



United Way
of Kennebec Valley



Education White Paper

Prepared for United Way of Kennebec Valley

Presented by Plimpton Research
FEBRUARY 2021

Contents

Executive Summary

Literature Review

Education Measures

Child Care

Public Prekindergarten

4th Grade Reading Proficiency

8th Grade Math Proficiency

High School Graduation

Adult Literacy

Educational Attainment of Working-Age Adults

Workforce Certifications

CareerCenters

Executive Summary

Education is one of United Way of Kennebec Valley (UWKV's) three priority areas. UWKV Board and community members collaborated to develop a list of nine broad measures spanning different aspects of education from early childhood through adulthood, and we gathered data on them as presented in this paper.

Strengths

- **Pre-K Enrollment:** The share of four-year-olds enrolled in public prekindergarten in Kennebec County (54%) is above the Maine average, and Maine outperforms the U.S. and New England averages on this measure.
- **4th Grade Reading:** Although Kennebec is below the state average in 4th grade reading assessment scores, proficiency rates have improved in recent years.

Areas of Concern

Several measures reveal concerns that seem related: 8th grade math proficiency and postsecondary education attainment are below average in Kennebec County.

- **8th Grade Math Proficiency:** The proportion of Kennebec County 8th graders scoring at or above state expectations in math on the Maine Educational Assessment in 2019—35%—was even lower than the state average of 36%.
- **High School Graduation:** Kennebec County's four-year high school graduation rate of 86% is two points below the state average of 88%.
- **Postsecondary education attainment:** Given the concentration and mix of employers in Kennebec County, it is surprising that higher education attainment in the county is 38%, three points below the state average of 41%. Even with the estimated 7.8% of adults with short-term credentials combined with postsecondary degree holders, both Kennebec County and Maine fall significantly short of the MaineSpark goal of 60% of adults with a degree or credential by 2025.

Literature Review

Several recent reports and initiatives have explored education issues in Kennebec County. Below is a brief summary of key findings.

Kennebec Valley Community Action Program (KVCAP) conducted a comprehensive community needs assessment in 2018. It used qualitative and quantitative data to analyze the factors that contribute to poverty in the KVCAP region and the needs of low-income residents. For the purposes of the KVCAP report, Kennebec Valley is defined as Kennebec, Lincoln, Sagadahoc, and Somerset Counties. Top education-related findings from its report include:

- Adults with less education are more likely to have incomes below the poverty threshold. Of people age 25 and older, nearly one-third (29%) of those without a high school diploma are living in poverty, compared to just 10% of those with an associate’s degree and 3% of those with a bachelor’s degree. In Augusta, the percentage is even higher: 39% of residents without a high school diploma are living below the poverty line. These trends are consistent with state and national patterns.
- KVCAP surveyed about 300 community members and asked why they think poverty exists. *Lack of job skills/training* ranked among the top five answers, with more than one-quarter of respondents (28%) naming this as a cause of poverty. As shown below, the majority of respondents (52%) thought inadequate wages and benefits were a cause of poverty.

KVCAP Community Needs Assessment Survey Results, 2018

Reasons for Poverty	Percent of Survey Respondents
Lack of jobs with livable wages/benefits	52%
Basic needs too expensive	36%
Drug/alcohol addiction	32%
High housing costs	30%
Lack of job skills or training	28%

- In KVCAP’s focus groups:
 - Access to affordable, high-quality child care emerged as a big challenge: “In my small town, there aren’t a lot of jobs that require education. But pay is so low, and child care so expensive, that it doesn’t equal out.”
 - “Clients described trying to get by on one income so the other parent can stay home and take care of children or moving in with grandparents who can offer low-cost housing and child care while a parent works.”
 - “Several parents described challenges finding after-school care for school-aged children, and two survey respondents offered the idea of extending the school day, both to provide care for children while parents are working and to offer more time to children for learning and engaging in productive pursuits: ‘I think the school day should be way longer to alleviate childcare expenses and give children a chance to belong to the group and learn morally positive interactions with others as well as learn everyday tasks such as sharing, chores, [and] responsibility.’”
 - “Several participants suggested that early childhood education teachers should earn more.”
 - “Many community members expressed the need for ‘life skills’ education (sex education, drug and alcohol awareness, professional ‘soft skills’), especially for children who may not receive support or guidance at home.”

