

Accelerating Diverse Talent Along the STEM Pipeline

Louis Stokes Midwest Center of Excellence 2015 LSMCE Conference Dr. Mary F. Howard-Hamilton @mhow262 #freeISU

Historical and Cultural Foundation

- Societal racial issues
- Theoretical Frameworks CRT, BFT, privilege
- Culture, race, gender, and STEM...it all matters



Minoritized Groups in STEM

- African American Women in STEM -Charleston et al (2014)
- Challenges of being a Black woman in Computing Sciences
- Commonality of isolation and subordination
- Sacrifices related to computing sciences pursuance



Spirituality

- Interview with graduate students the theme of spiritual identity development emerged:
- I'm also a spiritual person, so I get a lot from that...I think it changes my outlook on everything because that is the reason I am here is because God wants me to be here. I try to read the Bible and pray and focus on God because He is the most important thing. Like even tomorrow if something happened and I didn't get a Ph.D. I'd be fine. A lot of people think chemistry is all I have. You see a lot of people just throwing all of their everything into chemistry. This is not all I have. It doesn't define me. I have a source. I go to church every Sunday and hang out with those people and center myself.

Action Steps

STEM Angry Black Woman





Systemic Strategies

- Developing Integrated Support Systems
- Ensuring Inclusive Curricula
- Promoting Interactive Classrooms
- Increasing the Availability of Role Models and Mentoring
- Spiritual Support
- NPHC Greek Organizations
- K-12 Professional Development
- Continuous Support Post Graduation into Career

Educational Challenges and Opportunities

