# Montana Advisory Council on Indian Education 

April 6, 2022
Agenda - Working Session

## Zoom Link

Meeting ID 87227497119
Password 467018
Dial by Telephone +1 6465588656 or +14064449999
Mission: To provide for more effective and meaningful participation by Indian people in planning, implementation, and administration of relevant educational services and programs under the authority of local school boards.
Item 1: Call to order: 9:00 a.m.

* Welcome - Jennifer Smith, Chairperson
* Pledge of Allegiance
* Roll Call
Item 2: Approval of Minutes ..... 9:15 a.m.
* February 9, 2022 Minutes
Item 3: Chairperson Report ..... 9:25 a.m.
Item 4: Old Business ..... 9:30 a.m.
* Regalia Statement
Item 5: New Business10:00 a.m.* Class 7 Licensure Requirements Revision - McCall Flynn, Board of Public Education
BREAK10:15 a.m.
Updates to Member Concerns/Goals/Role of OPI ..... 10:30 a.m.
- Review of Current Data
- Youth Risk Behavior Survey - Susan Court (10 minutes)
- National Indian Education Survey - Jeremy MacDonald (10 minutes)
- Research Study - Nicole Frieling (10 minutes)
- Think Tank Discussion on topics for OPI Collaboration
- Review of Previous Points of Concern from MACIE members
- Addressing Graduation Rates, Dropout Rates, Mental Health Support Services (requests from Superintendent of Public Instruction)
$\checkmark$ Alternative pathways to graduation
$\checkmark$ 5th year students


## Item 6: Public comment

3:00 p.m.
This is an opportunity for any member of the audience to bring to the attention of the Council questions or relevant comments concerning matters not on the agenda. Please note that the Council is bound by ethical practice, bylaws, and Montana statutes. The Council may not take any action on matters brought to the attention of the Council during the public comment portion of the meeting unless specific notice of that matter is included in a properly noticed agenda. Therefore, in the Open Agenda portion of the meeting, the Council will not discuss or take any action, but may refer a matter presented to a future agenda. The following criteria exist for the public comments.

- The public may not discuss items on the current agenda at this time.
- The public may only discuss matters within jurisdiction of the Council.
- No action may be taken on a matter raised during the open agenda.
- The public may not comment in a boisterous, disorderly, hostile, or aggressive manner.
- Each member of the public may address the Council once.

Item 7: Adjournment
3:10 p.m.

Times are approximate.

The next meeting is May 11, 2022. It is an informational meeting.


# MACIE AGENDA <br> WORKING SESSION <br> ITEM 2 <br> APPROVAL OF MINUTES 

* Handout 2.1
- Draft February 9, 2022 minutes


MONTANA ADVISORY COUNCIL ON INDIAN EDUCATION ADVISORY TO THE BOARD OF PUBLIC EDUCATION AND SUPERINTENDENT OF PUBLIC INSTRUCTION

MACIE Meeting
February 9, 2022
Draft Minutes

| Members Present |  | Office of Public Instruction/ |  |
| :---: | :---: | :---: | :---: |
| Dawn Bishop-Moore | Indian Impact Schools of Montana | Board of Public Education |  |
|  |  | Elsie Arntzen | Matthew Bell |
| Norma Bixby | Northern Cheyenne | Joan Franke | Zach Hawkins |
|  | Tribe | Mike Jetty | Donnie Wetzel |
| Dugan Coburn | Urban - Great Falls | Annette Young |  |
| Jason Cummins | Class 7 | Guests |  |
| Michael Dolson | Confederated Salish \& Kootenai Tribes | Travis Anderson Ally Seneczko | Christa Gabriel |
| Jordann Forster | Montana Federation of Public Employees | Members Absent |  |
| Carrie Gopher | Office of Public Instruction | Rodney Bird | Bureau of Indian Education |
| Melissa Hammett | Urban - Missoula | Harold Dusty Bull | Blackfeet Tribe |
| Susie Hedalen | Board of Public | Levi Black Eagle | Crow Tribe |
|  | Education | Megan Gourneau | Fort Peck Tribes |
| Iris Kill Eagle | little Shell Tribe | Dr. Richard Littlebear | Tribal College |
| Jeremy MacDonald | School Administrators of Montana | Angela McLean | Montana University System |
| Jeannie Origbo (alternate) | Montana University System | Riley Werk | Youth - Reservation |
| Voyd St. Pierre | Chippewa Cree Tribe |  |  |
| Jennifer Smith | Urban - Billings |  |  |

The Montana Advisory Council on Indian Education (MACIE) meeting was called to order at 9:02 a.m. by Chairperson Jennifer Smith. The Pledge of Allegiance was recited, and roll call was taken.

Carrie Gopher, American Indian Student Achievement Director, and Matthew Bell, Language and Culture Immersion Specialist introduced themselves.

## Approval of Minutes

The minutes of the January 5, 2022 meeting were reviewed. No corrections were noted. Dawn Bishop-Moore motioned to approve the minutes as written. Michael Dolson seconded the motion. Passed by all.

## Ex-Officio Reports

> Superintendent of Public Instruction - Elsie Arntzen
The Summer Institute will be held this year at Montana State University Bozeman. A portal of the new licensure system will be shown.

The dropout rate across the state is increasing while the graduation rate is decreasing. The gap between Native American students and the aggregate of all students is also widening. The superintendent would like to discuss with MACIE on how to find out why this is happening and work to change this. She would also like to find ways to provide students with completion of high school if they do not graduate with their cohort (four years as required by federal government for data).

The Substance Abuse and Mental Health Services Administration (SAMHSA) grant is lapsing. The School Improvement Grant is also ending. Some of those who have been working with the SAMHSA wraparound grant will continue working in other agencies in another role. The superintendent would like to discuss with MACIE if there is another way to partner in mental health.

