Introduction to Federal Data and Research on Rural Education

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Overview of Webinar

- 1. Locale definitions from NCES/IES
- 2. Student enrollment
- 3. Demographic characteristics of students
- 4. Performance of students
- 5. College preparation and college enrollment*
- 6. Teacher mobility and recruitment*
- 7. Federal resources

*Discussion of these topics will include both national data and studies of particular states. All other topics will be covered only with national data.





School Locale Definitions for the National Data

- **City:** Territory inside an urbanized area and inside a principal city with a population ranging from less than 100,000 to more than 250,000
- Suburb: Territory outside a principal city and inside an urbanized area
- **Town:** Territory that is inside an urban cluster that can be anywhere from less than 10 miles from an urbanized area to more than 35 miles from an urbanized area
- **Rural:** Census-defined rural territory that is less than 5 miles from an urbanized area (or less than 2.5 miles from an urban cluster) to mor than 25 miles from an urbanized area (or more than 10 miles from and urban cluster)





Student Enrollment in Public Schools by Locale (in thousands), Fall 2016







Demographic Characteristics of Students









As of the fall of 2016, rural schools had a higher percentage of White students and a smaller percentage of Black and Hispanic students than did schools in other locales







As of the fall of 2016, more than two-thirds of rural students attended schools in which 25.1% to 75% of the students were eligible for free- or reduced-price lunch





Student Performance







In 2019, on average, 4th grade students in rural schools performed better on NAEP than did 4th grade students in cities and towns







In 2019, on average, 8th grade students in rural schools performed better on NAEP than did 8th grade students in cities and towns







In 2015, on average, 12th grade students in rural schools did not perform any better or any worse on NAEP than did 12th grade students in other locales







In 2016-17, the high school graduation rate for rural students was higher than for students in other locales







College Preparation and Enrollment











Findings from past research on college preparation and college enrollment for rural students as summarized by Burke, Davis and Stephan, 2015:

- Some research has indicated that rural students have less access to college preparatory programs and have a narrower school curriculum.
- students from cities, suburbs and towns.
- or a graduate or professional degree.



• Nationally, college enrollment rates are lower for students from rural areas than for

Smaller percentages of rural adults than urban adults have earned a bachelor's degree





In 2015-16, the percentage of rural public schools that had students enrolled in dual





enrollment/credit programs was higher than the percentage of city or suburban schools



In 2015-16, the percentage of rural public schools that had students enrolled in an all other locales that had students enrolled in an AP math course





Advanced Placement (AP) math course was lower than the percentage of public schools in



schools in other locales that enrolled students in such a course





In 2015-16, the percentage of rural public schools that had students enrolled in a non-math or non-science Advanced Placement (AP) course was lower than the percentage of public



In 2012-2013, a higher percentage of 11th and 12th graders in rural Kentucky high schools participated in dual enrollment courses than did 11th and 12th graders in the other locales









In 2017, the percentage of 18- to 24-year-olds in rural areas who were enrolled in undergraduate or graduate programs was lower than for those of the same age in other locales







The percentage of 2010 Indiana rural Indiana high school graduates who took at least 1 AP exam, and the percentage who enrolled in college in the fall of 2010, were similar to the percentages for their non-rural peers







In 2010, rural Indiana high school graduates were more likely to enroll in 2-year colleges and more likely to attend colleges undermatched to their presumptive eligibility when compared to their non-rural peers







Summary of IES Findings Presented Today on Rural College Prep and Enrollment

- Rural schools across the nation are more likely to have students enrolled in dual enrollment/credit courses than are schools in other locales. Consistent with this, a higher percentage of 11th and 12th graders in rural Kentucky schools participated in dual enrollment courses at higher rates than did 11th and 12th graders in other locales.
- Rural schools across the nation are less likely to have students enrolled in at least one AP course
- Nationally, young adults in rural areas are less likely to be enrolled in college or graduate school than are young adults in other locales
- However, one study of students in Indiana indicated that a similar percentage of rural high school graduates as non-rural graduates had taken at least one AP course and similar percentages of rural graduates as non-rural graduates enrolled in college
 - Interestingly, the rural high school graduates were more likely to enroll in two-year colleges and were more likely to enroll in a college that was less selective than they could have enrolled in





Teacher Mobility and Recruitment









summarized by Lazarev, Toby, Zacamy, Lin & Newman, 2017:

- suburban and urban areas.
- Certain characteristics of rural communities may make teacher recruitment and retention more challenging. These include:
 - Feelings of isolation that are due to the sparse settlement patterns of rural communities and the distance from population concentrations.
 - Small budgets and scale of operations of schools and districts often means lower compensation for teachers and difficulty providing resources for students with special needs and English learners.



