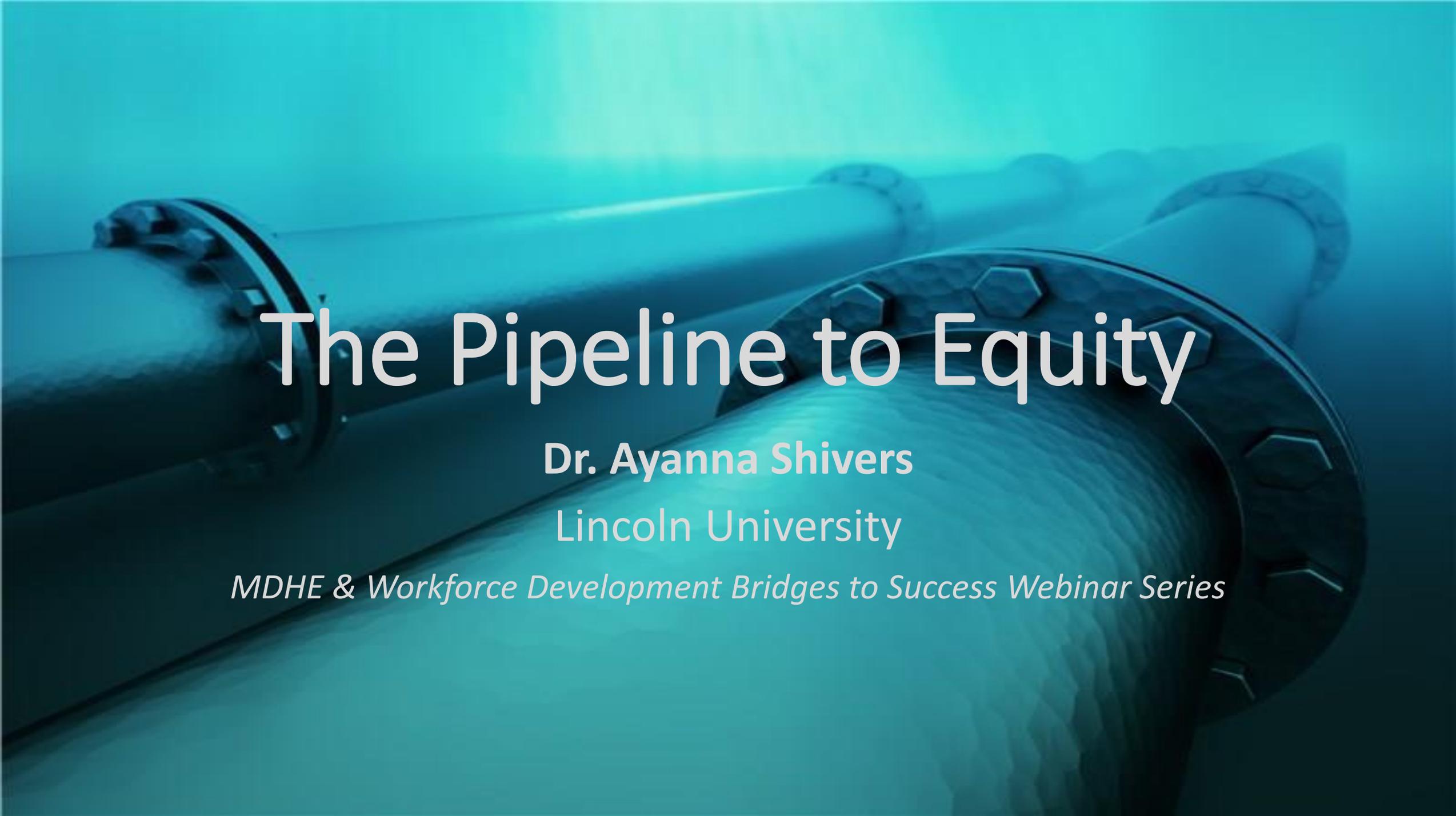




MISSOURI HIGHER EDUCATION EQUITY
BRIDGES TO SUCCESS



The Pipeline to Equity

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Lincoln University

MDHE & Workforce Development Bridges to Success Webinar Series

The Outline of Today's Presentation

- Defining Equity/ Equity in Education
- The Role of Historically Black Colleges and Universities (HBCU's)
- Lincoln University-Missouri
- The NOYCE project at Lincoln University

Definition of Equity



EQUALITY

Equality = Sameness

Equality promotes fairness and justice by giving everyone the same thing.

