



# Traditional and Alternative Pathways Through Michigan's Teacher Pipeline

**Presented to the Directors and Representatives of Teacher Education Programs in Michigan (DARTEP)**

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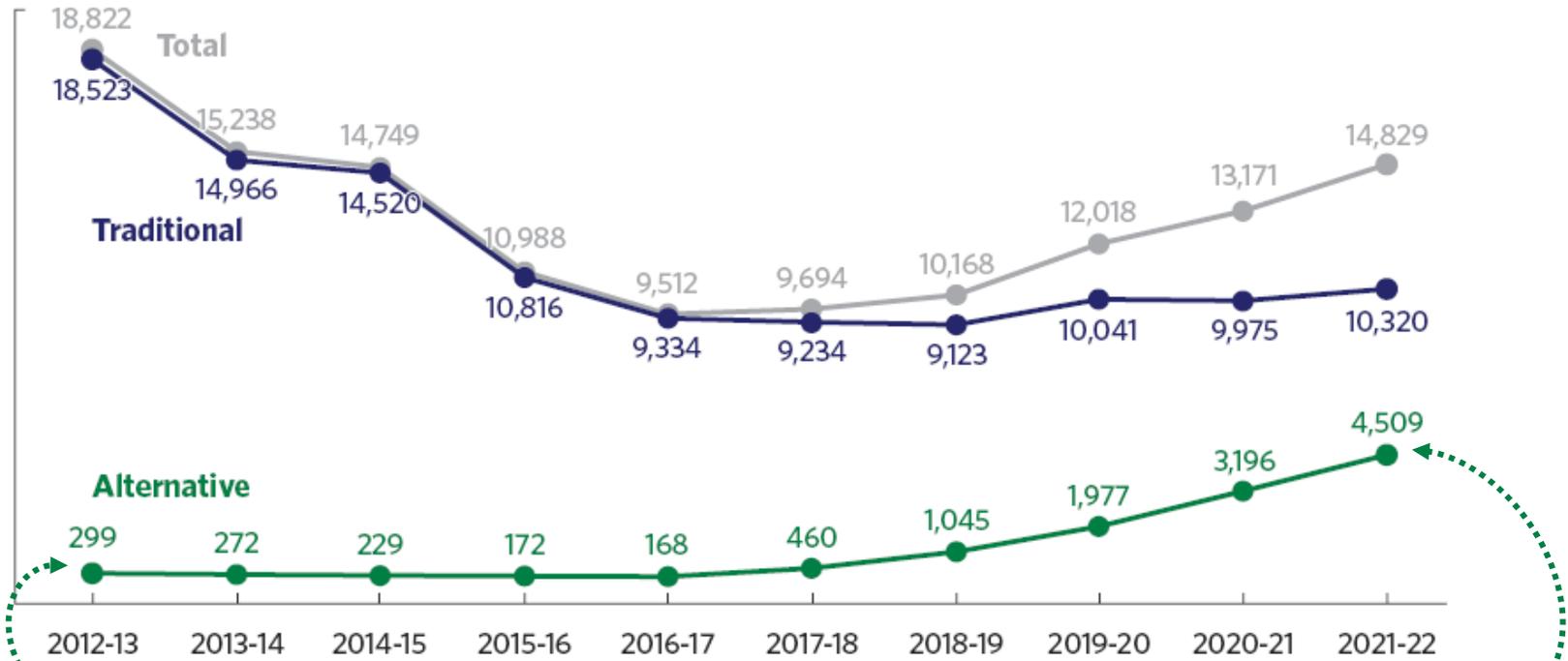
Education Policy Innovation Collaborative (EPIC)

College of Education | Michigan State University

# BACKGROUND

Most of Michigan's teacher preparation program enrollment comes from traditional-route programs; alternative-route programs are driving the state's recent enrollment growth

Michigan TPP Enrollment



2% of total enrollment

(12% nationally)

30% of total enrollment

(30% nationally)



# BACKGROUND

Today's presentation will include results from two recent studies about Michigan's teacher workforce about two different pathways into the profession

## TRADITIONAL-ROUTE

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### Tracking Progress Through Michigan's Teacher Pipeline

*Tara Kilbride, Katharine Strunk, Salem Rogers, & Usamah Wasif*

Changes in the size and composition of the pool of [prospective] Michigan teachers at key preservice, licensure, and career milestones.

## ALTERNATIVE-ROUTE

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### The Shifting Landscape of Alternative-Route Teacher Certification in Michigan

*Salem Rogers & Tara Kilbride*

The expansion of alternative-route teacher certification in Michigan and its implications for educator retention and diversity.



# **Traditional-Route Insights**

## **Tracking Progress Through Michigan's Teacher Pipeline**



# RESEARCH QUESTIONS

We examine patterns in attrition and progression at successive points along the teacher pipeline

1. How many Michigan undergraduate students show an **early interest in teaching** by enrolling in introductory-level teacher education courses?
2. How many **continue to pursue teaching** by enrolling in more advanced coursework and completing student teaching placements?
3. How much additional attrition takes place at the **licensure testing, initial certification, and early career** stages of the pipeline?
4. Do patterns of progression and attrition differ across **subgroups** of prospective teachers? Do these patterns differ from **other fields**?



# DATA & METHODS

We connect several state and public data sources to assess the size and composition of the population of [prospective] teachers at each stage

**Data sources:** Michigan Student Data System (MSDS), Michigan Test for Teacher Certification (MTTC), Michigan Online Educator Certification System (MOECS), Registry of Educational Personnel (REP), Title II, university course catalogs and teacher preparation program handbooks

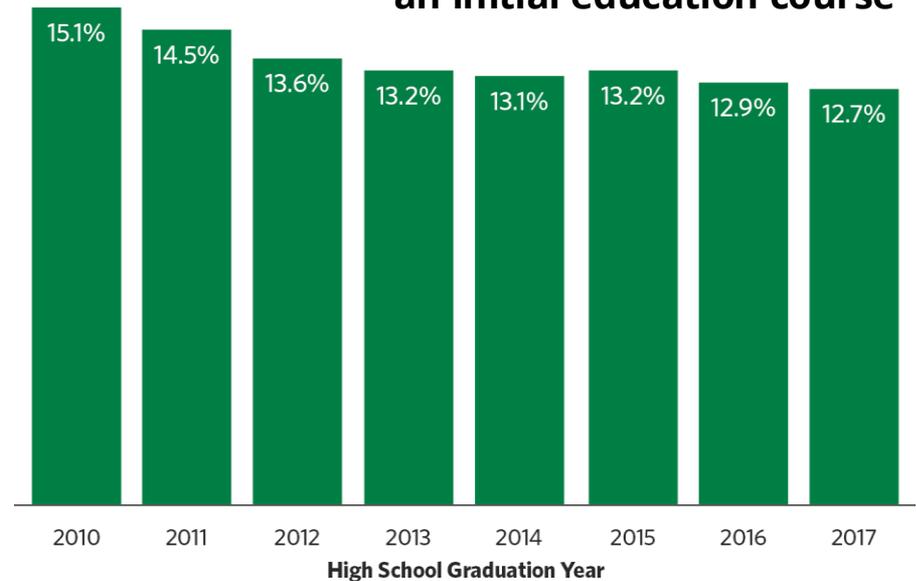
**Analysis sample:** 2010-2017 graduates from MI public high schools who enrolled in a MI public college/university with a traditional-route teacher preparation program the following year; MTTC test-takers and initial certificate holders from the same universities in the same age range



