

The state of STEAM

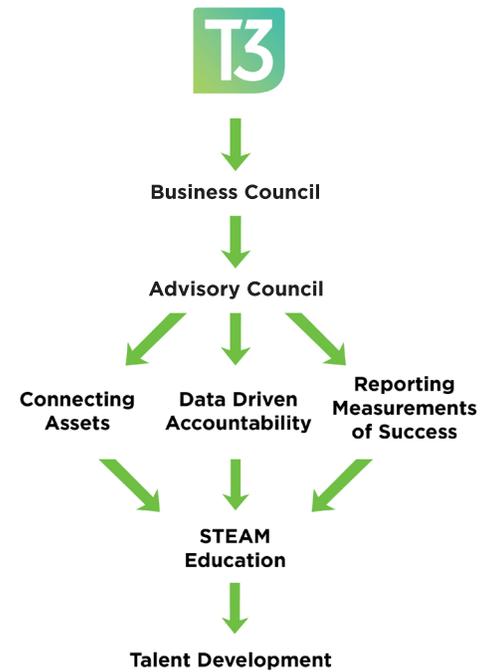
Science, Technology, Engineering, Arts and Math education in the Greater Lansing region

T3 VISION: Michigan's capital area will be the exemplary STEAM region in America.

Q: What is T3: Teach. Talent. Thrive.?

A: Teach. Talent. Thrive., or T3, is a network of connected assets to support education and talent development in the capital area, maximizing our chances for real, lasting change. Its mission is to establish a community committed to lifelong learning, led by business and community stakeholders, to ensure regional prosperity in the ever-changing new economy.

For years, conversations in Greater Lansing have revolved around the topic of education and college- and career-readiness. T3 plans to turn these conversations into actions by using private sector leadership and support from K-12, higher education, government and nonprofits to point the way forward. **The goal is to transform Michigan's capital area into the exemplary STEAM region in the U.S.**, focusing on the fields of science, technology, engineering, arts and math.



Q: How do we empower the capital region to become the exemplary STEAM region in the U.S.?

A: Using metrics collected by various organizations in the Greater Lansing region, this report provides a baseline for T3 to build on. With these numbers, we will act as a workforce development engine.

T3 will:

- Support a system in which pre-K-12 is the career exploration place for all students and they all have the opportunity to excel in STEAM education.
- Support all learners being college- and career-ready and are willing to invest in the necessary lifelong training and knowledge to assist them.
- Promote non-traditional approaches to learning including apprenticeships, internships, mentoring, job shadows, competency-based instruction and hands-on experiences to support student exploration in and out of the classroom.
- Seek broad community understanding of new economy jobs and the local businesses growing these industries.
- Seek to increase high quality talent available for the openings in four focus areas in our region.



Health care



Insurance/finance



Advance manufacturing



Emerging technologies

Q: Are we succeeding in providing STEAM

Third grade reading proficiency in Clinton, Eaton and Ingham Counties

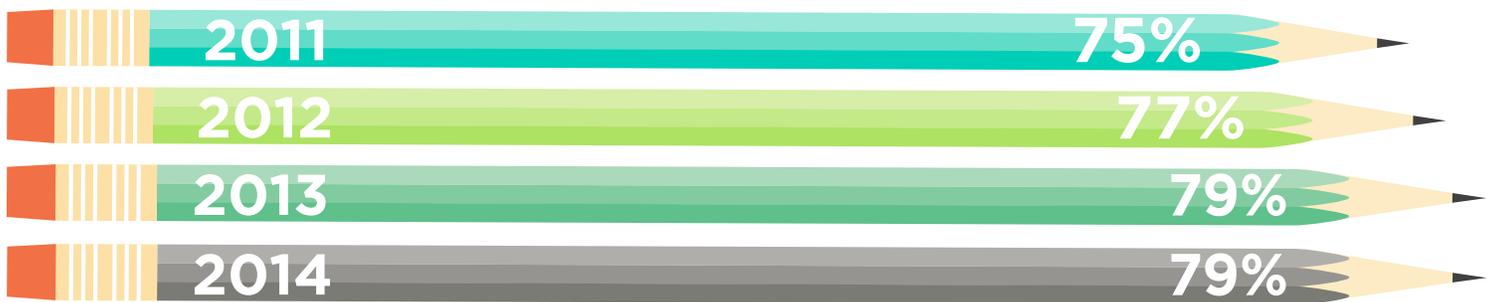
A: T3 will ensure all students are reading at grade level by the third grade. Basic literacy provides the foundation for future academic and career success.