Maine Children’s Alliance released *Key County Indicators of Child Health and Well-Being* snapshots in 2020, providing data on each of the 16 Maine counties on 14 measures in the areas of health, social and economic conditions, and education. Education findings include:

- While a majority of Kennebec County four-year-olds (54%) were enrolled in public Pre-K in 2019-20, the rate was down slightly from 58% in 2018-19.
- 4th grade reading proficiency in Kennebec County improved from 50% in spring 2018 to 54% in spring 2019.

- Kennebec County’s high school graduation rate improved from 84% in 2018 to 85% in 2019.

Education Indicators for Maine 2020, an annual report from Educate Maine, points to some of the areas for improvement and strategies that could address them.

- Prekindergarten: “High-quality pre-K greatly influences children’s academic and social-emotional development and improves readiness for kindergarten, setting the stage for later success in school. While Maine has made significant progress expanding pre-K participation, only 9% of Maine’s 4-year-olds are enrolled in full-day, five-days-per-week programs.”
- Student Aspirations: “Schools and communities across Maine can continue to raise students’ education and career aspirations through providing effective mentorship, programming, and comprehensive supports.”
- College-Going Rates: “Progress in terms of Maine students enrolling in postsecondary education has stalled since 2013. A contributing factor that lawmakers can address is the relatively high cost of higher education, which has grown considerably over time compared to average wages.”
- College Persistence: “College persistence rates in Maine have fluctuated over time. There has been an increase in public dialogue in Maine and the nation about the types of wraparound supports needed to help students – especially those from disadvantaged backgrounds – persist in higher education. Wraparound supports may include additional financial aid, targeted programming, counseling, transportation, and childcare.”
- College Completion: “Students who complete college are in a better position to secure high-paying careers and pay off debt than those who do not finish. Maine’s college completion rate has grown steadily over time and we have narrowed the gap with New England since 2013.”
- College Debt: “In 2018, the average annual student loan was \$7,111 in Maine and \$7,549 in New England. Maine and New England have seen a decline in average debt as a percent of income, though Maine has yet to close the gap with New England.” The two main ways to reduce the cost burden of college debt compared to income are: 1) Reduce college debt or 2) Increase post-college wages.
- Educational Attainment: “Mainers with degrees or credentials of value have better job prospects and higher wage-earning potential than their counterparts without such degrees or credentials. The state-supported attainment goal is for 60% of Mainers to have degrees or credentials of value by 2025.” While adult educational attainment has improved steadily since 2013, our state is still far from meeting this goal.

EDUCATION MEASURES

Child Care

Policymakers, advocates, and employers in Maine have brought attention to the importance of affordable, high-quality child care in terms of economic development. High-quality early childhood education for disadvantaged children has been shown to improve school readiness and to have positive impacts on long-term outcomes in education, health, social behaviors, employment, and earnings. We do not yet have comprehensive comparative data on early childhood education and care for infants and toddlers at the county or community level.

Licenses are required for child care providers serving more than two children, but enrolling in Maine's child care quality rating system, called Quality for ME, is voluntary. Quality for ME is designed to help parents identify high-quality early childhood and education programs. There are four steps, and Steps 3 and 4 are considered high-quality settings, indicating ongoing staff training and education, program evaluation, parent conferences twice a year, and recorded observation of children's interests and skills at least three times a year.

- In December 2020, Kennebec County had 175 licensed child care providers. The state total was 1,640 licensed providers.
- Both in Maine and in Kennebec County, **14% of licensed child care providers that voluntarily enrolled in the rating system were high quality** as defined by Quality for ME.

