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# JOURNAL

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## ***OUR FUTURE: Projections of Work and Life***

***Helen Harkness, Guest Editor***

- **The Future**
  - **The End of Work as We Know It**
  - **Jobs and Careers on the Front Line of the Future**
  - **Silicon Valley and the New Rules of Work**
  - **Training Challenges Facing Education and Training and Career Development in the Future**
  - **Old people are people too, so let's act accordingly**
  - **Crisis of Human Capital in Aerospace: It's All About the STEM**
  - **College for All – Reality or Flawed Myth?**
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## Chapter 9

# OUR JOBS: THE AMERICAN WORKFORCE and ECONOMY in CRISIS

by Ed Gordon

The good news is that the U.S. economy is set to grow between two to three percent in 2015. This is partly the result of America's rising shale oil production that has helped to drive down world petroleum prices. Also, a strengthening economy is attracting more overseas investments. On the surface the unemployment crisis has waned. The United States may reach so-called *full employment* of its skilled workforce during 2015. Global economic prospects are far weaker. Increasing financial turmoil is rising due largely to a major economic slowdown in China. Its ripple effects are triggering declining exports from Germany, Russia, Australia, Brazil, Canada, and other nations. This may depress the economies of many nations in 2015. [1]

### U. S. Employment Challenges

The U.S. unemployment rate has fallen from 6.7 to 5.5 percent during the past year. By February 2015 the United States had seen its longest streak of monthly job gains above the 200,000 level in the past decade. This also broke the record for the longest streak of private jobs gained over 60 straight months. However, the number of people in the U.S. labor market or the labor participation rate is near a 36-year low and is a major reason for the decline in the unemployment rate. More people who previously had been looking for work left the job market in February 2015 than got jobs. Normally as the labor market improves, people re-enter it and wages begin to rise. Thus far this has not occurred. The spiking number of baby boomers who are retiring only explains part of the fall of the labor participation rate, as this rate has declined among all age groups under age 62.

The number of Americans whom the **U.S. Bureau of Labor Statistics** classifies at "*Not in the Labor Force*" has increased by over one million workers in the past 12 months from 92 million to 93.5 million. In 2008, before the start of the U.S. recession, 79.5 million people were not in the workforce. The number of non-workers has risen by 14 million in the past seven years. Some claim that this increase is due to the bulge of baby-boomers reaching retirement age. However, the data show this is only partially correct. Almost 50 per cent of the people who have dropped out of the workforce are not retirees. More ominously, 16 per cent of men aged 25 to 54 who are classified as *prime age workers* are not in the workforce. This proportion has tripled since the late 1960s. [2]

Why are so many potential workers still idle? Why is wage growth stagnant?

### New Jobs "Deal" for the United States

The United States has a new jobs *Deal* that consists of four moving parts:

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- Demographics
  - Education
  - Automation
  - Longevity

**1st: 79 million Baby Boomers need to be replaced.** Many held technical jobs in STEM areas that are now vacant.

**2nd: Jobs require more education and career skills than ever before.**

**3rd: Automation has eliminated most low- and middle-skill jobs.** The digital workplace requires thinking and problem-solving abilities.

**4th: People are living longer.** Actuarial projections estimate that on average an American 65-year-old man will live to 86.6 years and the average woman to 88.8 years. More boomers want to keep on working beyond age 65. As they retire, their knowledge will be difficult to replace.

This new jobs *deal* helps explain why the current U.S. unemployment numbers just don't add up. [3]

### **No Labor Slack!**

In March 2013 when the unemployment rate was 7.7 percent, the then Federal Reserve Chairman Ben Bernanke said that when the economy strengthened discouraged workers would return to the workforce. [4]

This has not happened! Instead as the rate dips closer to the benchmark for “full employment,” the proportion of Americans not looking for work is near the all-time low. The big question is when and how will these workers return to the workforce. If the labor participation rate continues to stay at very low levels, economic stagnation is a distinct possibility. So what headline news can we expect in 2015? Rather than the gadget-filled utopia promised by tech enthusiasts, our world may begin to come to a slow grinding halt. The supply of adequately skilled workers in the United States and across the world may fail to keep up with the increasing demands of today's tech-driven economies.