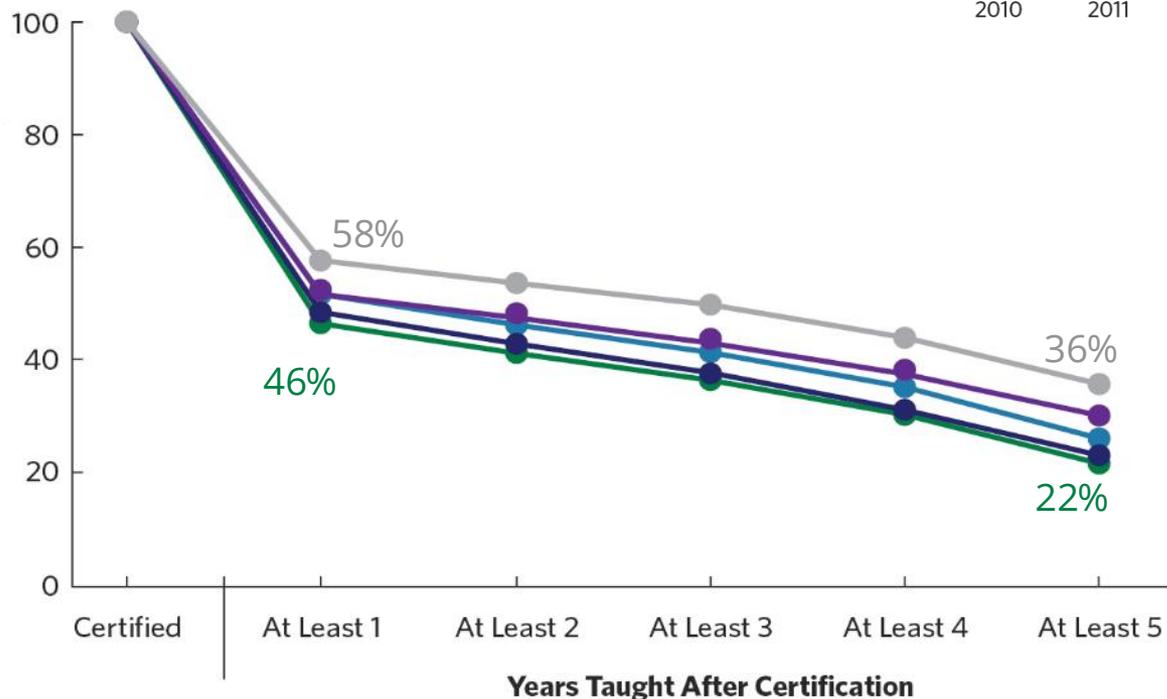
# INTEREST IN TEACHING VS EARLY CAREER OUTCOMES

More recent cohorts are less likely to enroll in introductory education courses but more likely to enter and stay in the profession after certification

Percent of students who took an initial education course



Percent teaching after certification



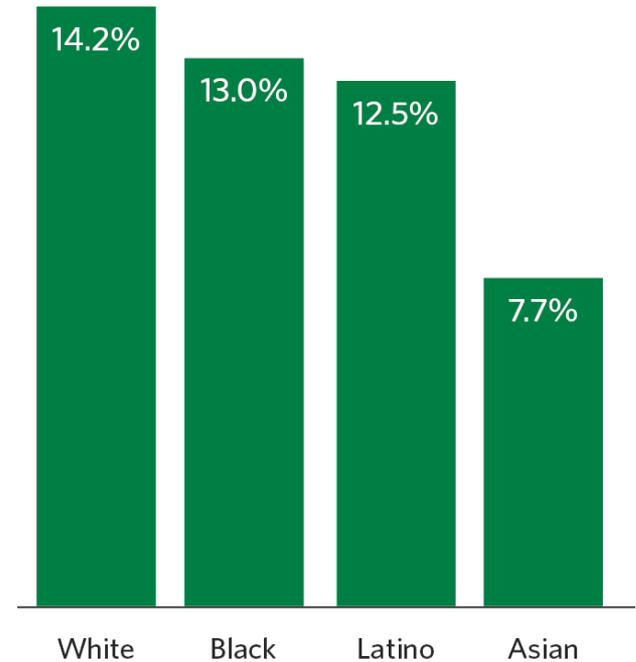
Certification Year:

- 2012-13
- 2013-14
- 2014-15
- 2015-16
- 2016-17

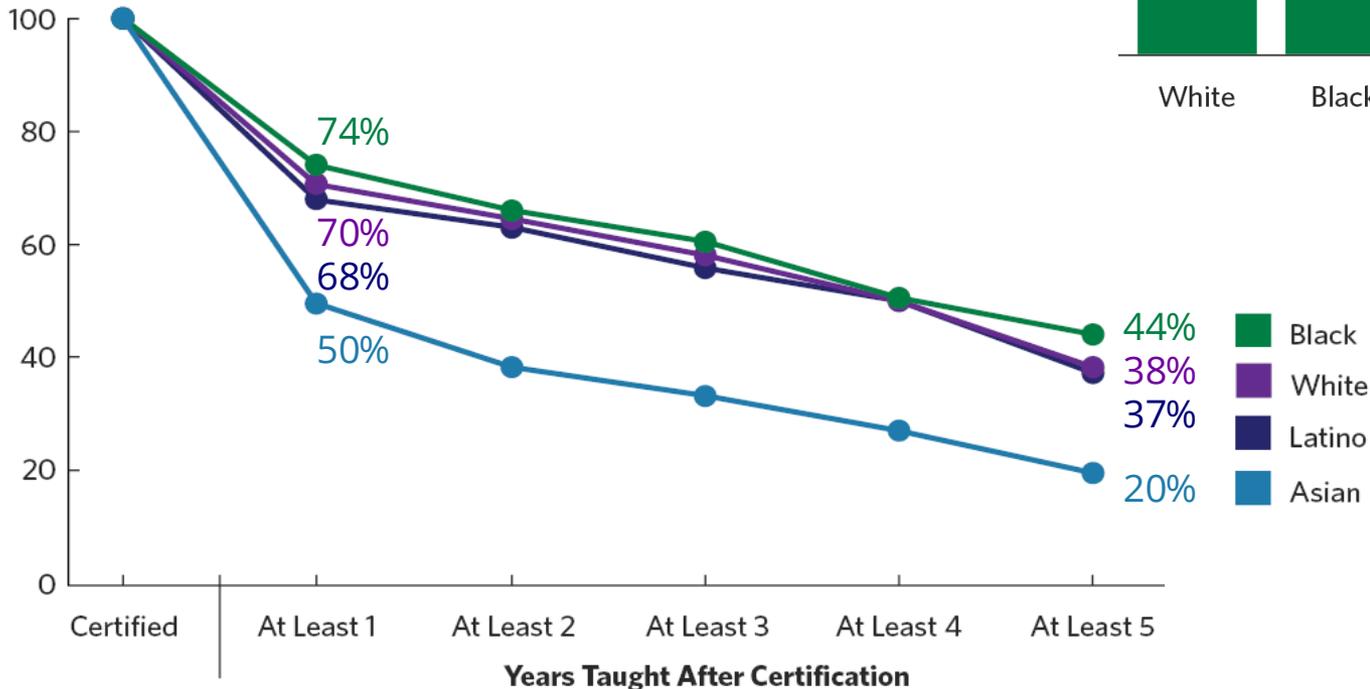
# INTEREST IN TEACHING VS EARLY CAREER OUTCOMES

Black students are only slightly less likely than White students to enroll in intro-level education courses, and more likely to enter and stay in the profession after certification. Yet, this group is underrepresented in the educator workforce.