County	2014-15	2015-16
Clinton County	61.7%	60.6%
Eaton County	51.6%	49.4%
Ingham County	51.8%	48.4%

(Source: mischooldata.org)

A: We must increase high school graduation rates so all students are college- and career-ready.

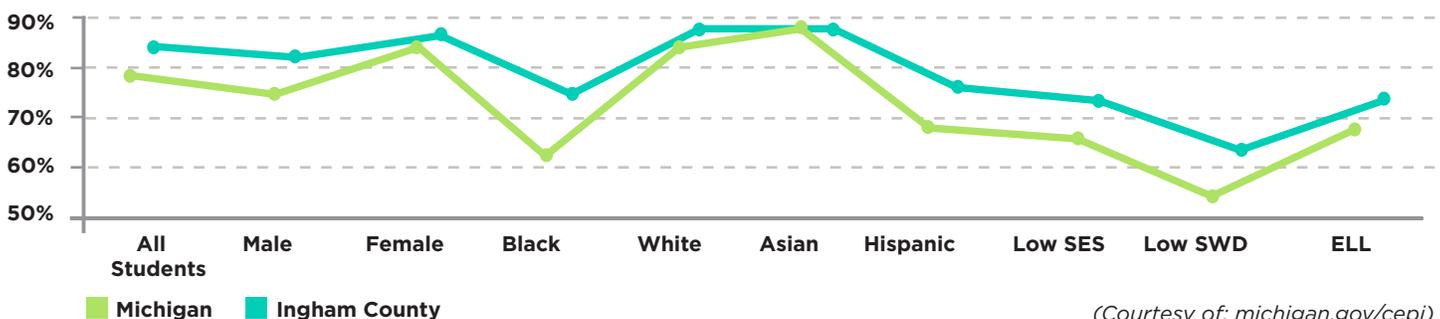
Percentage of Michigan public high school students who graduated.



(Source: mischooldata.org)

A: We must increase the number of adults with degrees and the skills needed to support our continued prosperity into the future.

2014 Ingham County 4-year cohort graduation rates by group



(Courtesy of: michigan.gov/cepi)

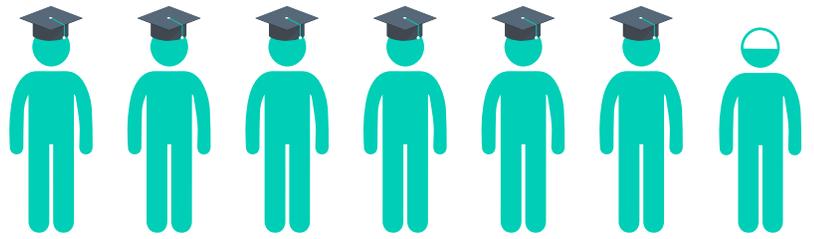
Q: What do these metrics

A: These metrics serve as the foundation for students pursuing occupations in STEAM fields.

education in the capital region?