Child Care Subsidies

Maine has a child care subsidy program funded through four different funding streams. Child care subsidies support access to early childhood education for families pursuing work, school, or job training. Eligibility is based on income below 85% of the state median, or about \$52,000 for a family of two and \$76,000 for a family of four.

- Maine DHHS reports monthly on child care subsidy use. In December 2020, the latest month with data available, **138 children in Kennebec County received child care subsidies**, including 25 infants and 113 toddlers.
- Statewide, 923 children received subsidies in December 2020. Kennebec County accounted for 15% of child care subsidies that month, even though only 9% of Mainers under age 5 reside in Kennebec County.
- **21% of Kennebec County children were enrolled in high-quality care**, as measured by Quality for ME. This exceeds the state average of 16% of children receiving subsidies enrolled in high-quality care.

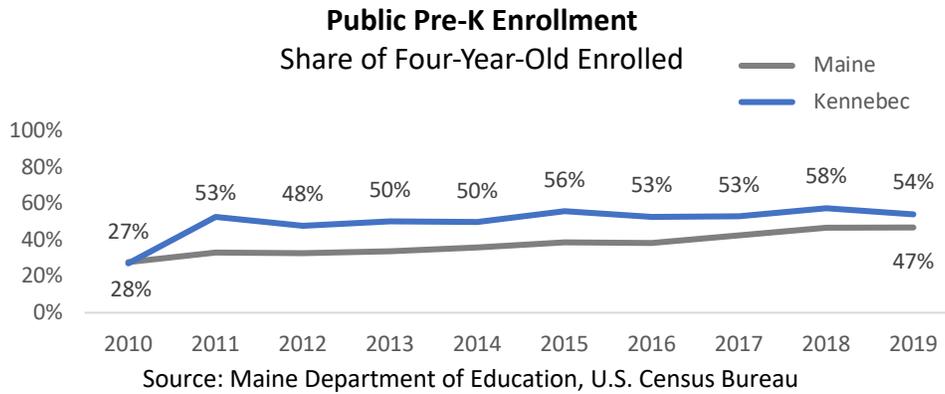
Four-Year-Olds Enrolled in Public Pre-K

The proportion of Maine school districts offering public pre-K programs has increased by a factor of three over the past decade. This reflects an increase in state funding to support school districts in

creating and expanding public preschool. In 2019-20, 77% of Maine school districts offered free public pre-K.

The national average in public Pre-K enrollment was 34% in fall 2019, and the Maine average was 47%.

- **Kennebec County outperformed both Maine and the U.S., with 54% of four-year-olds enrolled in public Pre-K in 2019.** However, this rate was a slight decrease from 58% in 2018.