Findings from past research regarding teachers in rural schools as

• Rural schools and districts have faced more severe educator shortages than those in



From school year 2011-12 to 2012-13, national data indicate that teachers in rural schools were equally likely to remain in their schools, and no more likely to leave teaching, than were teachers in city, suburban or rural schools









district





From school year 2011-12 to 2012-13, national data also show that among teachers who moved, rural teachers were less likely than city teachers to move to a school in their same





same school from 2015-16 to 2016-17 did not differ between rural and non-rural schools





In Colorado, Missouri, Nebraska and South Dakota, the percentage of teachers who stayed in the



Among teachers in 4 states who moved to a position in a different district between 2015-16 and 2016-17, teachers from both rural and non-rural districts were more likely to move to a position in a non-rural district









Findings from a 2017 report on recruitment and retention of teachers in Oklahoma rural school districts

- Teachers in rural school districts in Oklahoma had a shorter duration of employment than teachers in non-rural school districts
- Rural school districts successfully recruited a lower percentage of teachers than did non-rural school districts from 2006-07 to 2011-12
- Most teachers in rural school districts who left their position but were rehired in the state were rehired in another rural district
- Teacher characteristics were more related to successful recruitment than district or community characteristics
 - Teachers who were male, who have a higher postsecondary degree, and those with more teaching experience were harder to recruit and retain in rural school districts job assignment were positively associated with successful recruitment and retention
 - - For teachers in rural school districts, higher total compensation and increased responsibilities in





Summary of IES Findings Presented Today on Rural Teachers

- likely to move to a non-rural school
- successful in recruiting teachers than were non-rural districts.



• National data indicate that teachers in rural schools are just as likely to remain teaching in their school from one year to another as teachers in other locales, but among teachers who change schools, rural teachers are more likely to move to a different district than are teachers in cities

A study of teacher mobility in Colorado, Missouri, Nebraska and South Dakota found that among teachers who change schools, teachers in both rural and non-rural schools are more

A study of school districts in Oklahoma indicated that teachers in rural districts remained teaching in those districts for fewer years than did teachers in non-rural districts. However, when those rural teachers moved to another position in the state, they were most likely to move to another rural district. Between 2006 and 2012, rural districts in Oklahoma were less









Federal research efforts:

The Regional Educational Laboratory Program:* https://ies.ed.gov/ncee/edlabs/

Digest of Education Statistics at NCES: https://nces.ed.gov/programs/digest/

The National Center for Rural Education Research Networks: https://provingground.cepr.harvard.edu/rural

The National Center for Rural School Mental Health: https://www.ruralsmh.com/

Federal resources on rural education:

Section 5005 Report on Rural Education: https://www2.ed.gov/about/inits/ed/rural/rural-education-report.pdf

Rural Education Resource Center at US ED: https://www.ed.gov/rural-education

*This program conducts research on rural education and provides training, coaching and technical support to educators and administrators in rural areas (and in non-rural areas) with the goal of helping them to use research and research-based practices to improve programs and student performance.









Any Questions?

Thank you!!









Slide 3: Accessed on 2/115/2020 at https://nces.ed.gov/surveys/ruraled/definitions.asp

2018, Table 214.40 accessed on 2/15/2020 at https://nces.ed.gov/programs/digest/d18/tables/dt18_214.40.asp?current=yes

accessed on 2/15/2020 at https://www.nationsreportcard.gov/reading/nation/groups/?grade=4 and at https://www.nationsreportcard.gov/mathematics/nation/groups/?grade=4

https://www.nationsreportcard.gov/reading/nation/groups/?grade=8

Slide 11: Accessed on 2/15/2020 at https://www.nationsreportcard.gov/reading_math_g12_2015/





- Slide 4: U.S. Department of Education, National Center for Education Statistics. (2018). *Digest of Education Statistics*
- Slide 6: Ibid, Table 216.60 accessed on 2/15/2020 at https://nces.ed.gov/programs/digest/d18/tables/dt18_216.60.asp
- Slide 7: Ibid, Table 216.60 accessed on 2/15/2020 at https://nces.ed.gov/programs/digest/d18/tables/dt18_216.60.asp
- Slide 9: U.S. Department of Education, National Center for Education Statistics. (2019). The Nation's Report Card,
- Slide 10: Ibid, accessed on 2/15/2020 at <u>https://www.nationsreportcard.gov/mathematics/nation/groups/?grade=8</u> and at



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Slide 14: Burke, M. R., Davis, E., & Stephan, J. L. (2015). *College enrollment patterns for rural Indiana high school graduates* (REL 2015–083). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from http://ies.ed.gov/ncee/edlabs

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Slide 17: Ibid, Table 225.72 accessed on 2/15/2020 at https://nces.ed.gov/programs/digest/d18/tables/dt18_225.72.asp







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Slide 19: Special tabulation from the American Community Survey, 2017, Table B.3.b-1.

Slide 20: Burke, M. R., Davis, E., & Stephan, J. L. (2015). *College enrollment patterns for rural Indiana high school graduates* (REL 2015–083). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from http://ies.ed.gov/ncee/edlabs

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Slide 24: Lazarev, V., Toby, M., Zacamy, J., Lin L., & Newman, D. (2017). Indicators of successful teacher recruitment and retention in Oklahoma rural schools (REL 2018–275). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs.

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