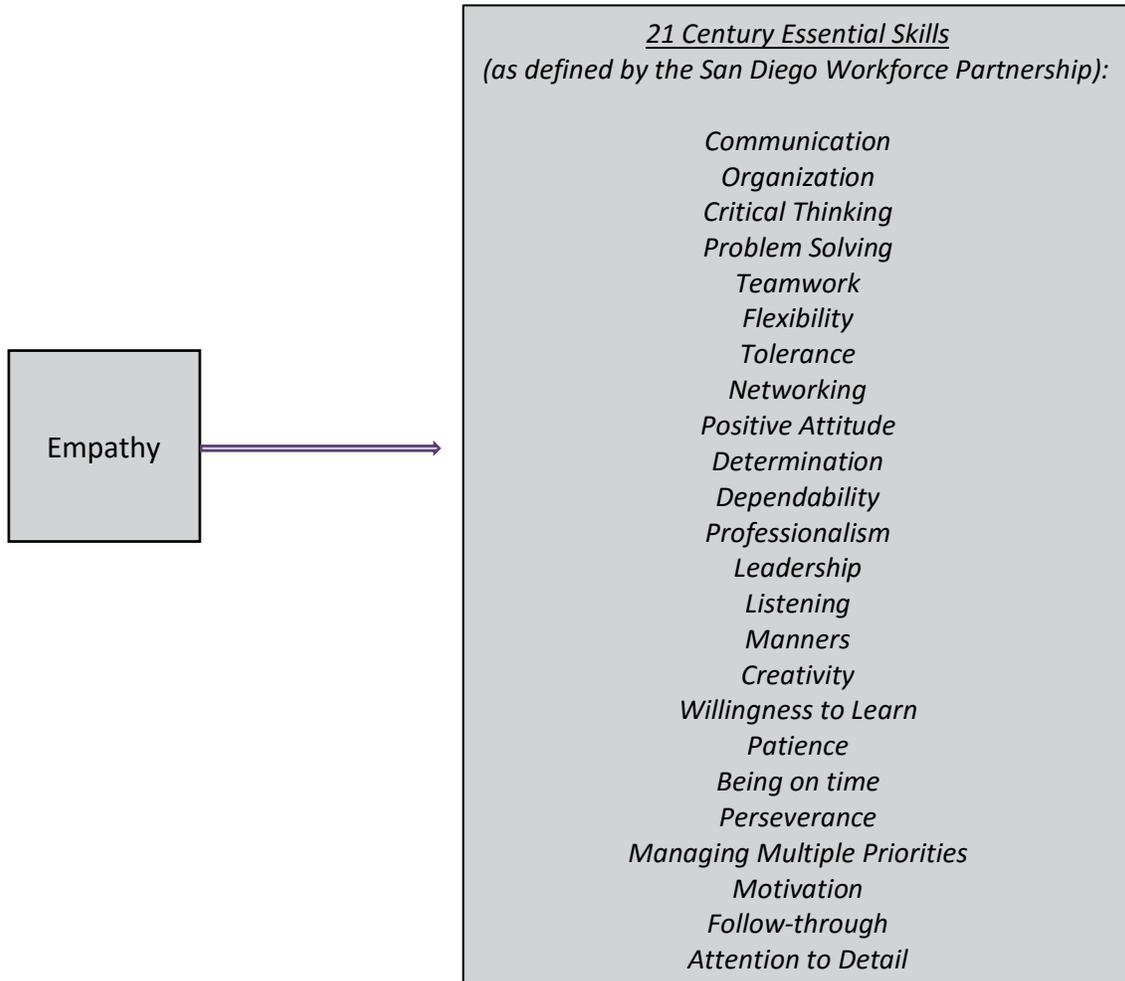
When asked to self assess their 21<sup>st</sup> Century skills, as defined by the San Diego Workforce Partnership, **students offered an average of 20 comments each** in self-reflection including specific examples and plans to improve.