Medicaid reimbursement for schools was given in the last legislative session. There are 23 schools signed up at this time. This, however, requires a hard dollar match of $1 / 3$. The other $2 / 3$ will come from the federal government. The first payment goes out February 11. Schools may sign up monthly for this. The superintendent would like to have discussion with MACIE regarding how best to provide mental health services to students at schools predominately serving American Indian students.

A partnership between the Office of Public Instruction (OPI) and sovereign nations and school districts need to happen to improve mental health for students. The Superintendent will put together a plan for working together.
The Chapter 55 rules are being organized. Public comment will be needed regarding these accreditation standards.
> Montana University System - Jeannie Origbo and Travis Anderson
The Montana Educational Talent Search has been refunded for five years to provide services to nine school districts throughout Montana - Browning, Great Falls, Hardin, Heart Butte, Lodge Grass, Polson, Ronan, St. Ignatius, and Two Eagle River. Services center around financial literacy, college exploration, soft skill development, leadership, and general high school completion. The Department of Education gave a couple of competitive priorities - STEM with an emphasis on computer science and engaged citizenship.

An Educational Opportunity Center grant was received by the Office of the Commissioner of Higher Education (OCHE) for the first time. This serves eligible clients in eleven counties Beaverhead, Broadwater, Deer Lodge, Granite, Jefferson, Lake, Lewis and Clark, Missoula,

Powell, Ravalli, Silver Bow - for adults (or younger if no eligible program in the area) with services center around advisement high school diploma completion or equivalency, financial literacy, and the college admission process. The department priorities for this grant are a highquality education options for service members, veterans, and their families and fostering flexible and affordable pathways for obtaining knowledge and skills.

The OCHE Diversity, Equity, and Inclusion team is offering some professional development. The first one is February 23. This is a student panel on the topic What Indigenous Students Need to Succeed in College. On March 23 Mike Jetty and Zach Hawkins from OPI will do a presentation on Teaching Culturally, Honoring the Strengths of Indigenous Students

College Access Decision week is coming up May 2-6.
The first-year services that GEAR-UP started is continuing for a second year. This is to provide services for students who graduated from GEAR-UP high schools receive services for college success. The campuses this is taking place at are Montana State University (MSU) Bozeman and Billings, University of Montana Missoula, Flathead Valley Community College, and Salish Kootenai College. The corresponding community colleges have been added in this second year.

Montana GEAR-UP worked with the Department of Education and received approval to use some of the carry over funds to support the university system's 1-2-Free initiative to offer up to two dual enrollment classes to each Montana high school student.

Norma Bixby asked Talent Search and GEAR-UP that those who work on/near reservices to contact tribal education departments to provide information on programs.

Jason Cummins was wondering about retention rates for Native American students.
American Indian Education Administrative Reports
> Tribal Relations and Resiliency Unit - Don Wetzel
The document on how to use American Rescue Plan Elementary and Secondary Schools Emergency Relief funds to support students was discussed. This provides strategies that have worked in different schools were gathered and categories the strategies support. There are links to various programs.

Jennifer Smith would like to see ideas for urban areas.
Engaging students to unlock their potential is a good way to provide services.
> Indian Education for All Unit - Zach Hawkins
Mr. Hawkins indicated the Indian Education for All (IEFA) continues to work with educator preparation programs and the Council of Deans to make sure the programs reflect knowledge of the IEFA Framework. The social studies standards are being updated. The high school and middle school lessons have all been updated and there are still a few elementary lessons to be updated.

There are two webinar series being presented, Ethnobotany and Current Issues in Indian Country. An IEFA and Contemporary Issues hub course is in the preproduction stages. The plan
is to have this in the fall. There are tentative plans for an IEFA Best Practices Conference in May and an Advocacy Institute in June-July.

The IEFA Unit is asking for help regarding the names of the tribes. The unit would like the MACIE tribal representatives to verify the authentic spelling and pronunciation of each name.

Jennifer Smith says Zach needs a raise.

## Informational Presentations

> Disability Rights Montana Education Advocacy - Ally Seneczko and Christa Gabriel, Disability Rights Montana

The Disability Rights Montana organization mission is to protect and advocate for human, legal, and civil rights of Montanans with disabilities while advancing dignity, equality, and selfdetermination. They are looking to make connections to build collaboration in Indian country for students with disabilities. They are mandated by the federal government under the Developmental Disabilities Act as the civil rights protection and advocacy system for Montana. They have the legal authority to represent almost any person with a disability. They provide information and referral, short term assistance and advocacy, and legal representation. All information is on their website.

MACIE would reach out to Disability Rights Montana if there is a family that is working with the administration and MACIE member trying to navigate the special education system and resolve an issue. There would also be collaboration working on issues regarding outreach, training, and legislation for Native communities.

## Chairperson Report

The goals and member concerns were reviewed. Chairperson Smith asked members to review these and talk to communities/schools regarding current concerns. Then at the next working meeting there will be a discussion on this and the strategic plan that was developed to determine if they need to be updated.

Jeremy MacDonald suggested making graduation rates our next concentration along with IEFA and teacher preparation.

Per discussion will have working session on April 6 in person. This will be an all-day session.

## Old Business

> Regalia Committee - Jordann Forster
Ms. Forster has been talking to Shane Morigeau who is working with the Native American Caucus to get a legal statement written up. However, she is concerned that waiting for the legal summary may take too long and to do a MACIE statement because it is the law. It was decided to go ahead with a MACIE statement. The committee will work on updating the statement and then will bring it to the entire council at the next working session.

## Public Comment

Matthew Bell discussed what he is doing at the Office of Public Instruction regarding language and culture - Class 7, Indigenous Language Immersion Program (ILIP) and Montana Indigenous Language Preservation (MILP) program.

Jordann Forster motioned to adjourn the meeting and Dawn Bishop-Moore (and Dugan Coburn) seconded the motion. Passed by all. The meeting was adjourned at 12:20 p.m.