### **Neglect in Developing the Work Force**

The United States and many nations throughout the world are being confronted with a legacy of over two decades of neglect by both businesses and society at large in developing their workforces. Hundreds of reports, studies, and surveys from such organizations as **Deloitte**, the **Manufacturing Institute**, **McKinsey**, **Accenture**, **Harvard Business School**, **Manpower**, the **Institute for Management Development**, **Conference Board**, **Brookings Institution**, **Business Roundtable**, **Oxford Economics**, **CEO Council**, **Society for Human Resource Management**, **Thomasnet's Industry Marketing Barometer**, **Center on Education and the Workforce of Georgetown University**, **National Bureau of Economic Research**, **Towers Watson**, **ABC Canada**, **U.S. Department of Commerce**, **American Association of Colleges of Nursing**, and many more have called attention to this human capital time-bomb. Yet we have largely ignored both updating worker skills and providing more students with the challenging general education and career training needed to meet the rising requirements of the contemporary workplace. [5]

Millions of workers who have left the workforce had jobs that have now been automated. Many

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of them lack the educational preparation and specific career/job skills currently sought by employers. They want good paying jobs but only qualify for low-skill jobs. On the employer side, companies only want to hire people who are *job ready*. They are looking for an exact fit and scorn job-training programs because they fear that such qualified hires will be poached by a competitor. Businesses see millions of unemployed people. They believe there is plenty of labor slack in the U.S. work force. They not only reject training, but also have kept wages low. This has kept a growing cadre of skilled people waiting until wages again reach a competitive level in their job area. On the other hand, recent surveys continually show that executives report finding appropriately skilled workers is their biggest worry, and they only see that it is getting worse. Yet, while some state that they intend to increase their training expenditures, this is happening too slowly for the labor force to significantly advance in attaining the skill levels demanded by modern workplaces.

One solution used by Columbus Casting, an Ohio steel foundry, was to hire 175 inexperienced workers who were given just enough basic training to do their jobs. The \$14-an-hour wage was unattractive to skilled workers, so this company hired people with a criminal record or a past history of extended unemployment. Following this practice of providing the most minimal training possible helps explain why U.S. annual productivity growth since 2009 has averaged just 1.3 percent, the weakest since the 1970s. Many new technologies are increasingly reliant on digitally driven equipment and software. Weak business investment in its human capital is a limiting factor for productivity growth in the U.S. knowledge economy. Something has to give to prevent the U.S. talent crisis from ending up in an economic train wreck!

In 2015 the business community must face the reality there is little slack in the U.S. labor market. Since the skills-job disconnect is global, every industrial nation is now chasing after the same limited supply of skilled people. U.S. business efforts to import an adequate number of these skilled foreigners to fill vacant STEM and other high-skill jobs has become an increasing exercise in futility. [6]

### **Lack of Rigor in U. S. Education**

Yet there seems to be a growing hostility in American culture to raising educational standards in order to provide larger numbers of students and workers with more in-depth knowledge and workforce skills training. This is because we have failed to clearly provide a coherent picture of what sustains our modern standard of living. It explains much of the public's hostility to overhauling the largely outdated 20th-century education-to-employment system. This system is similar to running a high-performance race car on low-octane fuel! It is self-defeating for students/parents and workers/businesses.

What are the consequences of the lack of rigor in American education? In January 2015 the results of an exam developed by the **Council for Aid to Education** found that 40 per cent of college seniors lack the critical thinking, analytical reasoning, writing, and communications skills required for success on the job. In a similar vein, the Association of American Colleges and Universities national survey reported that 58 per cent of employers said that serious education improvements are needed in higher education to prepare students for entry-level positions. [7]

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An international perspective is provided by the Survey of Adult Skills administered by the **Organization for Economic Co-operation and Development (OECD)**. This test was completed by about 166,000 adults in 23 nations and assessed the literacy, math, and problem-solving skills of adults aged 16 to 65. U.S. adults scored below the OECD average in literacy, very poorly in math, and slightly below average in technological problem-solving. [8]

The **Educational Testing Service (ETS)** extracted data from the OECD survey to conduct a comparative analysis of U.S. millennials. *America's Skills Challenge: Millennials and the Future* (January 2015) focuses on adults ages 16 to 34. They are our *digital natives*, the generation we have conditioned for higher achievement. Unfortunately, this did not prove to be the case. In literacy out of the 23 nations, only millennials in two nations, Italy and Spain, had lower average scores than Americans. In math, U.S. millennials were dead last, and in technical problem-solving skills, second from the bottom. The ETS study analyzed overall averages, but also did a variety of other comparisons. The results were equally surprising. U.S. millennials with master's degrees and doctorates did better than their peers in only three countries, Ireland, Poland, and Spain. The best students in Finland, Sweden, and Japan scored far higher than their U.S. counterparts.