We compared the aggregate of the 21<sup>st</sup> Century Skills self-evaluation to the analysis published by Burning Glass. Burning Glass is a US research company which aggregates data analytics from employer job postings. Beyond our expectations, the three areas in which students, in the aggregate, said they were in greatest need for improvement, exactly matched the three skills which employers, on a national level, said they were having the greatest difficulty finding.

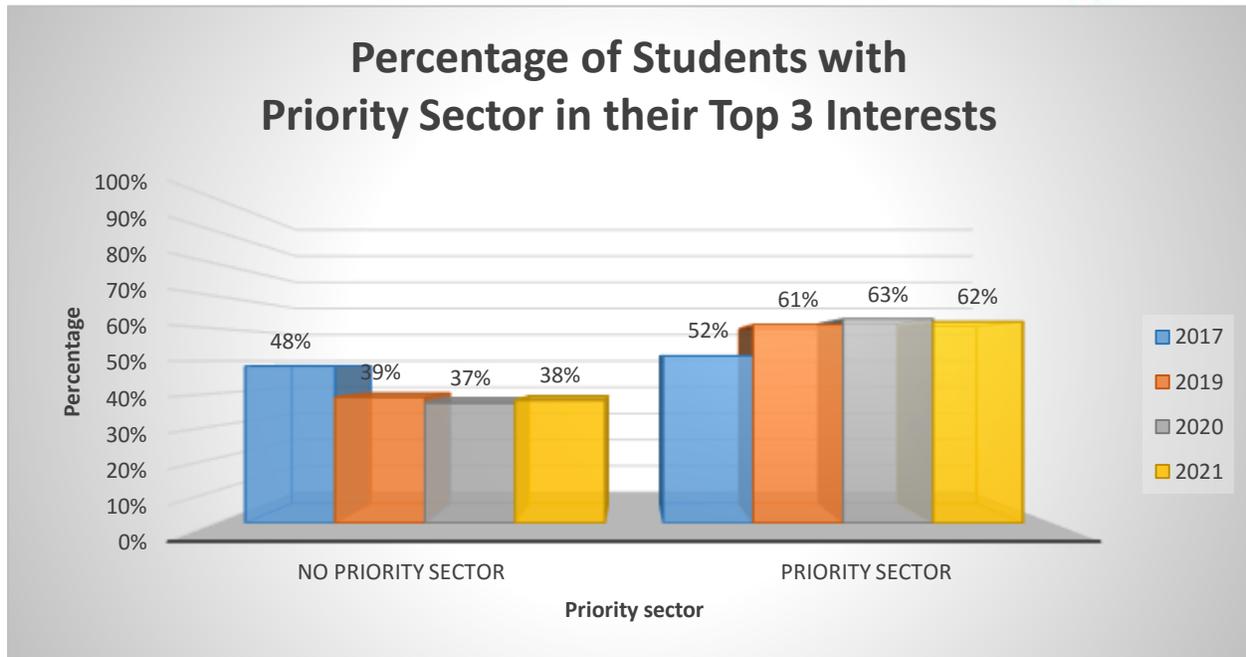
## An Amazing 21C Skills Match

Student self-assessments revealed that they believe their top skills are: **Creativity, Positive Attitude, Leadership, Listening, and Teamwork/Collaboration.** Student self-assessments revealed that their three skills in most need of improvement are: **Communication, Organization, and Patience. These three skills match the same three skills which Burning Glass has identified as top needs by US employers.**

Another interesting revelation was the worldwide communications company (part of Cohort #2) which told us that they were looking for young workers who have empathy. **Empathy** is not currently one of the 21<sup>st</sup> Century Skills as defined by the San Diego Workforce Partnership. This is the importance of the review of the Talent Pipeline by employers to share which skills are important to their company culture, how they define that skill and to demonstrate how important that skills/attitude is to all local employers. The resulting algorithm will demonstrate the ranking.