# MACIE AGENDA <br> WORKING SESSION <br> ITEM 4 OLD BUSINESS 

* Regalia Statement
- Handout 4.1
- Regalia Position Statement (draft)
- Handout 4.2
- Suggested Resolution


## MACIE Position Statement: On American Indian Regalia Worn in High School Graduation Ceremonies

It is the goal of the Montana Advisory Council on Indian Education to ensure the education of school Board of Trustees, administrators, teachers, staff, and community members who serve American Indian students and families within the state of Montana of the legal language and protections concerning the wear of regalia during public ceremonies.

Although Montana Senate Bill 319 (signed 2017) protects and supports American Indian students' right to wear traditional regalia during all public events (including graduation ceremonies), lack of awareness of this law still remains prevalent. MACIE continues to receive reports of students being denied protection under the regalia law. This protection includes the wearing of beaded mortarboards, gowns, and associated traditional attire, that is inherent among our sovereign Native nations. It is best to address and prevent unnecessary legal situations which may arise when districts are either uninformed or incompliant with this law.

The Montana Advisory Council on Indian Education (MACIE) recommends and advises that the Office of Public Instruction and Board of Public Education address this lack of awareness by informing and preparing all school affiliated staff in the area of legal protections of American Indian regalia by:

- affirming Montana Senate Bill 319 to all Trustees, Superintendents, Principals and staff
- defending the rights of American Indian students whom are protected under MT Senate Bill 319
- addressing these specific issues in teacher and principal preparation programs

Thank You,
Montana Advisory Council on Indian Education
February 2022

## RESOLUTION

WHEREAS, the Montana Advisory Council on Indian Education (MACIE) has adopted a position statement on American Indian Regalia Protections; and

WHEREAS, it is MACIE's goal to proactively inform and educate school district Board of Trustees, administrators, teachers, and staff who serve American Indian students, families, and communities within the state about the legal language protections that exist for Native regalia to be worn at public ceremonies such as graduation; and

WHEREAS, MACIE believes that many educators and school leaders find themselves uninformed and unprepared in regards to tribal sovereignty, culture, history, spirituality, and the traditional practices of wearing regalia to special events; and

WHEREAS, MACIE believes it is best to address these issues in a preventative manner in order to mitigate any and all unwanted and unnecessary situations from happening, and from continuing to happen, in order to better prepare educators and school leaders;

THEREFORE, BE IT RESOLVED, the Montana Board of Public Education and the Office of Public Instruction supports MACIE in their work to address this lack of awareness by assisting in informing and preparing educators in the area of legal protections of American Indian regalia and other issues mentioned above that are present in the intersection of school policies, and Montana law.



# MACIE AGENDA <br> WORKING SESSION <br> ITEM 5 <br> NEW BUSINESS 

* Class 7 Licensure Requirements Revision
- Handout 5.1
- Presentation Summary
$\checkmark$ Class 7 Language Changes
* Updates to Member Concerns/Goals/Role of OPI
- Handout 5.2
- Montana Youth Risk Behavior Survey 2021 - American Indian High School Results
- Handout 5.3
- National Indian Education Survey
- Handout 5.4
- Member Concerns and Goals
- Handout 5.5
- Strategic Process \& Outcomes Powerpoint

MACIE AGENDA PRESENTATION REQUEST

| Name and title of person <br> presenting | McCall Flynn, Executive Director, Board of Public Education |
| :--- | :--- |
| Contact information: phone | $406-444-0300$ |
| Contact information: e-mail | mflynn@mt.gov |
| Organization | Board of Public Education |
| Select one | - Presentation New Business |
| Resentation title | Recommendation Request on Revisions to Class 7 License in Chapter 57-Educator <br> Licensure |
| Description of presentation | The Board of Public Education is requesting MACIE's recommendations on the <br> revisions to the Class 7 Licensure in Chapter 57-Educator Licensure. The revisions <br> extend the term for a Class 7 American Indian Language and Culture Specialist from 5 <br> years to lifetime, which also removes the requirement for renewal. |
| How does this relate to the <br> MACIE goals (next page) | The Class 7 American Indian language and culture specialist license is for <br> those who meet tribal standards for competency and fluency as a requisite for <br> teaching that tribal language and culture, based on criteria developed by each <br> tribe for qualifying an individual as competent to be a specialist in its language <br> and culture. This directly relates to MACIE's goals by promoting efforts to <br> ensure safe, secure, and stable educational environments where students and <br> parents feel welcome and supported, as well as advocating for the meaningful <br> integration of culture and indigenous language in Montana schools. |
| The Board of Public Education is requesting MACIE either recommend the support of |  |
| Action requesting the |  |
| advisory council take |  |

> MONTANA ADVISORY COUNCIL ON INDIAN EDUCATION ADVISORY TO THE BOARD OF PUBLIC EDUCATION AND SUPERINTENDENT OF PUBLIC INSTRUCTION