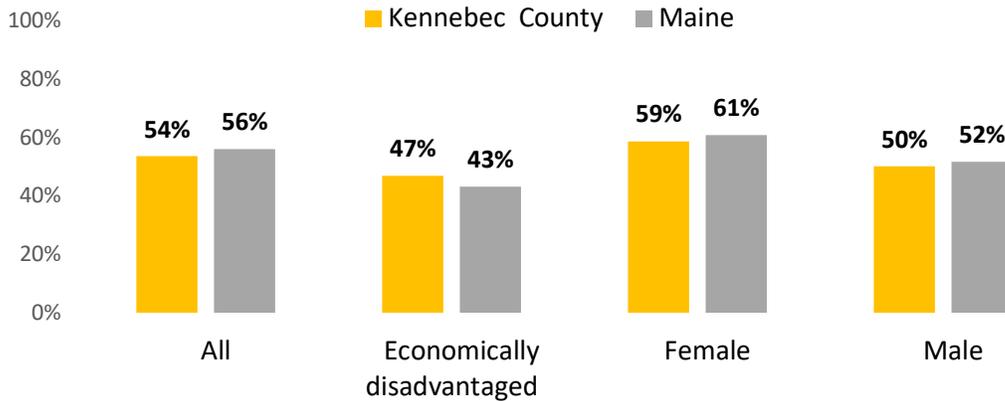
4th Grade Reading Proficiency

Both *Maine KidsCount* and *Measures of Growth* track 4th grade reading performance annually. Student reading proficiency in 4th grade is an indicator of whether students are on track for middle and high school and ultimately an indicator of whether students will graduate from high school on time. We chose the Maine Educational Assessment (MEA) to gauge how Kennebec County compares with other counties and the state as a whole. This test is administered annually to every student in grades 3-8 and 11 and is used to meet federal education funding accountability requirements.

In 2019:

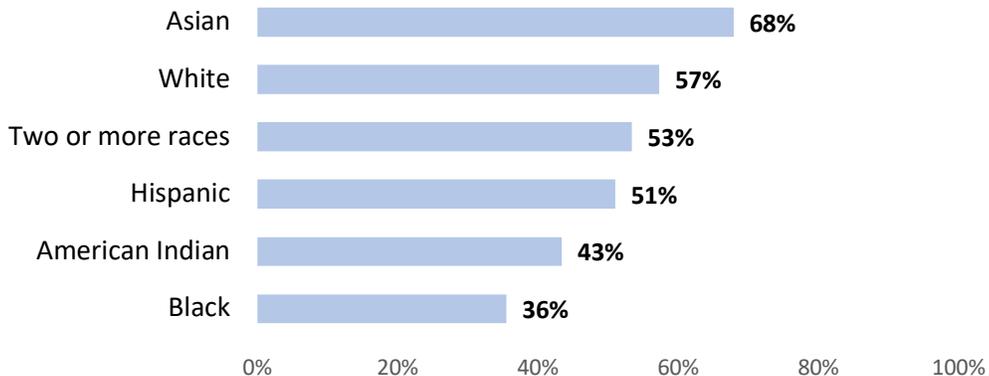
- **The majority of Kennebec County 4th graders—54%—scored at or above state expectations for English/Language Arts.**
- This is below the state average of 56%, but it is an improvement from only 50% in 2018.

4th Grade Reading Scores At or Above State Expectation, 2019



- Economically disadvantaged students—defined as those eligible for subsidized school meals, with incomes below 185% of poverty—in Kennebec County scored better than their peers statewide, meaning that there is a smaller gap in reading proficiency between low-income 4th graders and higher-income peers in Kennebec County than in the state as a whole (see chart above).
 - 45% of Kennebec County school children meet the definition of economically disadvantaged, just below the Maine rate of 46% (Maine KIDS Count).
- In both Kennebec County and Maine, there is a nine-point reading proficiency gap between female and male fourth graders, with females scoring higher.
- The chart below shows 4th grade reading proficiency rates as measured by the MEA for students of different races/ethnicities. Asian students scored the best, with 68% scoring at or above state reading expectations. Fewer than one-half of American Indian (43%) and Black (36%) Maine 4th graders scored proficient in reading.

