



Advocacy for Gifted and Talented in New York

Human Resources Pipeline

By: Jeanette Matthews

WHAT'S HAPPENED TO THE USA HUMAN RESOURCES PIPELINE?

- 2001: 160,000 entry level engineering jobs filled in USA:
100,000 filled by foreign students (K-12)
60,000 filled by USA students (K-12)
- 2000: 750,000 engineering jobs left open in USA because of lack of qualified candidates
- 9/2000-10/2001: 1.2 million Americans with college or vocational degrees hired
- 9/2000-10/2001: 1.9 million Americans with HS or less education were laid off
- 1970: USA hiring was 75% blue collar/25% white collar
- 2000: USA hiring was 70% white collar/30% blue collar
- 2008/2010: shortfall of 4-6 million qualified workers in USA as K-12 systems continue to place only 50% students or less into post-HS degreed programs

UPCOMING NEW YORK STATE DRAIN ON THE TALENT POOL

- \$5 billion NYS/SUNYA High Tech Park (Sematech, TLE, IBM)
- \$100 million re-investment in GE Global Research Center
- \$100 million RPI High Technology/Engineering expansion

GETTING ON THE FRONT END OF THE HR PIPELINE DROUGHT

State of Idaho: Partnership with State Ed Dept., University of Idaho, and Micron Technologies/Hewlett Packard, and Albertson Foundation to create and deliver math and science program for K-12 students and their teachers. Highlighted by Gov. Dirk Kempthorne during 2002 governors meeting.

State of Connecticut: Partnership with State Ed Dept., Exxon/Mobil, National Science Foundation, and other state associations to create CT. Academy for Education in Math, Science, and Technology. One of only 8 states to be selected for renewal of CONNSTRUCT program through National Science Foundation.

State of New Jersey: Partnerships among PSE&G, Pfizer, Verizon, and Commerce Bank whereby companies provide for staff training, curriculum development, internships, mentoring, and facilities improvement while graduates are better equipped to handle appropriate program at NJ college.

State of Massachusetts: Partnership with State Ed Dept., NOYCE Foundation, and National Science Foundation to create PALMS – a vanguard of education reform in Math and Science in the state.

NYS' BEST AND BRIGHTEST ARE WAITING TO SHOW-OFF THEIR STUFF

NYS assessment scores for Level 4 students are level or trending downward.

NYS continues to under-recognize unique abilities of "gifted" students by forcing them into educational programs targeted for Level 1 and Level 2 underachievers.

NYC schools are expanding programs to develop “high tech” skills package (including two more Bronx Schools of Science) while other NYS schools cut enrichment programs during budget shortfalls.

WHAT AGATE NEEDS FROM NYS LEGISLATURE?

Mandate gifted education in New York State and appoint a NYS head of gifted education who will focus on academic achievements of the top 10%

Create parallel curriculum which would give gifted students a faster-paced/higher challenge classroom situation

Endorsement to AGATE in form of commitment letter so AGATE can actively pursue NYS companies to provide partnership/alliances to create financial backing for gifted education programs across the state or

Commitment from Governor’s Office, Legislature, NYS Education Department, NYS University system to join forces and develop together a cohesive plan to reach out to corporations. Corporations provide creative juices and funding (\$\$\$/mentors/volunteers) to develop and implement new K-12 math, science, and technology initiatives in all NYS school districts

Option to explore Albany area “Bronx School of Science” to further develop the regional talent pool feeding Tech Valley companies

WHAT NYS GETS IN RETURN?

Richer K-12 math and science curriculum funded by interested corporations, leaving existing NYS Education Department budget for other school needs

Viable K-12 pool of talent to feed the growing technical needs of NYS companies and thereby attract more corporations to NYS

Children stretching their minds and becoming the future innovators for this nation

Joining the club- only 16 states do NOT mandate gifted education

BEST PRACTICE to market to other states facing identical talent pool dilemma