### 10.57.436 CLASS 7 AMERICAN INDIAN

LANGUAGE AND CULTURE SPECIALIST
(1) A Class 7 American Indian language and culture specialist license is valid for a period of five years.
(2) The Superintendent of Public Instruction shall issue a Class 7 license based upon verification by the authorized representative of a tribal government, that has a memorandum of understanding with the Superintendent of Public Instruction, that the applicant has met tribal standards for competency and fluency as a requisite for teaching that language and culture.
(3) The Board of Public Education will accept and place on file the criteria developed by each tribe for qualifying an individual as competent to be a specialist in its language and culture.
(4) A Class 7 American Indian language and culture specialist licensee may be approved to teach traffic education if the licensee meets the requirements of ARM 10.13.310 and is approved by the Superintendent of Public Instruction.
(5) A Class 7 American Indian language and culture specialist license may be renewed upon verification by the tribe that the professional development plan, as defined by the memorandum of understanding in (2) is met.
(6) A school district may assign an individual licensed under this rule to only specialist services within the field of American Indian language and culture under such supervision as the district may deem appropriate. No other teaching license or endorsement is required for duties within this prescribed field.
10.57.436 CLASS 7 AMERICAN INDIAN LANGUAGE AND CULTURE SPECIALIST
(1) A Class 7 American Indian language and culture specialist license is valid for the lifetime of the license holder. for a period of five years.
(2) The Superintendent of Public Instruction shall issue a Class 7 license based upon verification by the authorized representative of a tribal government, that has a memorandum of understanding with the Superintendent of Public Instruction, that the applicant has met tribal standards for competency and fluency as a requisite for teaching that language and culture.
(3) The Board of Public Education will accept and place on file the criteria developed by each tribe for qualifying an individual as competent to be a specialist in its language and culture.
(4) An applicant must verify completion of the online course "An Introduction to Indian Education for All in Montana."
(4) (5) A Class 7 American Indian language and culture specialist licensee may be approved to teach traffic education if the licensee meets the requirements of ARM 10.13.310 and is approved by the Superintendent of Public Instruction.
(5)A Class 7 American Indian language and culture specialist license may be renewed upon verification by the tribe that the professional development plan, as defined by the memorandum of understanding in (2) is met
(6) A school district may assign an individual licensed under this rule to only specialist services within the field of American Indian language and culture under such supervision as the district may deem appropriate. No other teaching license or endorsement is required for duties within this prescribed field.

Extended the term for a Class 7 American Indian Language and Culture Specialist from 5 years to lifetime, which also removes the requirement for renewal.

Inclusion of IEFA for all classes of licenses

## Montana

## Youth Risk



## American Indian

## High School Results

## ACKNOWLEDGMENT

The 2021 Youth Risk Behavior Survey (YRBS) report is a continuation of the surveillance and reporting system for adolescent risk behaviors developed by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, U.S. Centers for Disease Control and Prevention (CDC). The YRBS was first used in Montana in 1991. Superintendent Elsie Arntzen, and the Montana Office of Public Instruction, acknowledge the participation, support and cooperation of those persons who made the 2021 Montana Youth Risk Behavior Survey possible. Sincere appreciation is expressed to:

- the U.S. Centers for Disease Control and Prevention, Division of Adolescent and School Health, Surveillance Research Section, and WESTAT Technical Assistance Project;
- the cosponsors of the YRBS - Montana Department of Public Health and Human Services, Montana Board of Crime Control, Billings Area Indian Health Service, Montana Department of Transportation - State Highway Traffic Safety Section, and the Montana Department of Justice Special Services Bureau.
- the district superintendents, school principals, YRBS coordinators and teachers who cooperated with and supported the survey; and, most importantly,
- the Montana students who participated in the survey.

The Office of Public Instruction is committed to equal employment opportunity and nondiscriminatory access to all our programs and services. For more information or to file a complaint, contact OPI Title IX/EEO Coordinator at (406) 444-2673 or opipersonnel@mt.gov.

## Preface

Montana is proud to have completed over three decades of participation in the Youth Risk Behavior Survey (YRBS). These results are valuable to educators, school boards, and communities, including parents and students, in understanding the health risks of our Montana students; enabling districts to design local health and physical education curriculum to address local needs. In addition, these results drive state collaboration as well as program and policy decisions. The Montana Office of Public Instruction uses these results to establish benchmarks for reducing adolescent risk behaviors and increasing pro-social behaviors, designing state priorities for health programs, and evaluating the effectiveness of many health-related programs across the health and education systems

The Office of Public Instruction believes in making data-driven decisions and uses the Youth Risk Behavior Survey as the platform to make program and policy decisions within the agency regarding the health of Montana students. We encourage our 825 schools to use this plan to focus on suicide prevention, school safety, and support for students to address substance abuse and mental health topics within their own school plans.

Thank you to all the schools who continue to administer this survey, providing Montana with this critical data. Especially noteworthy is during the spring of the 2020-2021 school year, when schools faced many challenges, $98 \%$ of all school districts, and 22,576 students in grades 7 through 12 completed the survey. The 2021 YRBS results are the students' story and a 'snapshot in time' of their experiences.

- Most unintentional injuries and violence behaviors showed improving trends; however, increases were seen in texting or e-mailing (57\%, [50\% Native American]), and apps use (52\%, [52\% Native American]) while driving; behaviors in which Montana students already had the highest rates in the nation in 2019.
- A 30 -year high of $41 \%$ of high school students ( $49 \%$ of Native American students) reported feelings of sadness or hopelessness (depression) over the last year. Suicide ideation rates remained level from past years.
- Current tobacco usage rates declined for all tobacco products - cigarettes (7\%), electronic vapor products (26\%), smokeless tobacco (5\%), and cigars (5\%). Native American student current tobacco use rates are $14 \%$ cigarettes, $29 \%$ electronic vapor products, $6 \%$ smokeless tobacco, and $8 \%$ cigars.
- Alcohol and other drug use rates continue to decrease from those of students 30 years ago.
- Current marijuana use (past 30 days) was reported by $20 \%$ of students; continuing a downward trend from $37 \%$ in 2001. Thirty-two percent of Native American students currently use marijuana, down from a high of 53\% in 1999.
- Fewer students are currently sexually active (30\%, [32\% Native American]); however, of these students, fewer are using a condom to prevent pregnancy (52\%, [57\% Native American]).
- Among nutrition and dietary behaviors, the rates of daily soda or pop consumption are favorably decreasing (12\%, [11\% Native American]). However, 17\% of students (18\% Native American) did not eat breakfast and only $30 \%$ ( $21 \%$ Native American) ate breakfast daily.
- Physical activity rates remained steady, but screen time of 3 or more hours per day was reported by $72 \%$ of students, (71\% Native American students).