Maine 4th Grade Reading Proficiency by Race/Ethnicity, 2019



Source: Maine Department of Education, MEA Dashboard

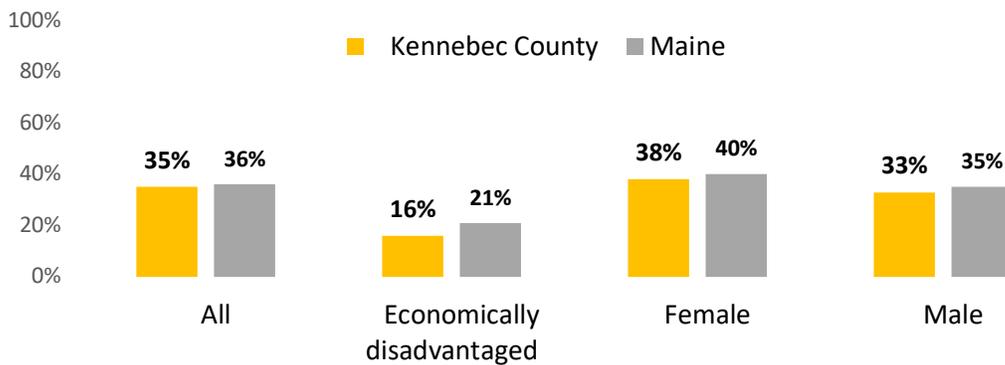
8th Grade Math Proficiency

Both *Maine KidsCount* and *Measures of Growth* also track 8th grade math performance. Proficiency in 8th grade math is the basis for success in quantitative courses in high school and beyond. We chose the MEA to gauge how Kennebec County compares with other counties and the state as a whole.

In 2019:

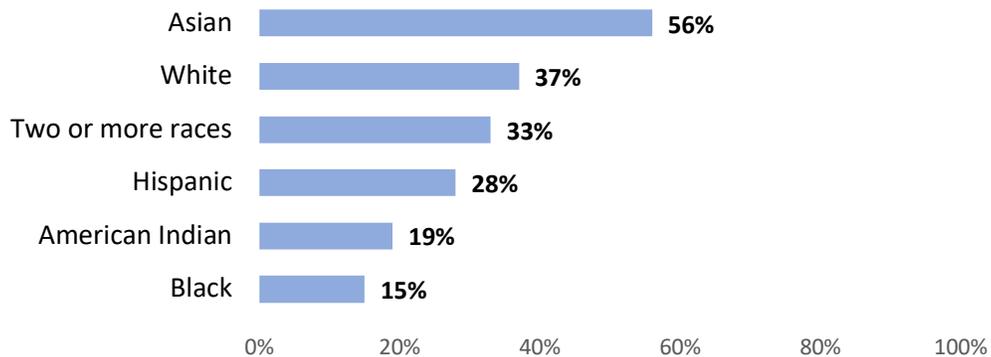
- **35% of Kennebec County 8th graders scored at or above state expectations on the math MEA test.**
- The state average is 36% of 8th graders proficient in math, just above Kennebec’s rate.
- Between 26% and 45% of 8th graders in other counties scored at or above state math expectations, placing Kennebec close to the middle of the range.

8th Grade Math Scores At or Above State Expectation, 2019



- Kennebec County has an even larger 8th grade math proficiency gap by economic disadvantage than the state as a whole, as shown above.
- Female 8th graders outperform male students in 8th grade math, on average.
- The chart below shows that rates of 8th grade math proficiency by race/ethnicity range from 56% of Asian students scoring proficient to only 15% of Black students.