Every region will have its own version of 21<sup>st</sup> Century skills based on culture. The commonality among these regional versions leads to global dialogue and global career preparation.



Another view of the importance of the Talent Cities initiative comes from CPP Innovation Labs Vita-Navis. The graphic above shows data from 13,127 San Diego County high school and middle school students. Bars on the right hand side show indications of interest in San Diego priority sectors as reported by the SuperStrong assessment – a key contributor to the Talent Profile.

The SuperStrong is a 60 item shortened form of the Strong Interest Inventory™ and is designed to be exploratory. The SuperStrong is completely digital and designed for use with mobile devices. Results are interactive, providing unparalleled insights by connecting to real world data from O\*NET, Bureau of Labor Statistics, and IPEDS. The SuperStrong is self-administrable and self-interpretable, providing students with measurements found on the long form such as General Occupational Themes (RIASEC), Basic Interest Scales, and Personal Style Scales.

Nurturing and expanding this level of interest through Talent Cities will result in stronger interest, better preparation and a detailed understanding of the jobs available in these industries.

### What does a Talent Profile look like?

A Talent Profile is a digital report designed to visually show 3 modes:

Individual Reports	Descriptions
Real-time Status	Top line shows status of student in their talent journey using algorithms that represent employer inputs and regional future economic development planning
Historical Trends	Upon request, shows trends of student journey
Recommendations	<p>Closing the gap analysis based on activities to date and information reported:</p> <p><i>“You have visited employer sites for five of the seven priority sectors, please visit ____.”</i></p> <p><i>“You rated yourself as needing to improve your organization skills, here are three suggestions:</i></p> <ul style="list-style-type: none"> <li>■ <i>Organize your homework by priority</i></li> <li>■ <i>Organize your backpack every day</i></li> <li>■ <i>Organize your locker.</i></li> </ul> <p>Note: recommendations are not made about specific career or vocational tracks.</p>

### What does a Talent Pipeline look like?

In the aggregate, Talent Profiles create a Talent Pipeline. Talent Pipelines provide an anonymous, aggregate, granular analysis of collective students’

- Strengths, Interests
- 21C Skills
- Global awareness
- Project-based learning: maker spaces, STEM labs
- WoW experiences: research, visits
- High priority sector awareness: research
- Levels of agency
- Community service

Talent Pipelines become valuable when companies provide input and educators take action. The greater the employer input, the greater the value. The employer review of the Talent Pipeline is one of most important aspects of the Talent Cities construct because it informs educators, students and parents about which skills are important to local economic growth as directly defined by employers. The Talent Pipeline is the essence of a new data-driven discussion.

The **Talent Pipeline** is a unique feature of the Talent Cities concept. Here is how it changes the current education-to-employment landscape.

*Impacts of the Talent Pipeline...*

	<i>without</i> Talent Pipelines	<i>with</i> Talent Pipelines
1	Students only KPI toward success is comparison of grades with other students.	Students can gain insight to their future success across a spectrum of values. If grades aren't their strong suit, another aspect may be. The result is greater self-esteem and commitment to continue education.
2	Employers don't get a voice until it is too late and students have selected their paths.	Internships and apprenticeships provide employers with a small quantity of specifically trained talent – what employers tell us they want are students skilled at 21 <sup>st</sup> century skills – learnability, transferability, lifelong learning – to adapt to a changing workplace.
3	Investors can't see a region's pipeline of talent increasing their talent risk.	When businesses start or expand or relocate to a given region part of that decision assumes a flow of quality talent. With granular talent pipelines, business leaders have true insights to the regional talent pipeline reducing this risk which can literally shutter start-ups.
4	Lack of equity remains in the shadows.	Lack of equity is spotlighted and policies can course-correct early on
5	The gap between educators and economy remains large with World-of-Work focus often distanced from economic development priorities.	Talent Pipelines serve as a report to ensure alignment between regional economic development planning and education offerings.
6	The gap between educators and employers remains large.	The Talent Pipeline fuels the educator-employer discussion lessening complaint and finger pointing and increasing positive action.
7	HR leaders don't have quality insights to plan onboarding and training offerings. The answer to the question, where is the talent line drawn, remains murky.	HR training budgets are reduced and training offerings are more impactful.