BUT, it can only work *if everyone starts from the same place*. In this example, equality only works if everyone is the same height.

EQUITY

Equity = Fairness

Equity is about making sure people get access to the same opportunities.

Sometimes our differences or history can create barriers to participation, so we must **FIRST ensure EQUITY** before we can enjoy equality.

Equity in Education

- Access
- Finances
- Qualified Teachers/ Ability to Offer Resources
- Location
- Background and experiences of students

Some of the same issues that are faced in K-12, can be found in higher education as well.

The Role of HBCU's

- To provide a space for Black students (particularly free Blacks) to continue their education
- To address the inequities that existed
- Some were designed to provide industrial education; while others provided a liberal arts education (Booker T. Washington and the W.E.B DuBois debate)



Interesting Facts About HBCU's

- The first Black person, Alexander L. Twilight, received a bachelor's degree in the United States was in 1823 from Middlebury College
- **The first college for Blacks was started in 1837 in Cheney, PA—however, it did not become a degree granting university until 1932!**
- 1857 Harris-Stowe State University was founded as a Normal School in St. Louis, MO
- **1866 Lincoln University was founded in Jefferson City**
- By 1870 there were 22 Black colleges in the US
- **In 1890, the Morrill Acts extended Land Grant Opportunities to Black Colleges**
- The term, HBCU, was created in the US Higher Education Act of 1965, refers to colleges that were founded prior to 1964 to serve Black students

Lincoln University-Missouri



Brief History of Lincoln University

- Lincoln Institute was founded in 1866 by members of the 62nd and 65th United States Colored Infantry
- In 1870 the Normal School was opened—this year the School of Education celebrates its 150th Anniversary
- In 1871 it moved to its current location
- 1877 college level work was added and those who graduated from the Normal school were able to teach for life without anything further
- In 1879, it became part of the State System
- 1890 it became a Land Grant Institution
- 1921 Walthall M. Moore passed a bill in the Missouri Legislation changing the name to Lincoln University and creating a Board of Curators
- 1954 desegregated and opened its doors to anyone who met the criteria

Equity in STEM and STEM Education

- According to the National Science and Technology Council Report 2018, STEM fields are expected to increase by 8.9%
- ACT 2018 data shows that **970,532** students showed interest in a STEM field but only **5839** were interested in STEM Education!



Equity in Missouri Education

- 2019-20 teacher shortage report stated Missouri had shortages in 45 areas—15 were in STEM
- According to Missouri DESE's equity plan 2018 the teacher workforce was not very diverse: 93.2%- White, 5% Black and 1.8% other. 78% of teachers are female. These numbers do not reflect the 2010 census (82.8- White, 11.6% Black and 5.6 % Other)
- The 2018 Equity Plan suggested there had been a decrease in minority teachers from the Initial plan of 2015
- High school science was one of the areas that had the most teachers that were less than fully qualified. Especially in rural, remote, highest FRPL and highest minority school districts.

Reaching Equity Goals At Lincoln (REGAL)

WHO:

- Lincoln University
- Moberly Area Community College
- Jefferson City School District
- Kansas City Public Schools
- Mexico Public Schools

Focusing on recruiting minority populations and rural students as STEM Majors!



What Is REGAL?

- 1.45 Million Dollar NSF Noyce Grant that will last for five years
- Designed to increase the number of STEM majors that teach in K-12
- An effort to recruit and retain underrepresented populations as STEM educators

When?