Maine 8th Grade Math Proficiency by Race/Ethnicity, 2019

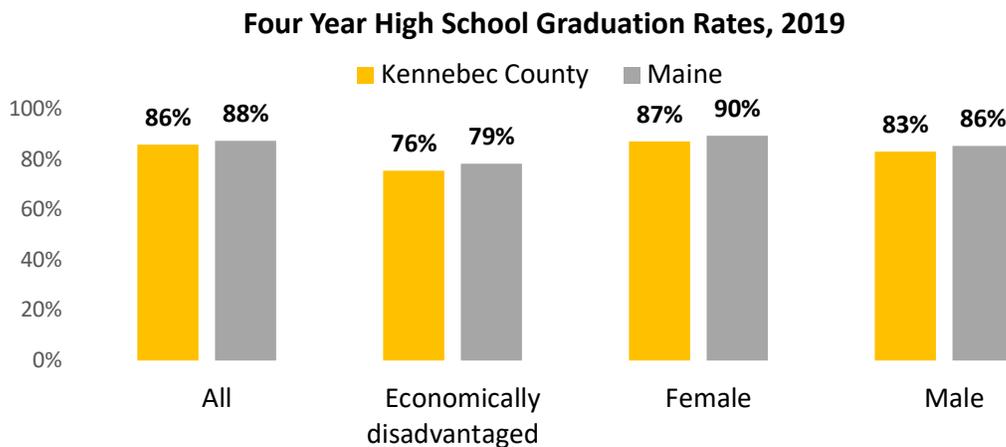


Source: Maine Department of Education, MEA Dashboard

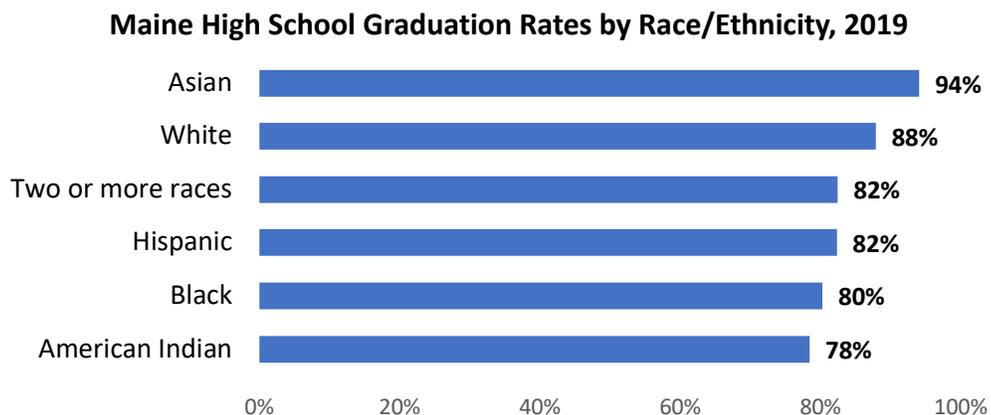
High School Graduation

This measure looks at high school graduation rates within four years of entering ninth grade. Earning a high school diploma on time is the first step toward economic stability and is required for many job opportunities. The Maine Department of Education reports annually on graduation rates for each school and for student groups. In 2019:

- **86% of Kennebec County students who had entered high school in 2015 graduated.**
 - Graduation rates at county high schools ranged from 80% to 94%.
- Statewide, 88% of the class of 2019 graduated on time.
- Both in the county and in Maine, students from low-income families graduated on time at rates about ten points lower than the average. Female students had higher graduation rates than male students by several points.



- Statewide, among students of different races and ethnicities,
 - Asian students have a 94% graduation rate.
 - Multiracial, Hispanic, Black, and American Indian students graduated at lower-than-average rates.



Source: Maine Department of Education, Graduation Rates

Adult Literacy

Education policy discussions and funding decisions too often overlook adult learners. Adults without basic reading skills struggle to find employment, help children with homework, and understand instructions for basic needs like nutrition information, transportation schedules, and medical instructions. Improving adult literacy can have a large positive impact.

Data from the National Center for Education Statistics averaged over 2012-2017 show:

- In Kennebec County, **14% of adults ages 16 to 74 had low literacy scores.**
- This is slightly higher than the state average of 13%.
- Maine's county adult low literacy rates range from 10% to 19%, placing Kennebec County close to the middle of the range.

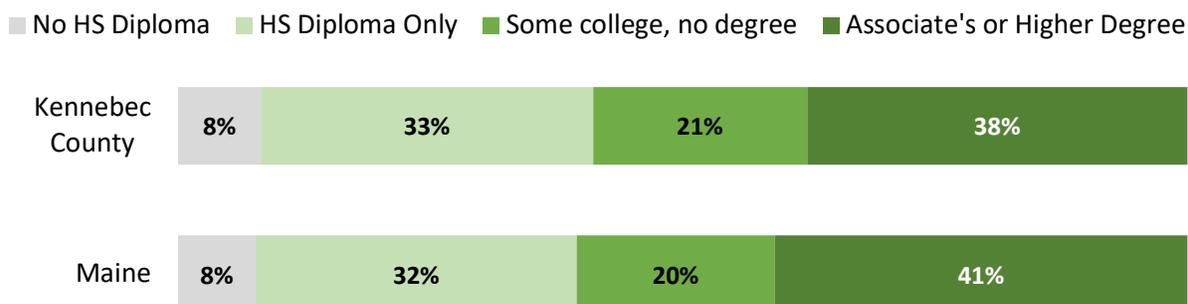
Educational Attainment of Working-Age Adults