Talent Pipelines can be custom reports per industry, per region or per employer. The existence of the Talent Pipeline simultaneously impacts an individual and a region enabling start-ups to grow without undue strain or expense. Talent pipelines attracts foreign direct investment lowering talent risk. Talent pipelines change the nature of talent planning in HR-led organizations.

*Lifelong learning starts in middle school...*

*Meet Gabrielle, a fictional student at Vista USD in Vista, California located in North San Diego County where our first Talent Cities pilots took place. Gabrielle is a middle school student attending one of five middle schools. Gabrielle has lived in Vista all her life, but not always under the easiest of circumstances. Gabrielle's father is a single parent who has always been employed, but does not have a career. He holds multiple jobs to make ends meet. Gabrielle's father wants the best for his daughter but the world of colleges and careers are not familiar to him.*



*He can't take Gabrielle to his workplace and he would struggle to take Gabrielle on college tours. English is not his first language, but he does understand the language of getting ahead. He knows that students who see the world of work, tour colleges and understand the jobs of the future will be the ones that get ahead.*

*At middle school, Gabrielle gets decent grades. She struggles some in math and science. She doesn't see the relevance. She is upset about clothes and make-up. Many of the girls are starting to buy new clothes and make-up. Gabrielle wonders when she will be old enough to get a job. She reasons that if she got a job, she could help her Dad, buy new clothes and still have time for community service at her church. School is slipping way down in Gabrielle's priorities.*

*As a middle school student, Gabrielle participates in the Talent Cities program. Everyone participates. The idea is to learn about and experience the industries that are growing in North San Diego County. Watching the introductory video was the first time that Gabrielle understood that companies need talent to grow and she could be that talent. Her Dad doesn't talk about work that way. He talks about work and money. Gabrielle learned something else from the video – the idea that she could enjoy work. Her Dad doesn't seem to enjoy work. This is the beginning of Gabrielle understanding the difference between a job and a career. To have a career, of course, staying in school needs to be a priority.*

*For the student, participating in Talent Cities is a simple multi-step process presented digitally.*

	<b>Step:</b>	<b>Description:</b>	<b>Frequency:</b>
<b>BEFORE VISITING A COMPANY SITE</b>	Initiate a Talent Profile	Students need to do this only once at the beginning of middle school, if they don't have a Talent Profile already.	Once
	Reflect and self-assess their own 21 <sup>st</sup> C skills	Asking students to rate their own 21 <sup>st</sup> C skills is a powerful process that results in awareness of the skills and a desire to improve.	Students create or receive action plans to improve 21 <sup>st</sup> C skills. The assessment should be taken twice a year.
	Validated Strengths/ Interests Assessments	Students take validated Strengths and Interests assessments giving them insights to their capabilities.	At the middle school age, students grow and change – assessments should be taken once per year.
	Watch a video about high priority sectors in their region	The best of these videos will be interviews with employers in high priority sector companies. Even better when students can make the video.	Students should watch the video once.
	Prepare a research report on the growth of high priority sectors as a team	Students use research and teamwork skills to prepare a report/presentation/video on the regional high priority sectors. Parents are asked to sign the report to ensure awareness of the jobs of the future by parents.	The report only needs to be prepared once.