### Percent of students who took an initial education course



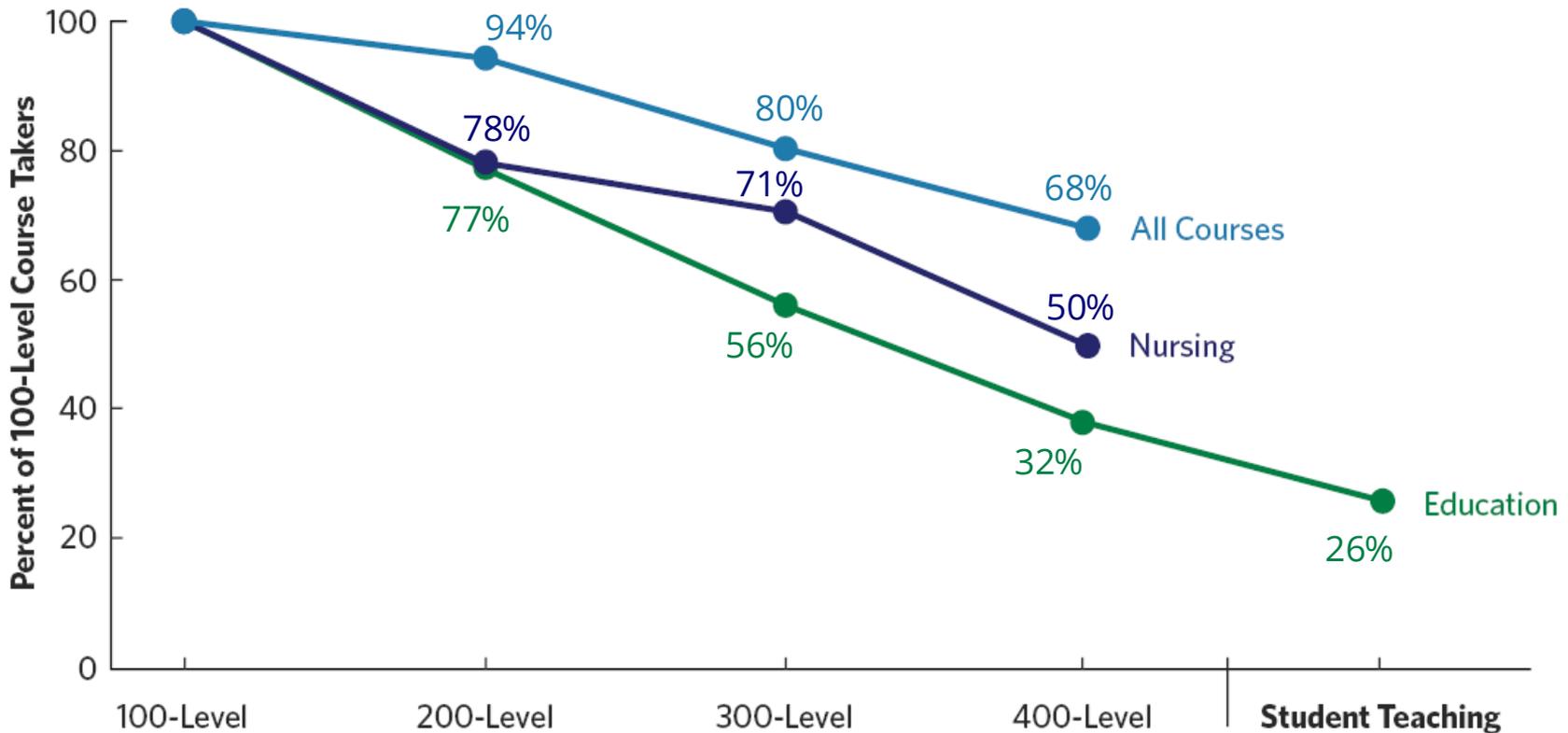
### Percent teaching after certification



# COURSEWORK PROGRESSION

Only one-quarter of the students who take introductory teacher education courses eventually become student teachers

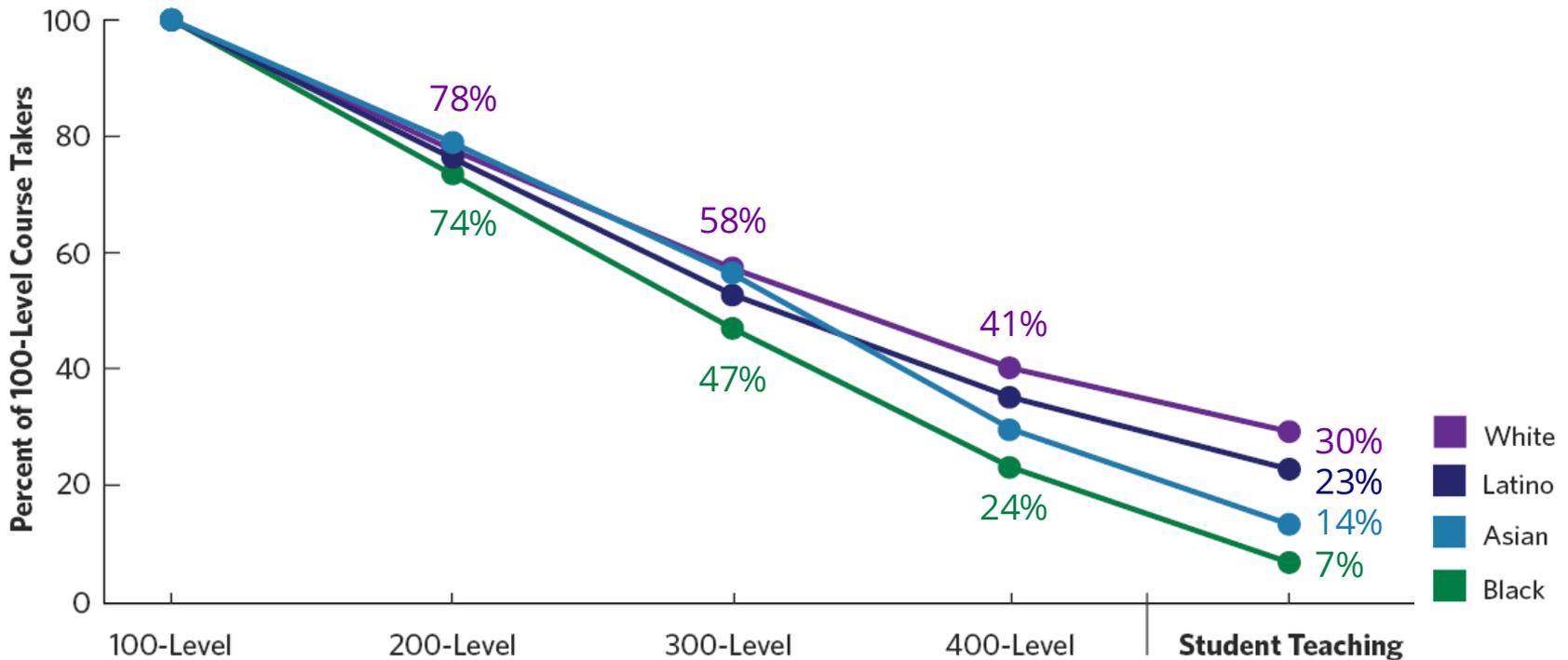
## Progression After Completing an Initial Course