ETS focused on native-born Americans and further native-born American with at least one college-graduate parent. The scores of both groups were still behind those of most other nations. When ETS looked at race, white and Asian-Americans did better, but still fell behind similar populations in other nations.

The ETS study called into question the rigor of U.S. educational credentials. Though few American test takers lacked a high school diploma, the scores of American millennials were not any better than those attained in nations that had relatively high rates of students who failed to finish high school.

Moreover, U.S. scores on the **Survey of Adult Skills** were lower in 2012 than in when it was last conducted in 2003. The ETS study concludes with this assessment:

A decade ago, the skill level of American adults was judged *mediocre*. Now it is below even that. Millennials, who will form the backbone of this nation's future, are not poised to lift us out of this predicament; in fact, the lack of adequate skills in this population has become a challenge for us to confront. [9]

Let's stop kidding ourselves that the kids are doing just fine! Already there are too many unemployed grads wondering, What was the benefit of my college education? Their parents are wondering that as well! Too many parents still don't get this message. National test scores (i.e., **National Assessment of Educational Progress**) indicate that many schools have too many students who are not reaching proficient skill levels in these general education areas. America's advanced technical development demands that all students attain higher reading, math, science, and communications proficiency. There are no more low-skill/high-wage jobs. This is not a political statement. This is the reality of America's 21st-century economy. Today's students need to learn more, not less than past generations, if they are to attain middle-class status. People will have to

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master multiple skills if they are to thrive in today's workforce and keep their skills and knowledge up-to-date as jobs and career demands change. If the United States is to prosper in 2015 and beyond as it faces the challenges posed by globalization, automation, and demographic change, we must invest more to develop our human capital.

### **Investing in Human Capital**

The message for businesses is that to achieve more growth over the next decade they must increase investments in both technology and in improving the education and skills of America's current and future workforce. That means that both Wall Street and Main Street businesses have to change their thinking. Company cost-cutting to increase short-term profits has led to serious underinvestment in worker training and student career education. Both poaching skilled people and surrendering all responsibility for student career education to local schools has become an accepted U.S. business practice.

American businesses have continued down this road of underinvesting in human capital for several decades. They now face a rising tide of vacant jobs they cannot fill. This will grow from about 7.4 million vacant jobs today to an estimated 14 to 25 million by 2022. [10]

What is a promising solution gaining traction across the nation for rebuilding America's education-to-employment system in order to prepare people for 21st-century job opportunities? More American companies need to participate in collaborative business-education programs at the regional level to provide people with the skills needed to fill current vacant jobs and prepare more students for in-demand careers.

### **What RETAINs Can Do**

**Regional Talent Innovation Networks (RETAINs)** are all about creating local delivery systems that both reeducate those already in the workforce and better prepare a larger proportion of students for current jobs and future careers that will be created by the ongoing jobs revolution. The over 1,000 RETAINs across the United States have chosen a wide variety of names, such as:

- The New North (Wisconsin)
- The Vermilion Advantage (Danville, Illinois)
- High School Inc. (Santa Ana, California)
- The Coachella Valley Economic Partnership (Palm Springs California Area)
- New Century Careers (Pittsburgh, Pennsylvania)
- Partners for a Competitive Workforce (Cincinnati, Ohio)

RETAINs act as neutral intermediaries that provide a place in which different groups can gather and safely collaborate. They produce cross-sector programs that support skill needs common to many businesses. RETAINs help minimize the poaching risks and promote a more positive overall regional business culture of creating rather than stealing talent from each other. (See **Figure 1, Appendix**) RETAINs succeed because individual groups form a new shared vision of a larger community arising from a variety of isolated silos. Each group has its own agenda and needs. But each also has an influence on the whole community, and each depends on the success of the whole community (See **Figure 2, Appendix**). RETAINs are of particular interest to small business owners because they offer a viable way of pooling their resources through joint programming that will inform, attract, and prepare skilled workers to fill current vacant jobs.