<b>VISITING A COMPANY SITE</b>	Pre-visit survey	On the way to the employer site, students are asked to complete a quick survey about their career goals	Every time students visit a company – the goal is for students to visit one company per high priority sector
	Observation rubric	Students receive a rubric that guides their tour of the employer site. It guides what they should notice, questions to ask employers, etc.	Every time students visit a company – the goal is for students to visit one company per high priority sector
	Employer Challenges “Experienships”	The tour of the employer site is interactive and hands-on. At each stop there is a challenge requiring students to use their 21C skills	Every time students visit a company – the goal is for students to visit one company per high priority sector – there will be multiple challenges
	Post-visit	On the way back from the employer site, students complete another quick survey revealing how what they have seen has impacted their career thinking	Every time students visit a company – the goal is for students to visit one company per high priority sector

*For the employer, Talent Cities is a regional commitment with ROI...*

The Talent Cities process begins with a convening hosted by the local chamber of commerce, workforce development agency or local government office of economic development. In the city of Vista, the Vista Chamber of Commerce took the first step forward quickly seeing the value to its membership. Convening the leading educators and employers, there was quick agreement that turned into action and the first Talent Cities pilot took place soon after. This first pilot was held in December 2016 at Solatube, a high tech advanced manufacturing company. The second pilot was held in April 2017. The increase in students, companies and diversity of high priority sector industries was five fold.



To prepare for the students' visit, companies follow the Talent Cities Employer Guide. The Guide seeks consistency among the visits sharing best practices among employers – here are some important highlights from the Guide:

- Kick-off by the CEO explaining the importance of the industry, projected growth and if applicable, entrepreneurial beginnings
- Tour of work site starting with initiation of the development process
- Hands-on activities wherever possible
- Short talks by the heads of each work station including Q&A. Talks cover the function, importance of teamwork, importance of 21<sup>st</sup> century skills, importance of lifelong learning, the path that brought the employee to this role, how they see the role evolving in the future
- Quick challenges for students at each work station called “experienships”
- Culminating design challenges
- Send-off by the head of HR addressing the various pathways to careers that use “mix-and-match approaches” to reach career flexibility and success. (The “mix-and-match” addresses military experience and corporate training or scholarship or certificates offering students from all socio-economic levels the opportunity to see alternative approaches to careers.)

## *Immediate, Mid-term and Strategic ROI for Employers*

Typically, employers view student internships and visits as a CSR activity, a gift to the community. The Talent Cities solution is a re-engineered approach which changes this model offering employers some immediate and important benefits in talent excellence:

### **#1 Re-examination of Corporate Culture and Talent Needs**

One immediate benefit is the opportunity for **HR Leaders to examine, improve and solidify their own corporate culture**. Meetings with employees to plan the visits for the students can generate powerful discussions, led by HR, around

1. Corporate culture
2. Importance of 21C skills to the company
3. Pathways to jobs and careers
4. Training offerings: internal vs external
5. Design of experienships
6. Talent needs of the future.

Employers at the first Talent Cities convening in North San Diego County readily admitted that much of their work around filling open headcount is reactive, not proactive. Tina Ngo Bartel, Director of Business Programs and Research for the San Diego Workforce Partnership, immediately cited her interest in the Talent Cities project based on its proactive nature.

### **#2 High Priority Sector Talent Collaboration**

Another immediate benefit is **collaboration of HR Leaders around talent issues** led by the Chamber of Commerce.

### **#3 Meaningful Internships, Apprenticeships and Part-time Jobs Talent Pool**

Employers continuing to offer internships and apprenticeships at the high school and community college level will find that there is greater quality choice. Interns will come to companies ready to contribute and learn. Students will stay local as the pipeline gets stronger offering more jobs and a local lifestyle that students already understand and like.

### **#4 Lower Recruiting, Onboarding, Training, and Retention Costs**

Algorithm-based recruiting, virtual training, certifications and the gig economy are all changing the nature of human capital development and talent risk management. Talent Cities is an opportunity for employers to get ahead of this new curve while lowering costs and improving quality of services. Talent Profiles can be used internally for on demand team deployment. Talent Pipelines tell employers where to focus training programs. New onboarding approaches can less time and cost prohibitive.