# COURSEWORK PROGRESSION

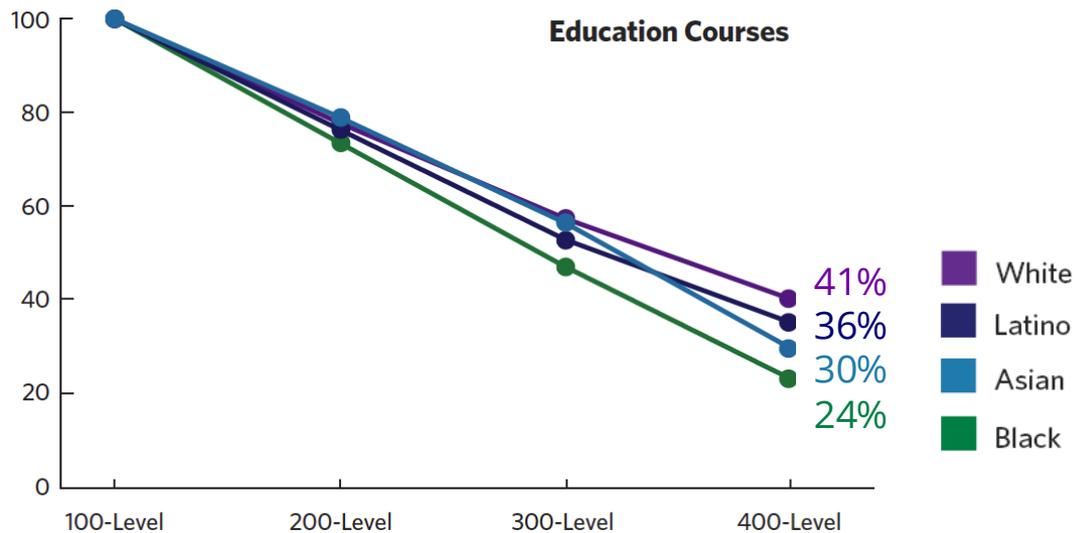
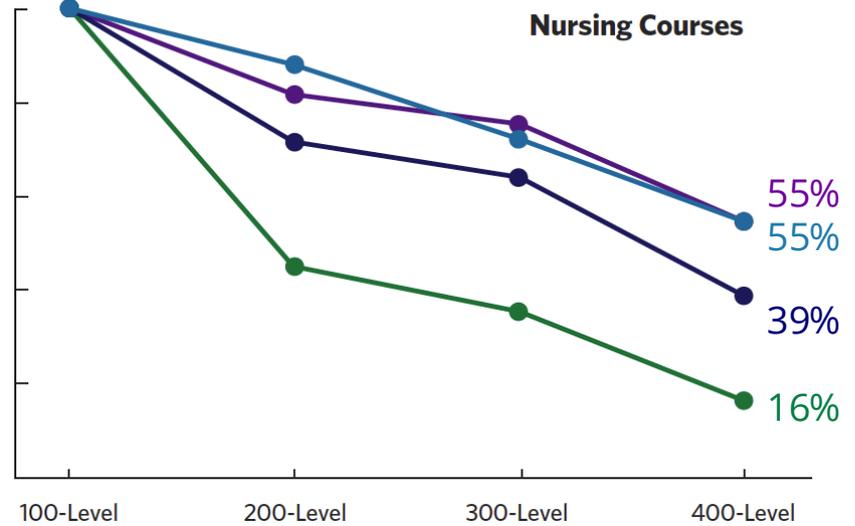
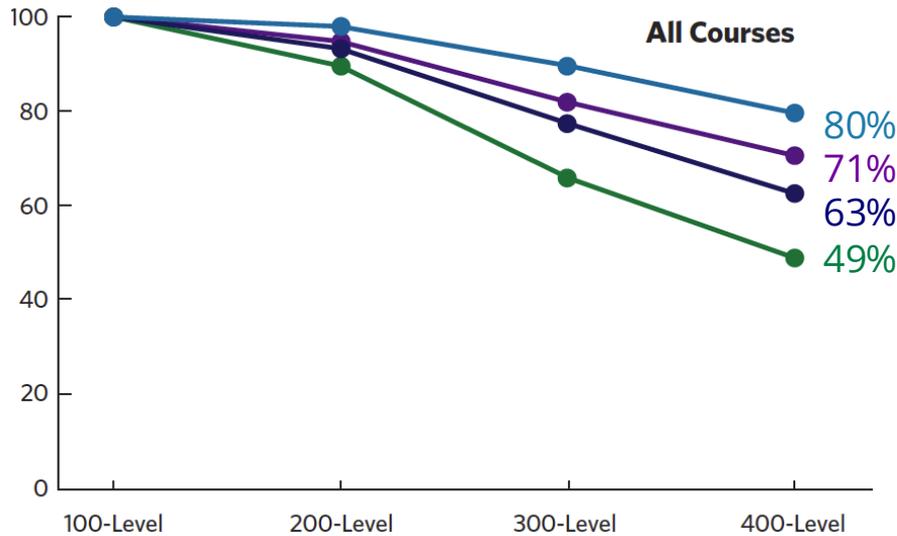
Students of color are less likely to continue pursuing teaching after each successive level of coursework