We are proud to focus our health and safety programs based on what students report through this survey. I am thankful for all the school and community partners that make this project a reality.



# Youth Risk Behavior Survey Program Montana Office of Public Instruction 

Susan Court, State Coordinator
Contact: scourt@mt.gov or 406-444-3178
Website: www.opi.mt.gov/yrbs

# 2021 Montana Youth Risk Behavior Survey 

American Indian Students Report

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## Frequency Distributions

(Percentage of Montana American Indian High School Students)

| 1. How old are you? |  |
| :--- | :--- |
| A. 15 years or younger | 39.1 |
| B. 16 or 17 years old | 48.5 |
| C. 18 years old or older | 12.4 |


| 2. What is your sex? |  |
| :--- | ---: |
| A. Female | 46.2 |
| B. Male | 53.8 |

The next 6 questions ask about safety.
8. How often do you wear a seat belt when riding in a car driven by someone else?

| A. Never | 2.4 |
| :--- | ---: |
| B. Rarely | 8.4 |
| C. Sometimes | 15.7 |
| D. Most of the time | 37.2 |
| E. Always | 36.3 |

9. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

| A. 0 times | 71.3 |
| :--- | ---: |
| B. 1 time | 8.2 |
| C. 2 or 3 times | 7.0 |
| D. 4 or 5 times | 4.5 |
| E. 6 or more times | 9.0 |


| 10. How often do you wear a seat belt when driving <br> a car? |  |
| :--- | ---: |
| A. I do not drive a car | 18.6 |
| B. Never | 1.8 |
| C. Rarely | 5.2 |
| D. Sometimes | 9.0 |
| E. Most of the time | 20.8 |
| F. Always | 44.6 |

11. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?

| A. I did not drive a car or other vehicle <br> during the past 30 days | 26.8 |
| :--- | ---: |
| B. 0 times | 67.8 |
| C. 1 time | 3.9 |
| D. 2 or 3 times | 1.1 |
| E. 4 or 5 times | 0.0 |
| F. 6 or more times | 0.3 |

12. During the past 30 days, on how many days did you text or e-mail while driving a car or other vehicle?

| A. I did not drive a car or other vehicle <br> during the past 30 days | 26.1 |
| :--- | ---: |
| B. 0 days | 36.9 |
| C. 1 or 2 days | 14.0 |
| D. 3 to 5 days | 7.8 |
| E. 6 to 9 days | 5.3 |
| F. 10 to 19 days | 4.2 |
| G. 20 to 29 days | 1.2 |
| H. All 30 days | 4.4 |

13. During the past 30 days, on how many days did you use the Internet or apps on your cell phone (such as YouTube, Instagram, or Facebook) while driving a car or other vehicle? (Do not count using your cell phone to get driving directions or to determine your location.)

| A. I did not drive a car or other vehicle <br> during the past 30 days | 26.4 |
| :--- | ---: |
| B. 0 days | 35.2 |
| C. 1 or 2 days | 13.4 |
| D. 3 to 5 days | 7.4 |
| E. 6 to 9 days | 3.6 |
| F. 10 to 19 days | 2.6 |
| G. 20 to 29 days | 1.3 |
| H. All 30 days | 10.1 |

The next 10 questions ask about violence-related behaviors and experiences.
14. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club on school property?

| A. 0 days | 92.7 |
| :--- | ---: |
| B. 1 day | 1.0 |
| C. 2 or 3 days | 2.4 |
| D. 4 or 5 days | 1.0 |
| E. 6 or more days | 3.0 |

15. During the past 12 months, on how many days did you carry a gun? (Do not count the days when you carried a gun only for hunting or for a sport, such as target shooting.)

| A. 0 days | 90.4 |
| :--- | ---: |
| B. 1 day | 3.1 |
| C. 2 or 3 days | 2.9 |
| D. 4 or 5 days | 0.7 |
| E. 6 or more days | 2.9 |

16. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?

| A. 0 days | 90.6 |
| :--- | ---: |
| B. 1 day | 5.2 |
| C. 2 or 3 days | 1.7 |
| D. 4 or 5 days | 1.4 |
| E. 6 or more days | 1.1 |

17. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?

| property? |  |
| :--- | ---: |
| A. 0 times | 94.6 |
| B. 1 time | 2.7 |
| C. 2 or 3 times | 1.4 |
| D. 4 or 5 times | 0.0 |
| E. 6 or 7 times | 0.6 |
| F. 8 or 9 times | 0.0 |
| G. 10 or 11 times | 0.0 |
| H. 12 or more times | 0.7 |


| 18. During the past 12 months, how many times <br> were you in a physical fight? |  |
| :--- | ---: |
| A. 0 times | 75.1 |
| B. 1 time | 11.5 |
| C. 2 or 3 times | 7.9 |
| D. 4 or 5 times | 2.3 |
| E. 6 or 7 times | 0.6 |
| F. 8 or 9 times | 0.8 |
| G. 10 or 11 times | 0.2 |
| H. 12 or more times | 1.6 |


| 19. During the past 12 months, how many times <br> were you in a physical fight on school property? |  |
| :--- | ---: |
| A. 0 times | 95.2 |
| B. 1 time | 2.4 |
| C. 2 or 3 times | 1.7 |
| D. 4 or 5 times | 0.0 |
| E. 6 or 7 times | 0.2 |
| F. 8 or 9 times | 0.0 |
| G. 10 or 11 times | 0.0 |
| H. 12 or more times | 0.5 |

20. Have you ever been physically forced to have sexual intercourse when you did not want to?

| A. Yes | 13.7 |
| :--- | ---: |
| B. No | 86.3 |

21. During the past 12 months, how many times did anyone force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)

| A. 0 times | 86.9 |
| :--- | ---: |
| B. 1 time | 8.2 |
| C. 2 or 3 times | 3.8 |
| D. 4 or 5 times | 0.3 |
| E. 6 or more times | 0.8 |