*For the employer, participating in Talent Cities is a multi-step process:*

	<b>Step:</b>	<b>Description:</b>	<b>Frequency:</b>
<b>BEFORE STUDENTS' VISIT</b>	Attend a convening hosted by the local Chamber of Commerce	Meeting of employers and educators to introduce the Talent Cities concept	Once
	Conduct employee meetings to plan student visits	Discuss: <ol style="list-style-type: none"> <li>1. Corporate culture</li> <li>2. Importance of 21C skills to the company</li> <li>3. Pathways to jobs and careers</li> <li>4. Training offerings: internal vs external</li> <li>5. Design of experienships</li> <li>6. Talent needs of the future.</li> </ol>	Prior to all student visits
	Collaborate with local HR Leaders – convened by the local Chamber of Commerce or local Centers of Excellence	Discuss how collaboration can help prepare a flexible, engaged talent base in the region.  Engage in symposiums with experts on talent issues.	Regularly
<b>FOLLOWING STUDENTS' VISIT</b>	Review the Talent Pipeline report. Define and bring forward recommendations for improving the Pipeline report and local policies.	Discuss how the design of the Talent Pipeline directly supports the future talent needs of the high priority sectors	Once annually

*For the Teacher, Professional Development for Talent Cities*

The Talent Cities solution is complimentary with education transformation movements toward project-based learning, global awareness and personal learning. Engaging in the Talent Cities solution requires professional development for educators. The goal is keep training efficient and on demand. From field research and principal/teacher feedback, we know that two of the greatest stumbling blocks teachers have are their own lack of awareness of high priority sectors and instructional design skills to link lessons to high priority sectors. This latter stumbling block is also an issue with STEM and maker space labs.

Feedback from principals suggests that the best form of high priority sector training for teachers is from employers themselves. This can be done live or via on demand video which can be viewed by students and parents too!

A key characteristic of a Talent City is multi-purpose training where the same employer orientation messages are available for education, employment, parents, contractors, candidates, etc.



*Proactive Public-Private Partnerships: New Alignments and New Points of Intersection*

**The introduction of the talent pipeline from the Talent Cities process at the middle school level re-engineers the local, regional, national talent process for better results.** The Talent Cities solution impacts every stage of learning and in so doing creates immediate, mid-term and strategic ROI for employers:

	Individual	Employers	Society
Early Education/Elementary	Individual learners at all socio-economic levels experience expression of interests, creativity, curiosity	Early education enables parents to continue their careers leading to a robust pipeline	As a society, early education enables financial stability among families and future generations
<b>Read-to-learn/Learn-to-read</b>			
Middle School	Individual learners at all socio-economic levels experience exposure to high priority sectors	Employers can influence the future talent pool proactively	<b>Drop-out rates, gang influence go down</b> as students see more reasons to stay in school
<b>Choice with Insight</b>			
High School/Post Secondary	Students choose vocational tracks, internships, apprenticeships and part-time jobs based on insights to their own strengths and interests and the importance of 21C skills	Employers receive interns and apprentices that can provide real value combining transferrable skill sets with high quality learning	Graduation rates go up and students graduate with a plan that <b>closes the education-to-employment gap</b> and engages young adults*
Workforce Development	Workers are ready with a set of tangible skills that enable them to adapt to accelerated change and new job opportunities as old ones fade	<b>Recruitment and onboarding costs go down</b> as students bring 21C skills, are interested in planning careers from apprenticeship, internships and understand the choice of staying local	Society experiences <b>lower unemployment rates and greater citizen engagement.</b> Robust talent <b>attracts start-ups, new businesses and expansion of existing businesses</b>
Lifelong Learning	Workers engage in learning lifelong to maintain workforce viability and career success	<b>Training costs go down</b> and holistic talent readiness increases and as talent pool remains agile and ready to learn	<b>Unemployment goes down and stays down</b> as a flexible, agile workforce transfers skills in pace with new job requirements

\*According to a recent report from the San Diego Workforce Partnership, [Flip the Script](#), Vista City was identified as having one of the largest percentages, 18.6%, of disaffected youth in San Diego County. These students need to be shown a relevant and feasible path for staying in school and entering the workforce before they become part of disaffected youth.