## Progression After Completing an Initial Course



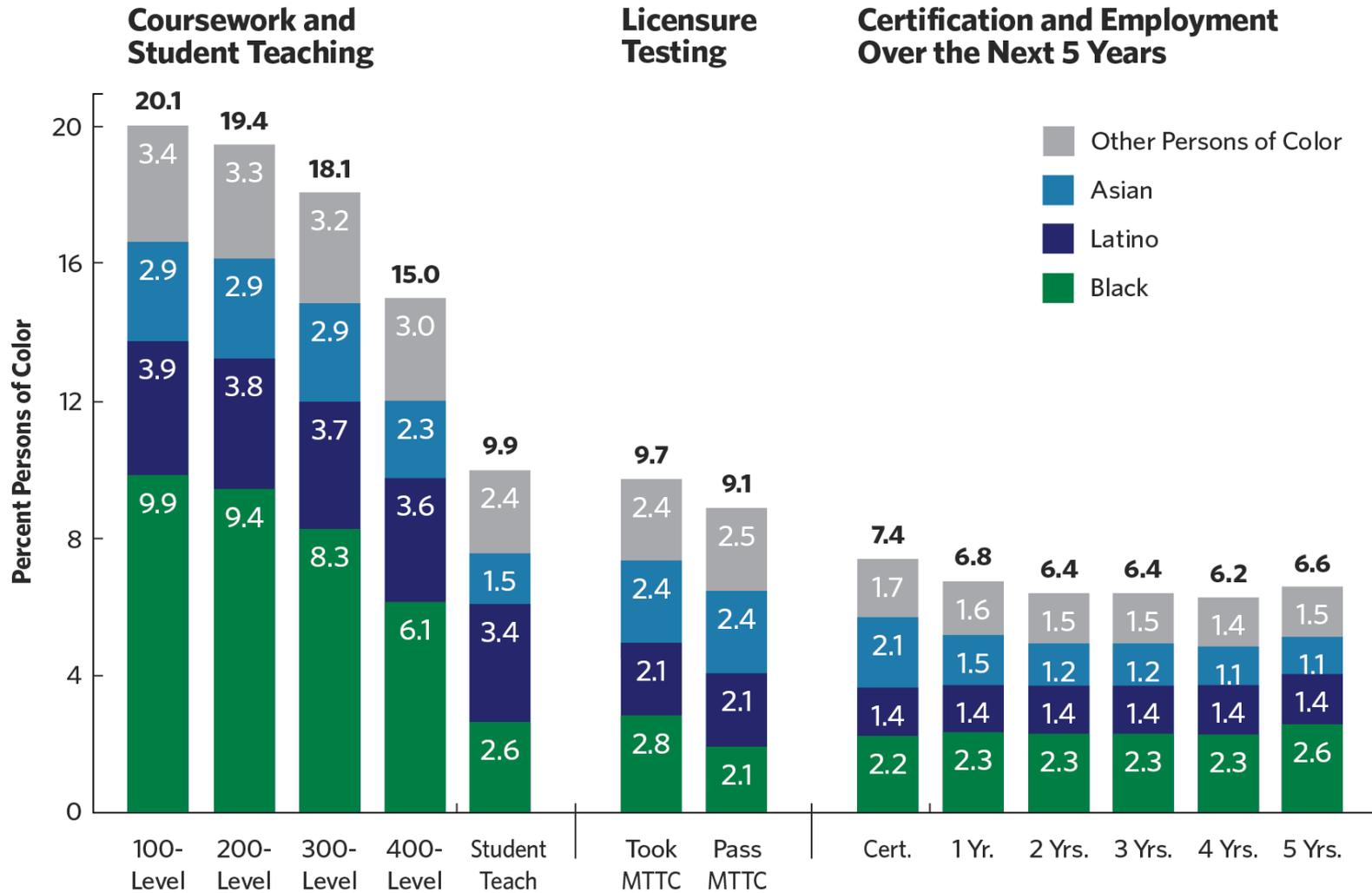
# COURSEWORK PROGRESSION

While differential attrition is not unique to teacher education, the extent and timing of this attrition differs from other fields



# IMPACT ON EDUCATOR DIVERSITY

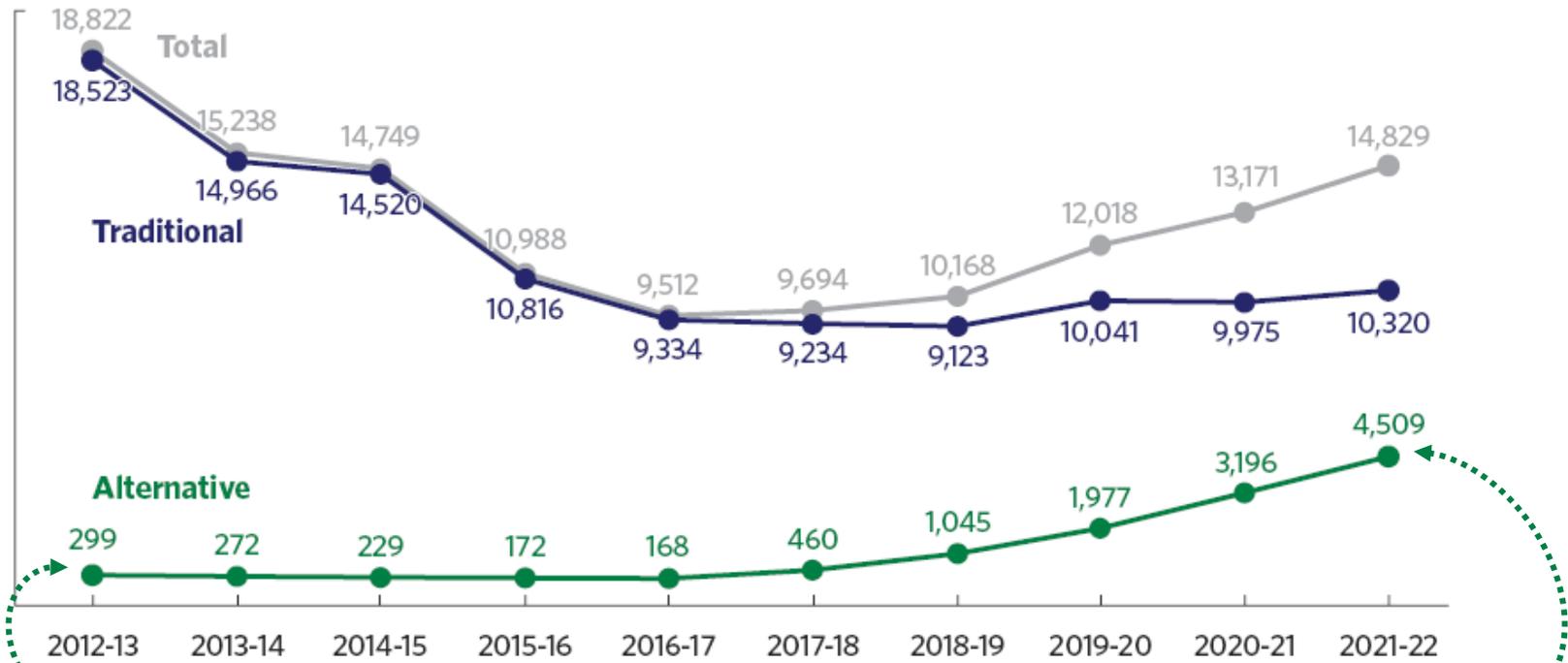
The pool of prospective Michigan teachers becomes less diverse as candidates progress through the teacher preparation coursework, student teaching, licensure, and early career stages of the pipeline



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# **Alternative-Route Insights**

## **The Shifting Landscape of Alternative-Route Teacher Certification in Michigan**



# OVERVIEW & RESEARCH QUESTIONS

We examine patterns in the expansion of alternative route programs



## Certification

Initial  
Added  
Endorsement



## Placement

Locale of  
Employing District



## Diversity

Teacher  
Ethnicity/Race



## Early Career

Retention

Have alt-route certification pathways been **expanding**?