Postsecondary institution enrollment
Fall 2014 = 69,049

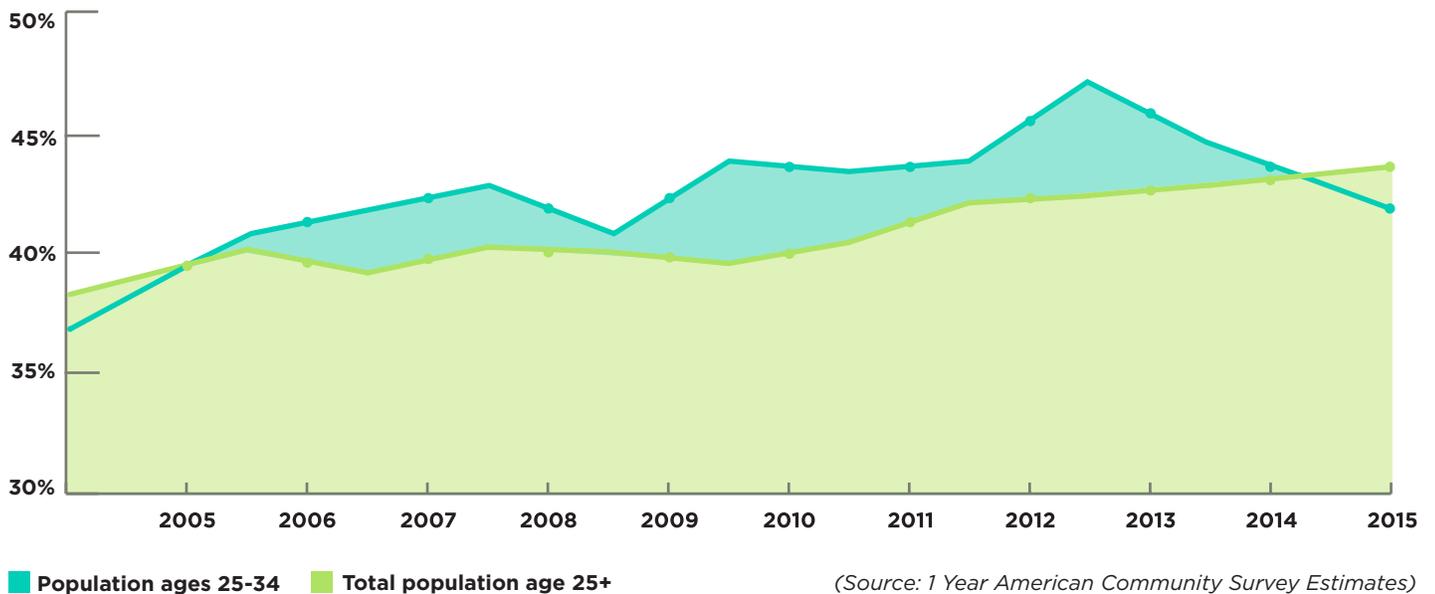
 = 10,000 people



(Source: micapitalregion.com, National Center for Education Statistics)

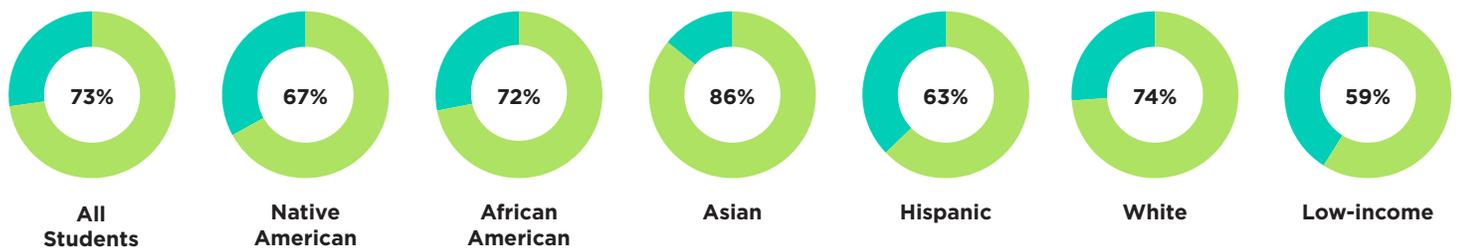
Population with associates degree or higher in the Greater Lansing region

The percent of individuals that have obtained a degree beyond high school.



(Source: 1 Year American Community Survey Estimates)

2014 college enrollment of high school graduates in Clinton, Eaton and Ingham Counties



(Courtesy of: mischooldata.org, Capital Area College Access Network)

have to do with STEAM?

95 percent of workers in STEAM fields have postsecondary education and training.

(Source: Georgetown University Recover Report: Job growth and education requirements through 2020)

Q: How do we transform into the exemplary STEAM region in America?

A: Support students' STEAM and career exploration in and out of school.



of parents say STEAM should be a priority to produce the next generation of innovators.



of STEAM college students have a parent in STEAM.



of STEAM college students say supportive parents is an important success factor.

(Source: Microsoft Corp. STEM Perceptions Report)

A: Support programs that give students opportunities to develop STEAM skills such as...



Impression 5 Science Center: Summer L.A.B.S.

- 933 students attended.
- Children challenged their understanding of science through experimentation and fun projects during week-long programs.



Capital Area IT Council: Tech Tours

- Michigan State University and Lansing Community College students attended.
- Throughout the school year, student groups toured local IT companies, then checked out unique housing and entertainment spots to explore the region's live/work/play options.



TEEMS: Teen Engineering Experience at Michigan State

- 85 students attended.
- The residential program gave students hands-on exposure to the field of engineering and life on a college campus.