*Final Point: Next Steps*

In the 2017-18 school year, the number of students participating in the Talent Cities experience will increase significantly.

In addition to our core employers, we want to expand the number of employers participating in the program.

Throughout 2017-18, we will continue to strengthen the partnership around Talent Cities providing tools, reports and analytics.

Please stay tuned for updates...

Thank you for your interest and participation.



# Talent Cities

Traditionally, schools have excelled in producing students who are good at school. Graduates often lack the skills and aptitudes to be successful in today's high skill/high tech priority sectors.

Talent cities solves this "talent-gap" by building a talent pipeline aligned to the needs of businesses and entrepreneurs. Students gain insight into crucial skill sets through hands on exposure while local businesses get access to future talent and valuable data on their talent pipeline.

Data from the 2016-17 pilot:

---

1

55%

of participants showed movement as defined by interest in high priority sectors

2

Self-Reflection

participants offered over 20 comments per individual describing strengths and areas for growth

---

3

Communication,  
Organization, and  
Patience.

the three areas in which students, in the aggregate, said they were in greatest need for improvement, exactly matched the three skills which employers, on a national level, said they were having the greatest difficulty finding\*.

---

4

4x

participation grew by four times, both in number of employers and number of students from the first pilot to the second.

\* Burning Glass

# QUICK TIPS



For Creating a Successful Experienceship!



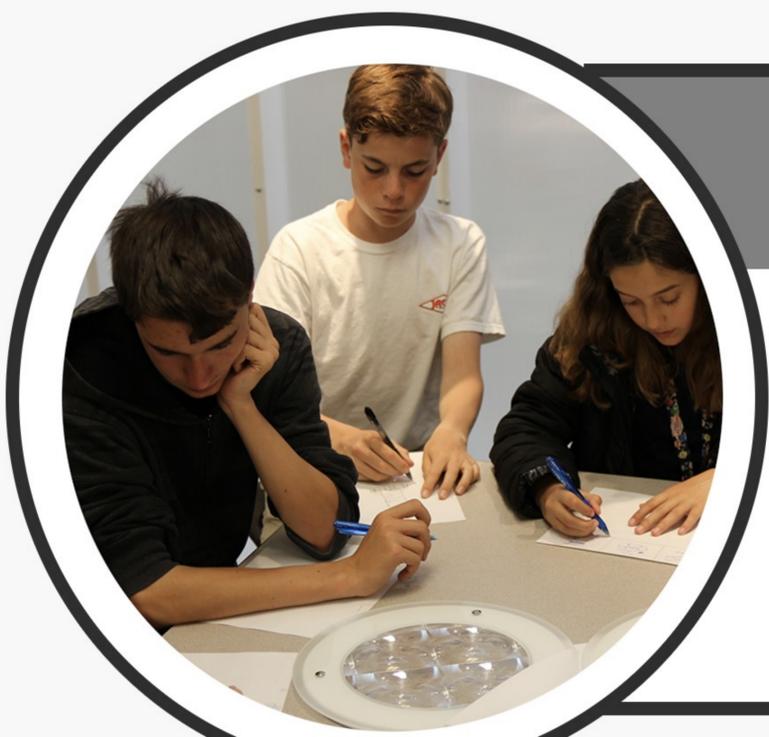
## Activate (15-20 Minutes)

- Provide students a brief explanation of why your company is successful and what it does
- Explain what you are looking for in employees
- What should students be looking for during their visit?



## Engage (45 - 60 Minutes)

Give them a tour of your facility. Provide opportunities for students to ask questions of your employees in a variety of contexts : Design, marketing, production, administration, etc. It is key that this is interactive and not lecture.



## Expand (45 - 60 Minutes)

- Provide students with a hands on design challenge.
- How might students take what they have learned about your industry to design a product, process, or service that would create value for your business or community?

A **design challenge** is an open-ended project that encourages students to ask questions, take initiative, and think creatively.