22. During the past 12 months, how many times did someone you were dating or going out with force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)

| A. I did not date or go out with anyone <br> during the past 12 months | 42.0 |
| :--- | ---: |
| B. 0 times | 55.0 |
| C. 1 time | 2.1 |
| D. 2 or 3 times | 0.6 |
| E. 4 or 5 times | 0.0 |
| F. 6 or more times | 0.3 |

23. During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon.)

| A. I did not date or go out with anyone <br> during the past 12 months | 41.8 |
| :--- | ---: |
| B. 0 times | 52.8 |
| C. 1 time | 3.5 |
| D. 2 or 3 times | 1.2 |
| E. 4 or 5 times | 0.0 |
| F. 6 or more times | 0.6 |

The next 3 questions ask about bullying. Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.
24. During the past 12 months, have you ever been bullied on school property?

| A. Yes | 13.3 |
| :--- | :--- |
| B. No | 86.7 |

25. During the past 12 months, have you ever been electronically bullied? (Count being bullied through texting, Instagram, Facebook, or other social media.)

| A. Yes | 14.2 |
| :--- | :--- |
| B. No | 85.8 |

26. During the past 12 months, have you ever been the victim of teasing or name calling because someone thought you were gay, lesbian or bisexual?

| A. Yes | 14.8 |
| :--- | :--- |
| B. No | 85.2 |

The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.
27. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?

| A. Yes | 49.0 |
| :--- | :--- |
| B. No | 51.0 |

28. During the past 12 months, did you ever seriously consider attempting suicide?

| A. Yes | 26.7 |
| :--- | :--- |
| B. No | 73.3 |

29. During the past 12 months, did you make a plan about how you would attempt suicide?

| A. Yes | 20.7 |
| :--- | :--- |
| B. No | 79.3 |

30. During the past 12 months, how many times did you actually attempt suicide?

| A. 0 times | 82.4 |
| :--- | ---: |
| B. 1 time | 14.6 |
| C. 2 or 3 times | 2.7 |
| D. 4 or 5 times | 0.0 |
| E. 6 or more times | 0.3 |

31. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

| A. I did not attempt suicide during the <br> past 12 months | 83.0 |
| :--- | ---: |
| B. Yes | 4.5 |
| C. No | 12.5 |

## The next 4 questions ask about cigarette smoking.

32. Have you ever tried cigarette smoking, even one or two puffs?

| A. Yes | 52.2 |
| :--- | :--- |
| B. No | 47.8 |

33. How old were you when you first tried cigarette smoking, even one or two puffs?

| A. I have never tried cigarette <br> smoking, not even one or two puffs | 48.0 |
| :--- | ---: |
| B. 8 years old or younger | 8.4 |
| C. 9 or 10 years old | 8.3 |
| D. 11 or 12 years old | 11.3 |
| E. 13 or 14 years old | 11.1 |
| F. 15 or 16 years old | 10.9 |
| G. 17 years old or older | 2.0 |

34. During the past 30 days, on how many days did you smoke cigarettes?

| A. 0 days | 85.6 |
| :--- | ---: |
| B. 1 or 2 days | 5.2 |
| C. 3 to 5 days | 2.6 |
| D. 6 to 9 days | 3.5 |
| E. 10 to 19 days | 0.9 |
| F. 20 to 29 days | 0.8 |
| G. All 30 days | 1.3 |

35. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

| A. I did not smoke cigarettes during <br> the past 30 days | 85.4 |
| :--- | ---: |
| B. Less than 1 cigarette per day | 6.5 |
| C. 1 cigarette per day | 2.2 |
| D. 2 to 5 cigarettes per day | 4.5 |
| E. 6 to 10 cigarettes per day | 1.4 |
| F. 11 to 20 cigarettes per day | 0.0 |
| G. More than 20 cigarettes per day | 0.0 |

The next 5 questions ask about electronic vapor products, such as JUUL, SMOK, Suorin, Vuse, and blu. Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods.
36. Have you ever used an electronic vapor product?

| A. Yes | 55.0 |
| :--- | :--- |
| B. No | 45.0 |

37. During the past 30 days, on how many days did you use an electronic vapor product?

| A. 0 days | 71.0 |
| :--- | ---: |
| B. 1 or 2 days | 7.5 |
| C. 3 to 5 days | 4.8 |
| D. 6 to 9 days | 1.9 |
| E. 10 to 19 days | 6.7 |
| F. 20 to 29 days | 2.9 |
| G. All 30 days | 5.2 |

38. During the past 30 days, on how many days did you use an electronic vapor product on school property?

| A. 0 days | 86.1 |
| :--- | ---: |
| B. 1 or 2 days | 4.7 |
| C. 3 to 5 days | 2.9 |
| D. 6 to 9 days | 1.9 |
| E. 10 to 19 days | 1.6 |
| F. 20 to 29 days | 0.2 |
| G. All 30 days | 2.6 |


| 39. During the past 30 days, how did you usually <br> get your own electronic vapor products? (Select <br> only one response.) |  |
| :---: | ---: |
| A. I did not use any electronic vapor <br> products during the past 30 days | 71.3 |
| B. I got or bought them from a friend, <br> family member, or someone else | 17.9 |
| C. I bought them myself in a vape shop <br> or tobacco shop | 0.8 |
| D. I bought them myself in a <br> convenience store, supermarket, <br> discount store, or gas station | 1.2 |
| E. I bought them myself at a mall or <br> shopping center kiosk or stand | 0.3 |
| F. I bought them myself on the <br> Internet, such as from a product <br> website, vape store website, or <br> other website like eBay, Amazon, <br> Facebook Marketplace, or Craigslist | 0.5 |
| G. I took them from a store or another <br> person | 0.6 |
| H. I got them some other way | 7.5 |


| 40. During the past 30 days, what flavor of <br> electronic vapor product did you use most <br> often? (Select only one response.) |  |
| :--- | ---: |
| A. I did not use an electronic vapor <br> product during the past 30 days | 67.3 |
| B. Alcoholic drinks (such as wine, <br> margarita, or other cocktails) | 0.8 |
| C. Chocolate, candy, desserts, or other <br> sweets | 3.2 |
| D. Fruit | 16.7 |
| E. Menthol | 5.6 |
| F. Mint | 2.8 |
| G. Tobacco | 1.0 |
| H. Some other flavor | 2.5 |