Wharton Center for Performing Arts: Disney Musical in Schools

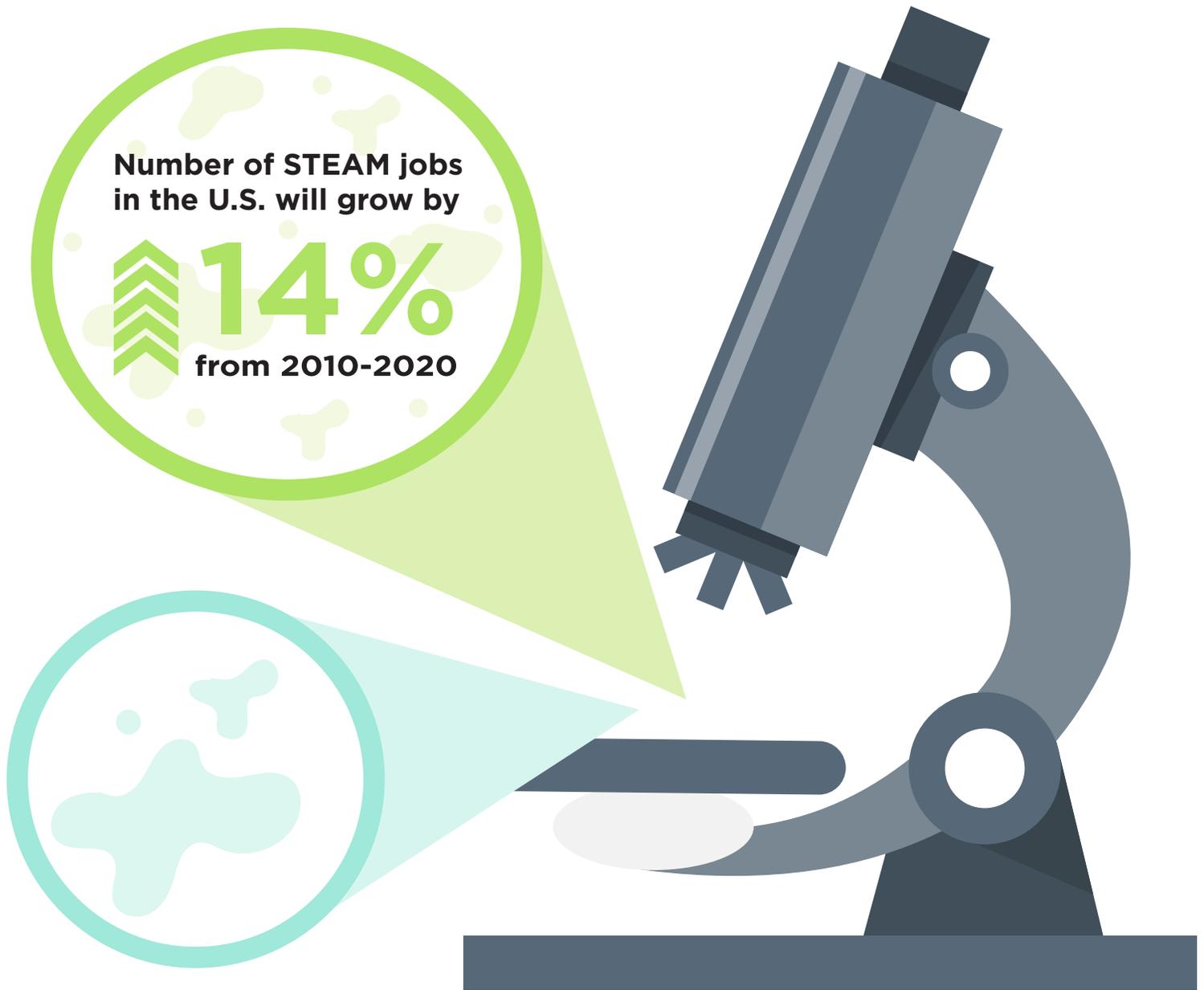
- 156 students in four public elementary schools participated.
- Third, fourth and fifth graders participated in a 17-week music theater residency, studying every aspect of a show, from geography and costume design to character biology and language.



Capital Area Manufacturing Council: MFG Day

- 1,000+ students participated.
- Students from five counties spent National Manufacturing Day visiting more than 20 local companies to explore career opportunities in advanced manufacturing.

A: Provide non-traditional learning through mentoring, apprenticeships and internships in STEAM and knowledge sector occupations. The knowledge sector is defined by occupations requiring a significant level of education, adaptable skills and creativity. Our students will need all three to fill the growing positions in Metro Lansing.