How do alt-route programs contribute to educator **diversity**?

Are alt-route teachers more likely to **leave the profession**?

# DATA & METHODS

We examine patterns in the expansion of alternative route programs.



## Certification

Initial  
Added  
Endorsement



## Placement

Locale of  
Employing District



## Diversity

Teacher  
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## Early Career

Retention

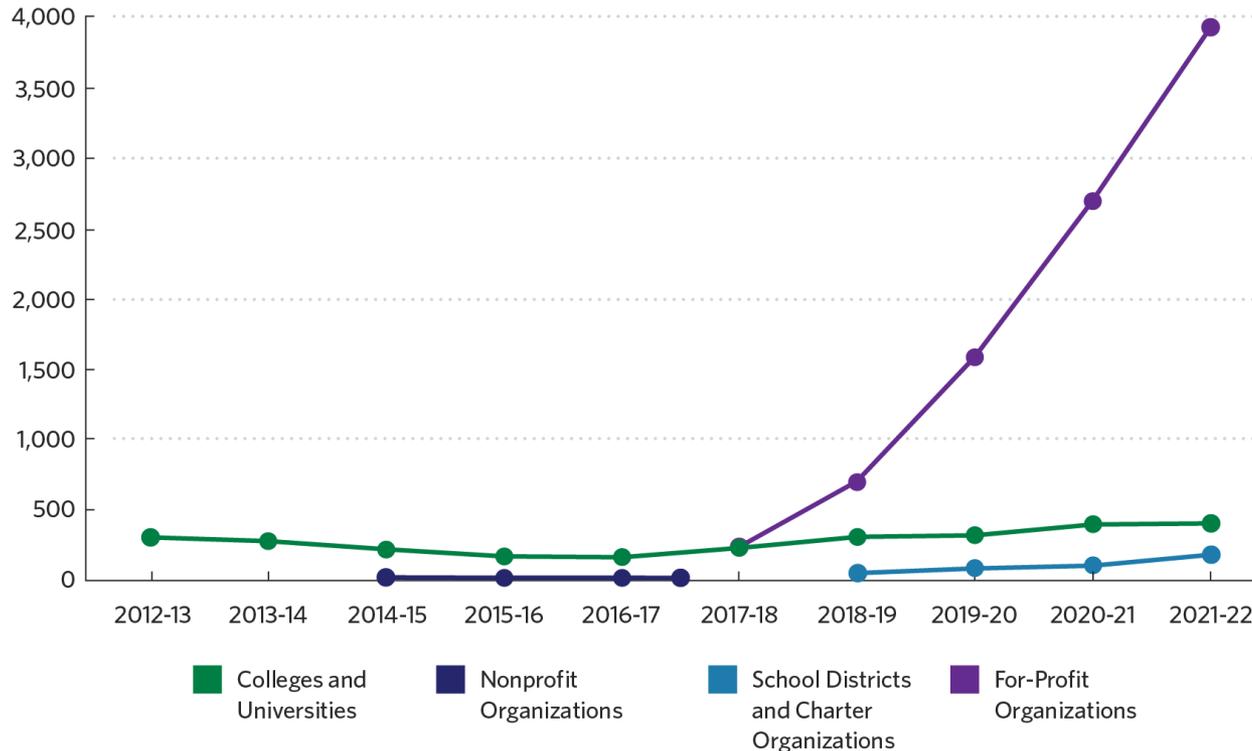
**Data sources:** Title II, Michigan Online Educator Certification System (MOECS), Registry of Educational Personnel (REP), Educational Entity Master (EEM)

**Analysis sample:** Anyone granted an interim teaching certificate

# INCREASING ENROLLMENT

Recent growth in alt-route enrollment is driven by two fully virtual programs

Alternative-Route Enrollment by Provider Type

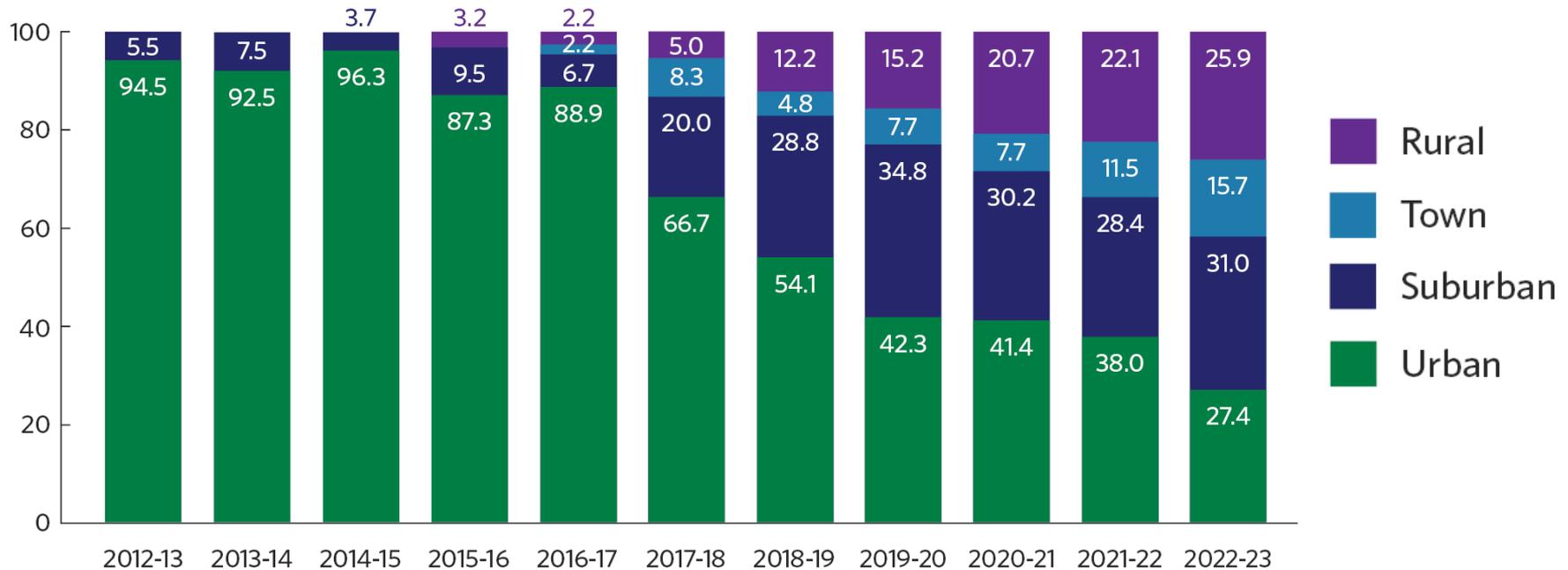


These programs are run by organizations outside of the higher education sector that offer virtual teacher preparation in multiple states.