The next 2 questions ask about other tobacco products.
41. During the past 30 days, on how many days did you use chewing tobacco, snuff, dip, snus, or dissolvable tobacco products, such as Copenhagen, Grizzly, Skoal, or Camel Snus? (Do not count any electronic vapor products.)

| A. 0 days | 94.2 |
| :--- | ---: |
| B. 1 or 2 days | 2.6 |
| C. 3 to 5 days | 0.8 |
| D. 6 to 9 days | 0.5 |
| E. 10 to 19 days | 0.0 |
| F. 20 to 29 days | 0.5 |
| G. All 30 days | 1.5 |

42. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

| A. 0 days | 92.0 |
| :--- | ---: |
| B. 1 or 2 days | 4.2 |
| C. 3 to 5 days | 1.4 |
| D. 6 to 9 days | 1.1 |
| E. 10 to 19 days | 1.0 |
| F. 20 to 29 days | 0.0 |
| G. All 30 days | 0.2 |

The next question asks about all tobacco products. Please consider cigarettes, electronic vapor products, smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products), cigars (including little cigars or cigarillos), shisha or hookah tobacco, and pipe tobacco when answering this question.

| 43. During the past 12 months, did you ever try to <br> quit using all tobacco products? |  |
| :--- | ---: |
| A. I did not use any tobacco products <br> during the past 12 months | 57.7 |
| B. Yes | 27.3 |
| C. No | 15.0 |

The next 6 questions ask about drinking alcohol. This includes drinking beer, wine, flavored alcoholic beverages, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

| 44. How old were you when you had your first drink <br> of alcohol other than a few sips? |  |
| :--- | ---: |
| A. $~ I ~ h a v e ~ n e v e r ~ h a d ~ a ~ d r i n k ~ o f ~ a l c o h o l ~$ <br> other than a few sips | 42.6 |
| B. 8 years old or younger | 6.9 |
| C. 9 or 10 years old | 5.2 |
| D. 11 or 12 years old | 8.6 |
| E. 13 or 14 years old | 17.1 |
| F. 15 or 16 years old | 16.9 |
| G. 17 years old or older | 2.6 |

45. During the past 30 days, on how many days did you have at least one drink of alcohol?

| A. 0 days | 75.6 |
| :--- | ---: |
| B. 1 or 2 days | 10.1 |
| C. 3 to 5 days | 6.6 |
| D. 6 to 9 days | 3.3 |
| E. 10 to 19 days | 2.7 |
| F. 20 to 29 days | 0.8 |
| G. All 30 days | 0.9 |

46. During the past 30 days, on how many days did you have $\mathbf{4}$ or more drinks of alcohol in a row, that is, within a couple of hours (if you are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (if you are male)?

| A. 0 days | 84.9 |
| :--- | ---: |
| B. 1 day | 4.5 |
| C. 2 days | 1.5 |
| D. 3 to 5 days | 5.0 |
| E. 6 to 9 days | 1.4 |
| F. 10 to 19 days | 1.4 |
| G. 20 or more days | 1.2 |

47. During the past 30 days, what is the largest
is, within a couple of hours?

| A. I did not drink alcohol during the <br> past 30 days | 79.8 |
| :--- | ---: |
| B. 1 or 2 drinks | 3.2 |
| C. 3 drinks | 1.3 |
| D. 4 drinks | 1.7 |
| E. 5 drinks | 2.9 |
| F. 6 or 7 drinks | 3.9 |
| G. 8 or 9 drinks | 2.2 |
| H. 10 or more drinks | 5.0 |


| 48. During the past 30 days, how did you usually <br> get the alcohol you drank? |  |
| :--- | ---: |
| A. I did not drink alcohol during the <br> past 30 days | 75.8 |
| B. I bought it in a store such as a liquor <br> store, convenience store, <br> supermarket, discount store, or gas <br> station | 2.7 |
| C. I bought it at a restaurant, bar, or <br> club | 0.3 |
| D. I bought it at a public event such as <br> a concert or sporting event | 0.0 |
| E. I gave someone else money to buy <br> it for me | 7.7 |
| F. Someone gave it to me | 5.7 |
| G. I took it from a store or family <br> member | 2.1 |
| H. I got it some other way | 5.6 |


| 49. During the past 30 days, what type of alcohol <br> did you drink most often? (Select only one <br> response.) |  |
| :--- | ---: |
| A. I did not drink alcohol during the <br> past 30 days | 75.0 |
| B. Beer | 7.7 |
| C. Wine | 1.0 |
| D. Vodka | 3.7 |
| E. Some other liquor, such as rum, <br> scotch, bourbon, whiskey, or tequila | 5.2 |
| F. Flavored alcoholic beverages, such <br> as hard seltzer, Smirnoff Ice, <br> Bacardi Silver, Mike's Hard <br> Lemonade, Four Loko, or hard apple <br> cider | 6.4 |
| G. Some other type of alcohol |  |

The next 3 questions ask about marijuana use. Marijuana also is called pot or weed. For these questions, do not count CBD-only or hemp products, which come from the same plant as marijuana, but do not cause a high when used alone.