(Source: Microsoft Corp. STEM Perceptions Report)

Employment in Greater Lansing 2005-2014

5.27% all occupations

5.32% knowledge sector occupations

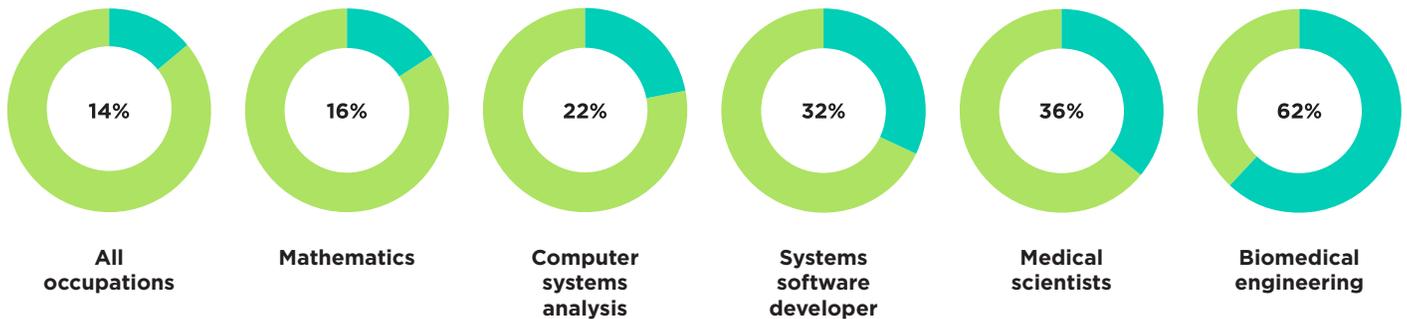
(Source: micapitalregion.com, Bureau of Labor Statistics)

Q: What do we know?

A: With these metrics, we know:

- STEAM education is a talent development engine.
- The capital region's businesses struggle to find the right talent to fill positions, according to the Michigan Future Business Index.
- The private sector has had limited opportunities to help the public sector re-shape education to meet the private workforce and talent development needs.
- Attracting and retaining talent in the STEAM fields are growing national and global issues.

The future of job growth in STEAM fields in the U.S. through 2020



(Courtesy of: capitalareacan.org)

Q: How do we get there?

A: T3 has invited the public and private sectors to the same table as workforce agencies, and we're ready to go.

With our Business Council — made up of private sector CEOs — leading the charge, we can turn years-worth of conversations into action — transforming the capital area into the exemplary STEAM region in America.



Work with us to set T3's direction and influence how public resource dollars are spent to drive talent development and economic growth.

T3 partners are committed to lifelong learning

Business Council

- AF Group
- Burcham Hills Retirement Community
- Case Credit Union
- Dean Transportation
- Diversified Environmental Services, Inc.
- Emergent Biosolutions
- Farm Bureau Insurance
- Hayes Green Beach Memorial Hospital
- Lansing Board of Water and Light
- McLaren Greater Lansing
- Michigan Business Network
- Michigan State University Federal Credit Union
- Moebius Medical & Aerospace Technologies
- Niowave, Inc.
- Peckham, Inc.
- Right at Home
- Sparrow Health System
- Spartan Motors
- TWO MEN AND A TRUCK
- WILX News 10

Advisory Council

- Adams Outdoor Advertising
- Bekum America Corporation
- Capital Area District Libraries
- Capital Area Michigan Works!
- Capital Area United Way
- Clinton County Regional Educational Agency
- Comcast Spotlight
- Dean Transportation
- Eaton Regional Educational Agency
- H&H Restaurants
- Greater Lansing Labor Council
- Information Technology Empowerment Center
- Ingham Intermediate School District
- International Brotherhood of Electrical Workers Local 352
- Lansing Community College
- Lansing Regional Chamber of Commerce
- Lansing School District
- Lansing Economic Area Partnership (LEAP)
- Maner Costerisan
- Michigan Rehabilitation Services
- Michigan State University
- Piper & Gold Public Relations
- Public Policy Associates Incorporated
- Such Video
- Tri-County Regional Planning Commission
- Williamston Community Schools
- WILX News 10
- WKAR Public Media from Michigan State University
- WLNS TV 6

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- Kristin Beltzer, Lansing Regional Chamber of Commerce
- Patrick Harrison, Dean Transportation
- Teresa Kmetz, Capital Area United Way

To help us transform the capital area into the exemplary STEAM region in America, get involved and contact:

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