July 1, 2020 – June 30, 2025

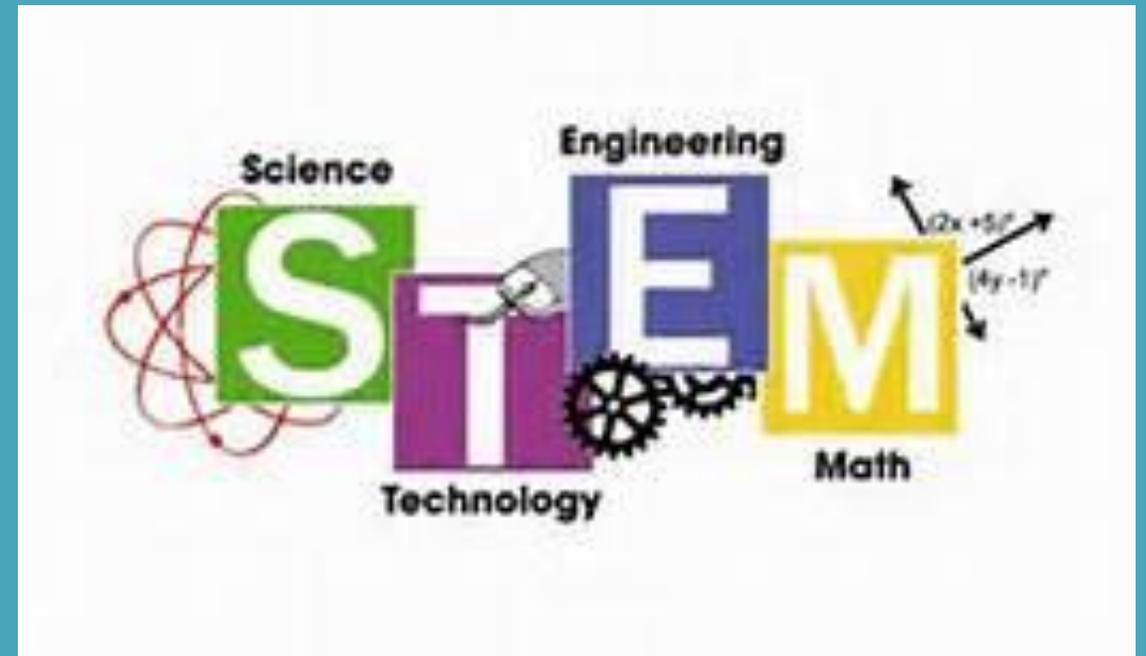
Where?

Lincoln University Campus and its partners

How?

The REGAL Noyce Scholars Program is designed to address these issues by building on LU's foundation of graduating culturally relevant teachers for more than a century and creating a pipeline network utilizing districts Grow Your Own (GYO) and its partnership with Moberly Area Community College (LUMACC) by implementing the following:

- REGAL Interns
- REGAL Scholars
- REGAL Support Network
- REGAL Summer Experience
- MS/HS Outreach
- STEM Advisory Board
- STEM Conference
- Parent Workshops



Why Are We Doing This?

Project Goals:

1. Increase the number of STEM majors graduating from Lincoln University; and teaching in K-12 classrooms
2. Assist Grow Your Own (GYO) programs in Jefferson City, Kansas City and Mexico, MO in developing STEM majors to return to their respective hometowns and teach
3. Promote STEM as a viable career field for underrepresented populations
4. Construct an inquiry-based culturally responsive curriculum that can be integrated into undergraduate STEM and teacher preparation programs; as well as be a part of ongoing professional development.

Intellectual Merit and Broader Impact

Intellectual Merit: STEM majors cannot adequately serve high need school districts without training in pedagogy that addresses cultural diversity at all levels. The REGAL initiative will be informed by activities and lessons learned from LU's four-year (2012-2015) NSF funded project, *Applying Performance Pyramid to STEM Education*, which aimed to improve retention and learning for nontraditional STEM majors. This project will also add to the discourse on GYO programs by partnering with various school districts with dual-credit offerings and community colleges to create a pipeline of STEM majors who graduate with a bachelor's degree from LU, after receiving their associate's degree.

Broader Impact: The United States created a path to success in STEM Education with a vision, "where all Americans will have lifelong access to high-quality STEM education and the United States will be the global leader in STEM literacy, innovation, and employment (National Science and Technology Council, 2018, p.4). This project will assist the nation in reaching its goal by creating a GYO pipeline of STEM majors who will teach in high need communities and positively influence the next generation of STEM majors to return to the classroom. This project will use a mixed-method design to determine its effectiveness. Conferences and research journals have been identified as ways to disseminate the research findings in regards to implementing an inquiry-based, culturally relevant curriculum and the effectiveness of GYO programs in retaining and recruiting underrepresented populations in STEM majors as K-12 teachers.

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