

The Dod's Declining Talent and the 35,000 Student Problem: Two Problems Likely Solvable From a Symbiotic Relationship

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Overview

- Why is this important to DoD?
- The 35,000 problem
- Where have we been?
- Direct DoD Scholarships
- What if the DoD had started sooner, looking back 30, 40, 50, and 60 years
- Next steps -- Charisse

Why is this important to DoD?

- Largest STEM employer in the world
- Fantastic drain on the US economy, on our economic growth
- For sure, we're skewing society's representation in the military—poorest of the poor not represented well
- On-going under-representation of Minorities and Women in DoD and Universities
- DoD must more aggressively attack the problem in a multifaceted way
- We're proposing several novel approaches

Where Have We Been?

- Why 27 and 55 percent matter?
 - Graduate Year Minority Impact: \$3.1B (adjusted salary by discipline)
 - Graduate Year Impact on Women: \$15B
 - Annual Lifetime Minority Impact With No Salary Adjustment: \$120-150B
 - Annual Lifetime Impact to Women With No Salary Adjustment: \$400-600B
- Apportioning DoD Funding to Elite Universities to HBCUs / Women

What is the 35,000 Problem?

- Malcom Gladwell framed the salient finding of Hoxby and Avery as the 35,000 problem
 - 35,000 overlooked that are QUALIFIED to go to the Ivy League
 - They're the poorest of the poor (Over-represented by Minorities and Women)
 - Drawn from the book "***I Hate the Ivy League***", which one can only listen to it via Audible (Gladwell wants to you hear the "left out" students
 - ***The Missing One-Offs: The Hidden Supply of High-Achieving, Low Income Students*** by Caroline M. Hoxby and Christopher Avery (Dec 12)
- The claim by elite universities they can't find smart Minorities and Women is a giant fraud
- Vast majority are never contacted and never apply to a university

**DoD Should Target Growing 25-35,000 STEM Graduates
Per Year From The "35,000 Problem"**

Show Me the Data: 2019 STEM Realities

- Engineering: Women are 13-24%, with approximately 5000 Black graduates out of 127,000 total graduates in 2019
- Computer Science and IT: About 89,000 grads per year and 26% of them are Women and Black only 9%
- Health related professions: 251,400 grads Black: 29,000
- Biological Sciences: 121,200 degrees: Men 36%: Black: 10,000
- Hispanic population is really surging as a STEM participant when comparing today to 10-15 years ago

**Given Under-representation in the STEM Professions,
DoD focus on 35,000 Problem Should Lift Participation**

Looking Back Decades – Reshapes STEM?

- Simulation Results
 - Varying pool growth
 - Varying how far book
 - Varying composition of demographics

Challenges

- How to organize to reach these specific students
- They will need more funding AND support than the typical scholarship recipient
- Many are in schools that don't care
- Many are the backbone of their family
- DoD should rethink the activities of the ROTC staffs
 - Military, civilian military, other Federal agencies, Peace Corps, AmeriCorps
 - These kids will need additional support
 - Should the funding target HBCUs, Women, and schools with ROTC

Charisse's Actions / Next Steps

- Drafting the salient features of what should be the legislation
- Working with the delegations to begin the process