The education level of working age adults is an important factor in a region's economic health. More educated and skilled adults help to attract, retain, and create more new employers and contribute to economic diversity and stability. Maine has similar education attainment levels to the national average, but lower rates of college degree attainment than the New England average. MaineSpark, a coalition of education institutions, nonprofit and private sector organizations, has established a goal that 60% of Maine adults will hold a postsecondary education degree or workforce credential by 2025.

U.S. Census data for 2018 show that:

- **38% of Kennebec County adults hold an associate's or higher degree.**
- The Maine average is 41% with a postsecondary education degree, three points higher than in Kennebec County.

Adult Educational Attainment, 2018



Source: Maine Department of Labor, County Economic Profiles

Workforce Certifications

Education, economic and workforce development professionals have struggled for years to find comprehensive data sources on non-degree occupational credentials. The effort is complicated by the range of providers offering these programs. Employers, associations, public education institutions, the armed services, and private training providers all offer different types of credentials like professional certifications, licensures, and digital badging.

In recent years, the Lumina Foundation has developed state and national—but not county—level estimates of occupational credentials (specifically credentials that have value in the labor market) among adults who do not hold a postsecondary education degree. In 2019:

- **7.8% of Maine adults hold a short-term credential only**, just below the national average of 8.1%.
- Combining the 7.8% holding short-term credentials with the 41% of Maine adults with an associate's or higher degree, a total of **49% of Maine adults hold a workforce credential or degree**, well short of the 60% MaineSpark coalition goal.

Career Centers

The Maine Department of Labor administers CareerCenters that provide employment and training services at no charge for Maine workers and businesses. CareerCenters offer job resources for job seekers and assist employers with recruitment, training, workforce services, and access to labor market information.

- In Kennebec County, the Augusta CareerCenter is one of 12 statewide.

Sources

Educate Maine, *Education Indicators for Maine 2020*, <https://educationindicators.me/>

Lumina Foundation, *A Stronger Nation: Learning beyond high school builds American talent*, www.luminafoundation.org/stronger-nation/report/2020/#state/ME

Maine Children's Alliance, *Key County Indicators of Child Health and Well-Being 2020*, https://www.mekids.org/site/assets/files/1674/all_countiesv2.pdf

Maine Department of Education,

Graduation Rates, www.maine.gov/doe/data-reporting/reporting/warehouse/graduation-dropout-data

MEA Dashboard, www.maine.gov/doe/Testing_Accountability/MECAS/results/assessmentdashboard

Maine Department of Health and Human Services,

2018 Maine Child Care Market Rate Survey, June 2018, www.maine.gov/dhhs/ocfs/ec/occhs/child_care/ME%20MRS%202018%20Report.pdf

Child and Family Services, Early Childhood Education Data Dashboard, www.maine.gov/dhhs/ocfs/dashboards/early-childhood-education.shtml

Maine Department of Labor, *County Economic Profiles*, www.maine.gov/labor/cwri/county-economic-profiles/countyProfiles.html

Maine Economic Growth Council, *Measures of Growth 2020*, <https://www.mdf.org/economic-policy-research/measures-of-growth-report/>

Maine KIDS Count 2019, www.mekids.org/site/assets/files/1241/kidscount_2019.pdf

Maine Roads to Quality, Child Care Provider website, <https://mrtq.org/>

MaineSpark Coalition, <https://mainespark.me/>

National Center for Education Statistics, Program for the International Assessment of Adult Competencies (PIAAC) U.S. Skills Map, <https://nces.ed.gov/surveys/piaac/skillsmap/>