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RETAINs link regional employers together as a collaborative network to rebuild the talent pipeline that integrates training organizations, educational institutions, and other community-based organizations. This reduces the individual company's investment in employer-provided education and training (See **Figure 3, Appendix**). RETAINs also recognize that the development of a student's academic knowledge and career skills are no longer mutually exclusive silos. Both the informational content of 21st-century jobs and the speed of continuing labor-market changes have now ended this division.

Today's reality is that all students must be prepared for some form of postsecondary education – 2- or 4-year college degrees, technical certificates, or apprenticeships. Integrating the required 21st-century skills and career and technical education into the entire education system (elementary, secondary, postsecondary, workplace learning) will make this a reality. The required direction for all K-12 education is to prepare every student for this transition without remediation to a postsecondary education.

This is the primary reason why many RETAINs have as part of their network liberal arts, college-prep, career academies, or to adopt a simpler term for this discussion, comprehensive career academies (CCAs). They are a growing phenomenon in high schools across the United States. Over 2,500 CCAs are already operating. Many are smaller learning communities within larger high schools. Some are stand-alone career high schools in healthcare, IT, and various STEM areas. They blend a stronger liberal arts curriculum with specific practical career-education courses, internships, and pre-apprenticeship experiences. RETAINs also support apprenticeship education programs. Apprenticeships are post-secondary skill-training programs that combine paid, supervised, on-the-job learning experiences with related classroom academic instruction. Apprenticeships provide students with an advanced set of skills leading to certification in specific career areas including many types of technicians. No single business sector can effectively rebuild regional workforce delivery systems by acting alone. RETAINs as cross-sector public/private partnerships help focus on building sustainability and growth for all their business members. Through participating in them businesses discover they share the same concerns and learn how to work together in solving this skills-job crisis for employers, community members, and the regional economy (See **Figure 4, Appendix**). [11]

### **Call to Action**

American society is currently neglecting both its students and workers. If we fail to reform our education-to-employment systems to produce the skilled labor needed today as we approach full employment, when will this ever happen? Decision time has arrived for systemic change to restructure learning for the 21st century!