# EXPANDED REACH

Fully virtual options have made alternative certification more accessible outside of urban areas

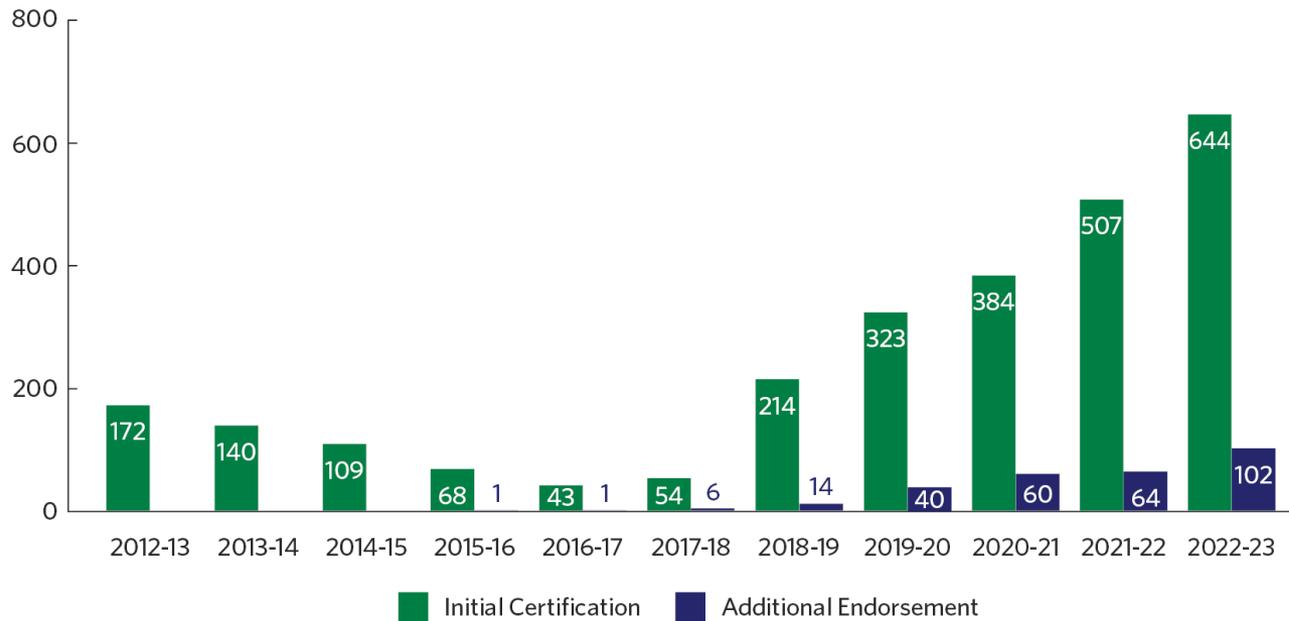
Percent of New Alt-Route Teachers



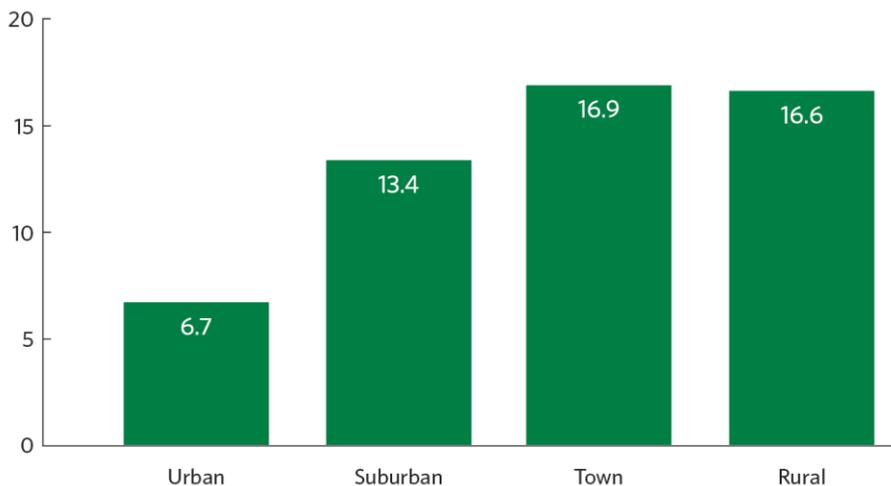
Before 2017-18, nearly all alt-route teachers worked in urban areas. As Michigan's alt-route programs grew, they also broadened their reach to other types of locales. In 2022-23 there were nearly as many alt-route teachers in rural areas as in urban areas.



Number of New Alt-Route Teachers



Percent of New Alt-Route Teachers Adding Endorsements



## CHANGING USE

Alternative-route programs are gaining popularity as a pathway for both initial certification and for certified teachers to add new endorsements.

Many of the interim-certified teachers in rural areas, towns, and suburbs enrolled in alt-route programs to add an endorsement.

This is less common in urban areas, where nearly all ITC-holders are first-time teachers.

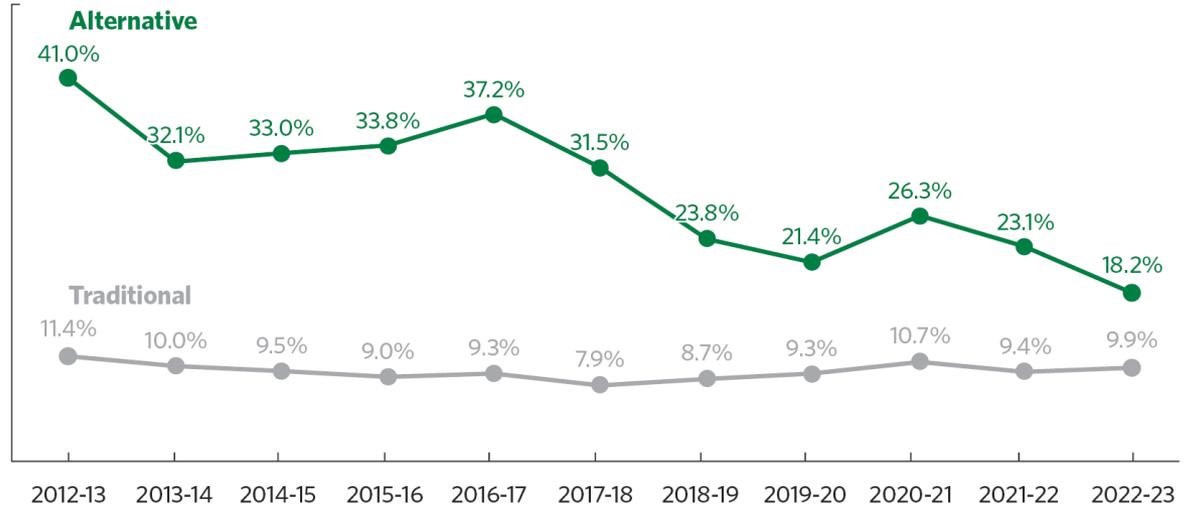
# DIVERSITY

New teachers entering Michigan's workforce through alternative pathways are more diverse than those from traditional routes