## 1 Select a Challenge

- ✓ Pick a topic that is related to your business. Think of a real issue your team is working on

- ✓ Define the challenge, not the solution

- ✓ A key consideration for success is staffing. Which members of your team will have the energy and enthusiasm to engage a group of 12 to 14 year old students

### Samples:

"Design a light baffle or trim that will appeal to young people."

"Create a new package design that uses less material than the current package"

"Design a marketing campaign to encourage students to conserve water."

## 2 Prepare for the Challenge

- ✓ Gather tools and materials. (\*VUSD may be able to help with supplies)

- ✓ Provide workspaces for design and testing

## 3 Introduce the Challenge

- ✓ Make it real. Describe the challenge in relation to your business and what students may have learned during their tour

- ✓ Introduce practical constraints including time limits and safety issues.

- ✓ Keep the instructions simple- encourage students to think for themselves and try new ideas

## 4 Facilitate the Challenge

- ✓ Get started - get students involved in brainstorming and rapid prototyping

- ✓ Encourage collaboration and teamwork. Urge students to look at old things in new ways. Encourage creativity by providing unique materials

## 5 Student Presentations

- ✓ Make sure you leave enough time for student teams to present and explain their work

- ✓ Celebrate creativity and resourcefulness



# Talent Cities Timeline

NOVEMBER  
9  
2017

## Project Kickoff



### Business Luncheon

Bring together business partners and school leaders to discuss Talent Cities and confirm commitments.



### Groundwork: **Schools**

Identify and provide support to participating teachers



### Groundwork: **Business**

Recruit participating businesses and provide support and materials

DEC.  
4TH-8TH  
2017

## Talent Cities Week 1



### 10-15 Businesses

The goal would be to involve businesses from all of the priority sectors



### 40-50 Students / School

8-10 students per day from each site visiting sectors businesses of their choice

FEB 26-  
MARCH 2  
2017

## Talent Cities Week 2



### 10-15 Businesses

These may be new or returning businesses



### 40-50 Students / School

8-10 students per day from each site visiting sectors businesses of their choice

# Project Progression

## Talent Cities



01.



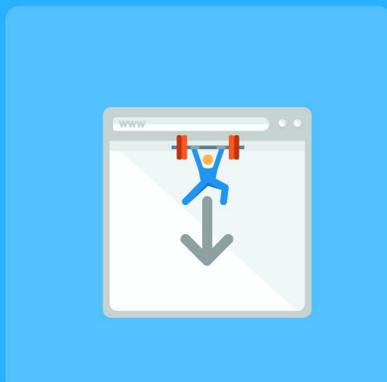
### 21st Century Skills Self-assessment

Students take a brief online self-assessment of their 21st century skills. This data provides a baseline and feeds into their individual Talent Profile. Students gain insight into areas of strength and needs for growth.

02.

### Strengths and Interests Assessments

Students take validated Strengths and Interests assessments giving them insights to their capabilities. This data further builds their Talent Profile.



03.



### Instruction on San Diego County High Priority Sectors

Students learn about the region's High Priority Sectors. This can take a variety of forms including direct instruction, videos, interviews, etc.

### Research & Report

Students take a deep dive into one of the Priority Sectors. The teacher has discretion on the format of this assignment. Ideally, students would work in groups to research a sector of interest and report their findings in an engaging manner.



04.

05.



### Pre-visit Survey and Rubric

- On the way to the employer site, students are asked to complete a quick survey about their career goals.
- Students receive a rubric that guides their tour of the employer site. It highlights what they should notice, questions to ask employers, etc

06.

### Experiencship

Students engage in a hands-on interactive tour of a local High Priority Sector business. Students participate in a design challenge that puts theory into action.



07.



### Reflection

Students complete another quick survey revealing how what they have seen has impacted their career thinking. Teachers can expand on the reflection piece in a number of ways to help students make meaning from the experience.



Before Visiting a Company Site

Visiting a Company Site