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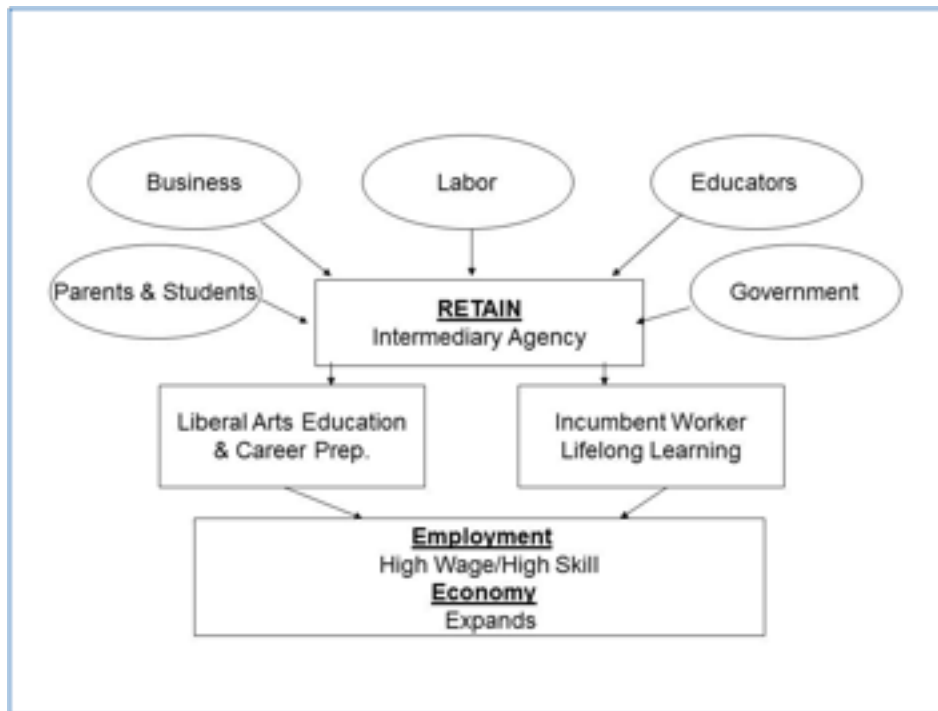
**Edward E. Gordon.** is the author of *Future Jobs: Solving the Employment and Skills Problem* (2013) as well as many other academic and business titles on adult learning and workforce development issues. For 20 years he taught at several Chicago universities including DePaul, Loyola, and Northwestern. He is the founder and president of Imperial Consulting Corporation in Chicago. He has consulted with leaders in business, education, government and non-profits for over 40 years. Ed is a big picture thought leader connecting the employment dots between business, education, and training. The culmination of his work as a visionary who applies a multi-disciplinary approach to today's complex workforce needs and economic development issues can be found in his newest book, *Future Jobs: Solving the Employment & Skills Crisis*. The founder and president of Imperial Consulting Corporation (in Chicago and Palm Desert, California), he is a human capital management expert who is internationally recognized as an authority on how talent discovery, career planning, and training relate to business and economic development. As a writer, researcher, speaker, and consultant he has helped shape policy and promote business and education development. He has helped hundreds of clients, including Fortune 500 companies, as well as: Microsoft, PricewaterhouseCoopers, the Federal Reserve, Motorola, Metra Rail, the American Institute for Research, the Conference Board (U.S. and Canada), the U.S. Departments of Education and Labor, state agencies of Alabama, Arkansas, California, Delaware, Illinois, Indiana, Kansas, Michigan, Minnesota, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Virginia, and Wisconsin; as well as universities, school systems, non-profit organizations, and trade or professional associations. Gordon is the author or co-author of 18 books including *Winning the Global Talent Showdown*, *The 2010 Meltdown*, *Skill Wars*, *FutureWork*, *Closing the Literacy Gap in American Business*, *Opportunities in Training and Development*

*Careers, Literacy in America, The Tutoring Revolution, Peer Tutoring: A Teacher's Resource Guide* and *Tutor Quest*. He has been quoted in or written over 300 articles for major newspapers, including *USA Today, The Wall Street Journal, The New York Times, Washington Post, Boston Globe, Investor's Business Daily*, popular magazines, business publications, and education journals, including *The Futurist, M World, Talent Management, Training, HR Magazine*, and *Employment Relations Today* as well as in the documentary film *Waiting for Superman*. His media experience includes the CBS Network's The Early Show, PBS, CNN, NBC, Bloomberg TV, WGN, NPR, Time-Warner Cable, USA Radio, and Yahoo! As a professional speaker, he has been heard by over 500,000 people and millions on television and radio. He has taught courses in business, psychology, and history for 20 years at several Chicago-area universities including DePaul, Loyola, and Northwestern. He currently is on the Executive Board of the Chicago Renaissance Manufacturing Council, the Advisory Board of the Coachella Valley Economic Partnership (Palm Springs area), the Human Capital Executive Research Board, and the Advisory Board of the Catholic Charities of Chicago. He previously served on the Board of Directors of the Better Business Bureau of Chicago and Northern Illinois, the Board of Trustees of Moraine Valley Community College, the Board of Directors of the Illinois Literacy Resource Development Center, and the Youth Policy Committee of the Chicago Workforce Board. He earned the PhD in History/Psychology, graduating Magna cum Laude from Loyola University in Chicago, and the MA in History, graduating Magna cum Laude from DePaul University in Chicago. Contact him as follows:

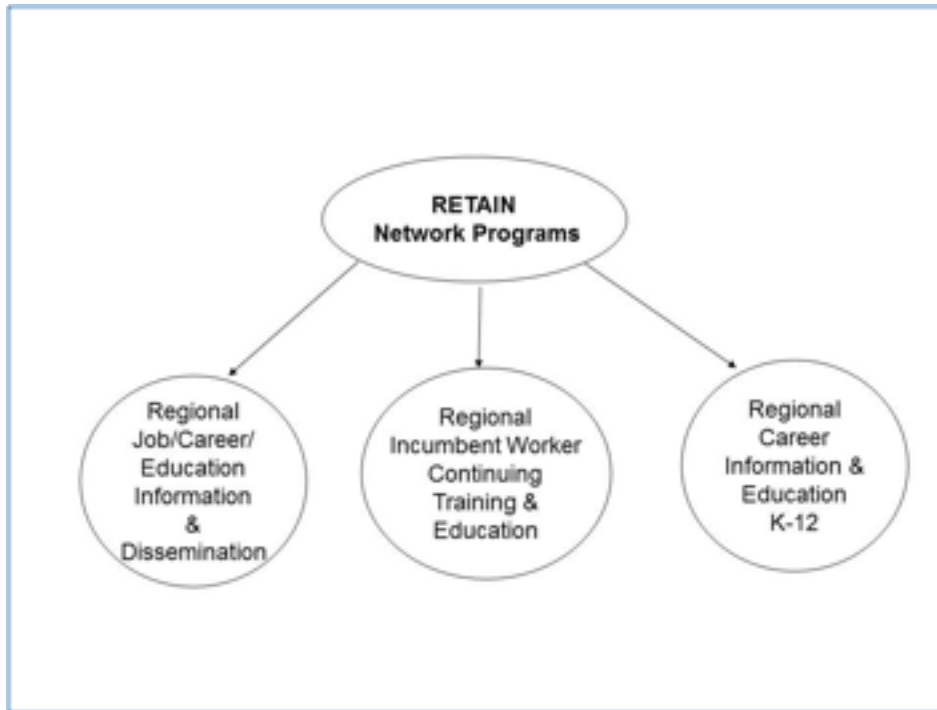
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**APPENDIX**

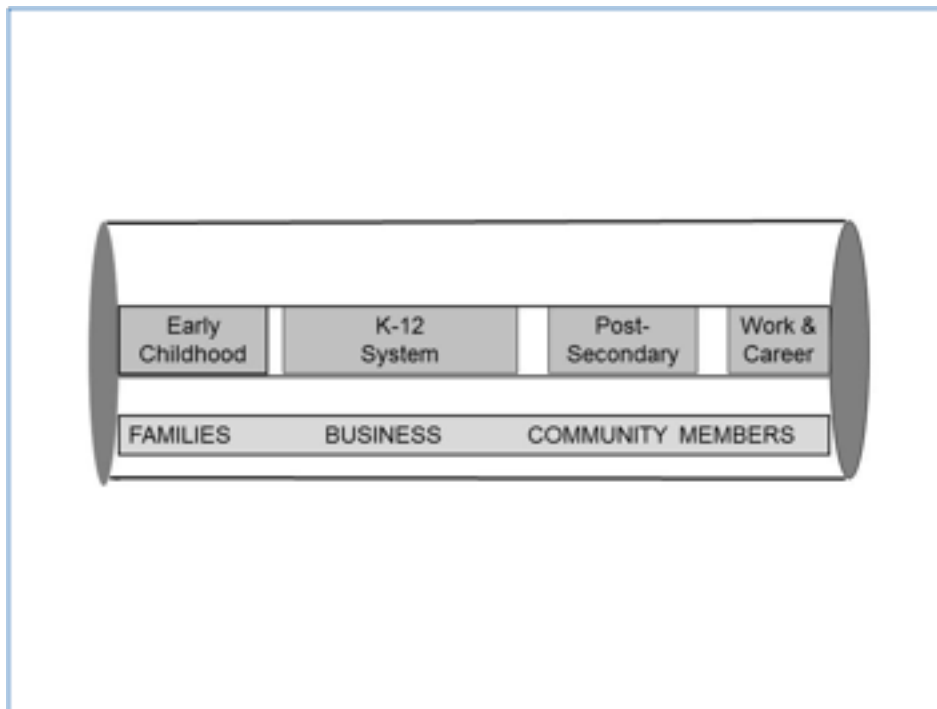
**Figure 1: Build a RETAIN Network**



**Figure 2: Shared Talent Vision**



**Figure 3: Rebuilding the Talent Pipeline**



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**Figure 4: What RETAINs Do**