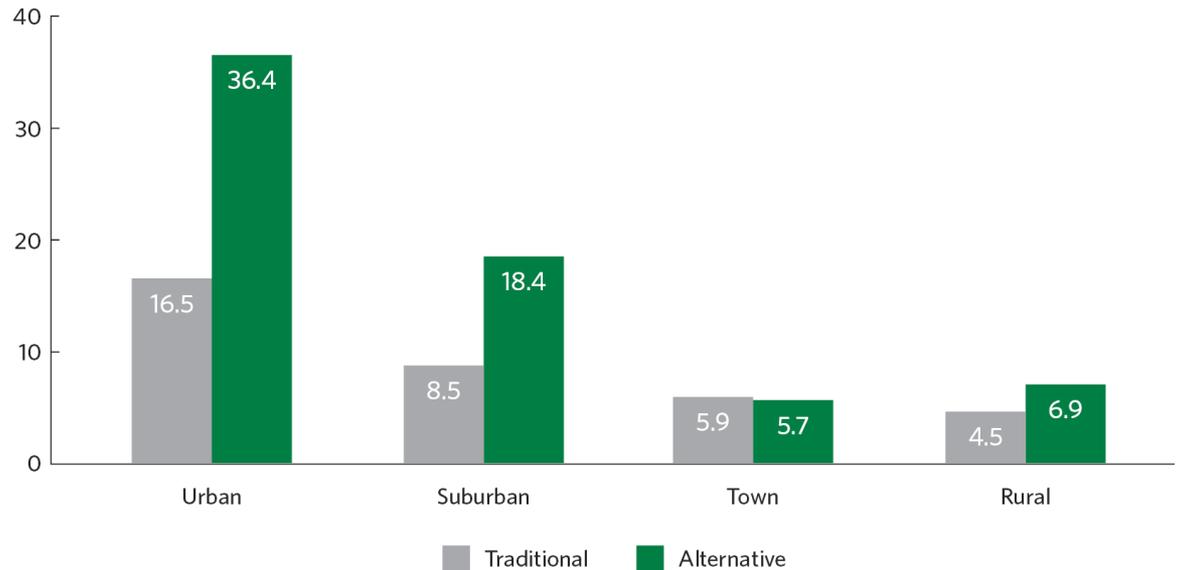
As alt-route programs expand outside urban areas, they are becoming less diverse

However, in rural, suburban, and urban areas, new teachers from alt-route programs are more diverse than those from traditional pathways to the profession

Percent of New Teachers Who Are Persons of Color



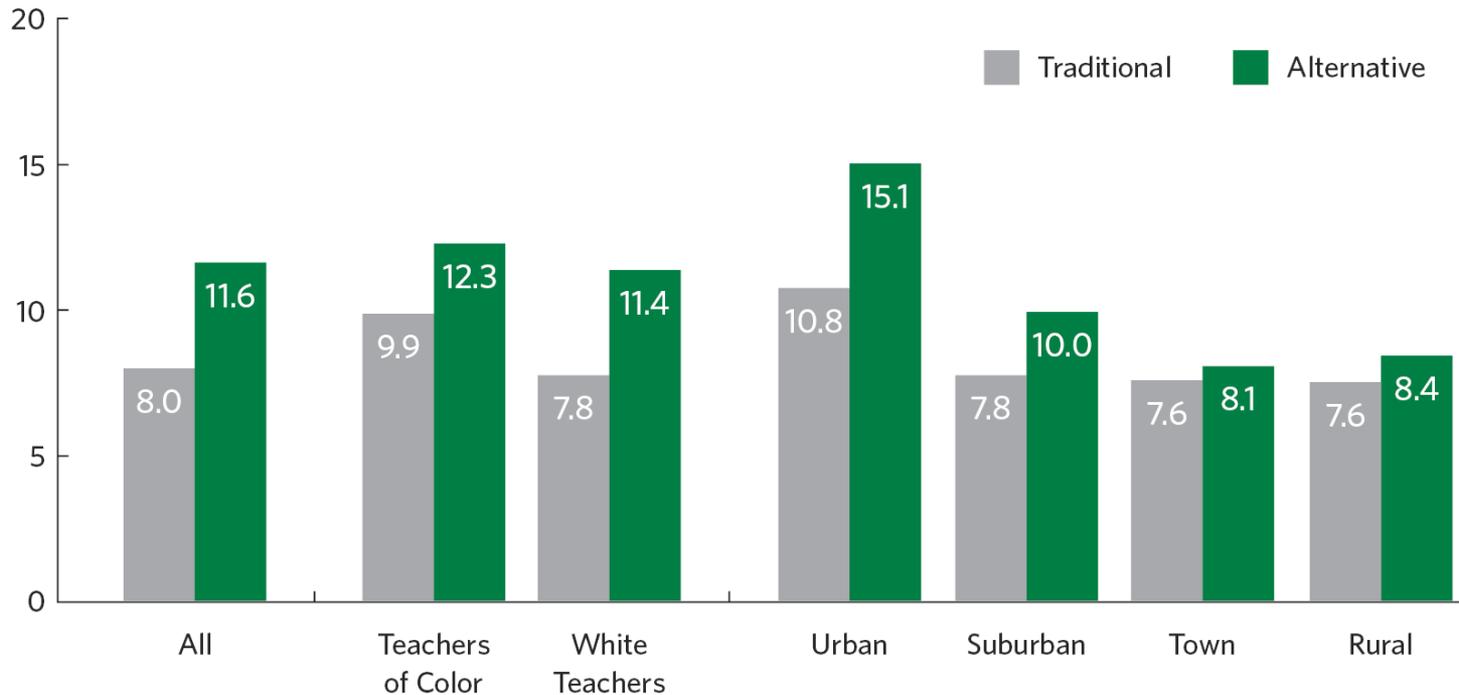
Percent of New Teachers Who Are Persons of Color



# EARLY CAREER ATTRITION

Teachers who completed alternative-route programs leave the profession at higher rates

Percent of early-career teachers who left the profession



Across all subgroups, teachers who completed **alternative-route** programs **leave the profession at higher rates** than those from traditional programs, suggesting alt-route teachers need more support to stay in the profession long-term.

# Key Takeaways & Policy Implications

## EARLY-CAREER TEACHERS

The increasing prominence of alternative-route certification means that early-career teachers need different supports than in the past. **Focusing on supporting and retaining these teachers will be critical in the coming years.**

## TARGETED RECRUITMENT

**Educator recruitment strategies are changing.** Traditional programs are reaching a smaller number but better-fit group of prospective teachers. Alternative programs are helping some districts—especially in rural areas—to build capacity from within their existing teaching staff.

## ASPIRING TEACHERS OF COLOR

The most acute losses of diversity from MI's teacher pipeline happen during candidates' postsecondary education. **To foster a more representative teacher workforce, efforts to support and retain teachers of color must start early.**

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