| 50. During your life, how many times have you used <br> marijuana? |  |
| :--- | ---: |
| A. 0 times | 44.9 |
| B. 1 or 2 times | 7.1 |
| C. 3 to 9 times | 7.9 |
| D. 10 to 19 times | 6.5 |
| E. 20 to 39 times | 5.3 |
| F. 40 to 99 times | 6.7 |
| G. 100 or more times | 21.6 |


| 51. How old were you when you tried marijuana for <br> the first time? |  |
| :--- | ---: |
| A. I have never tried marijuana | 44.6 |
| B. 8 years old or younger | 4.9 |
| C. 9 or 10 years old | 7.2 |
| D. 11 or 12 years old | 11.6 |
| E. 13 or 14 years old | 19.3 |
| F. 15 or 16 years old | 10.9 |
| G. 17 years old or older | 1.5 |

52. During the past 30 days, how many times did you use marijuana?

| A. 0 times | 68.0 |
| :--- | ---: |
| B. 1 or 2 times | 6.7 |
| C. 3 to 9 times | 6.8 |
| D. 10 to 19 times | 4.0 |
| E. 20 to 39 times | 4.7 |
| F. 40 or more times | 9.8 |

The next question asks about synthetic marijuana use. Synthetic marijuana also is called Spice, fake weed, K2, or Black Mamba.
53. During your life, how many times have you used synthetic marijuana?

| A. 0 times | 86.6 |
| :--- | ---: |
| B. 1 or 2 times | 4.5 |
| C. 3 to 9 times | 4.8 |
| D. 10 to 19 times | 1.3 |
| E. 20 to 39 times | 0.3 |
| F. 40 or more times | 2.6 |

The next question asks about the use of prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it. For this question, count drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet.
54. During your life, how many times have you taken prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it?

| A. 0 times | 85.5 |
| :--- | ---: |
| B. 1 or 2 times | 10.0 |
| C. 3 to 9 times | 2.3 |
| D. 10 to 19 times | 0.8 |
| E. 20 to 39 times | 0.2 |
| F. 40 or more times | 1.2 |

## The next 8 questions ask about other drugs.

55. During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?

| A. 0 times | 93.4 |
| :--- | ---: |
| B. 1 or 2 times | 5.5 |
| C. 3 to 9 times | 0.8 |
| D. 10 to 19 times | 0.0 |
| E. 20 to 39 times | 0.0 |
| F. 40 or more times | 0.2 |


| 56. During your life, how many times have you <br> sniffed glue, breathed the contents of aerosol <br> spray cans, or inhaled any paints or sprays to get <br> high? |  |
| :--- | ---: |
| A. 0 times | 92.9 |
| B. 1 or 2 times | 2.0 |
| C. 3 to 9 times | 2.2 |
| D. 10 to 19 times | 1.6 |
| E. 20 to 39 times | 0.3 |
| F. 40 or more times | 1.0 |


| 57. During your life how many times have you used <br> heroin (also called smack, junk, or China White)? |  |
| :--- | ---: |
| A. 0 times | 97.3 |
| B. 1 or 2 times | 1.7 |
| C. 3 to 9 times | 0.5 |
| D. 10 to 19 times | 0.2 |
| E. 20 to 39 times | 0.0 |
| F. 40 or more times | 0.2 |

58. During your life, how many times have you used methamphetamines (also called speed, crystal meth, crank, ice, or meth)?

| A. 0 times | 97.5 |
| :--- | ---: |
| B. 1 or 2 times | 2.0 |
| C. 3 to 9 times | 0.2 |
| D. 10 to 19 times | 0.0 |
| E. 20 to 39 times | 0.0 |
| F. 40 or more times | 0.2 |


| 59. During your life, how many times have you used <br> ecstasy (also called MDMA)? |  |
| :--- | ---: |
| A. 0 times | 93.2 |
| B. 1 or 2 times | 5.3 |
| C. 3 to 9 times | 1.0 |
| D. 10 to 19 times | 0.0 |
| E. 20 to 39 times | 0.0 |
| F. 40 or more times | 0.5 |


| 60. During your life, how many times have you used <br> a needle to inject any illegal drug into your <br> body? |  |
| :--- | ---: |
| A. 0 times | 97.9 |
| B. 1 time | 1.7 |
| C. 2 or more times | 0.5 |

61. During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?

| A. Yes | 20.9 |
| :--- | :--- |
| B. No | 79.1 |

62. During the past 30 days, how many times did you use hallucinogenic drugs, such as LSD, acid, PCP, angel dust, mescaline, or mushrooms?

| A. 0 times | 88.8 |
| :--- | ---: |
| B. 1 or 2 times | 7.9 |
| C. 3 to 9 times | 2.3 |
| D. 10 to 19 times | 0.7 |
| E. 20 to 39 times | 0.0 |
| F. 40 or more times | 0.2 |

The next 7 questions ask about sexual behavior.

| 63. Have you ever had sexual intercourse? |  |
| :--- | ---: |
| A. Yes | 49.8 |
| B. No | 50.2 |


| 64. How old were you when you had sexual <br> intercourse for the first time? |  |
| :--- | ---: |
| A. I have never had sexual intercourse | 50.0 |
| B. 11 years old or younger | 2.2 |
| C. 12 years old | 2.6 |
| D. 13 years old | 6.9 |
| E. 14 years old | 11.1 |
| F. 15 years old | 17.3 |
| G. 16 years old | 6.8 |
| H. 17 years old or older | 3.1 |


| 65. During your life, with how many people have <br> you had sexual intercourse? |  |
| :--- | ---: |
| A. I have never had sexual intercourse | 49.8 |
| B. 1 person | 17.4 |
| C. 2 people | 9.5 |
| D. 3 people | 8.0 |
| E. 4 people | 5.1 |
| F. 5 people | 2.6 |
| G. 6 or more people | 7.6 |


| 66. During the past 3 months, with how many <br> people did you have sexual intercourse? |  |
| :--- | ---: |
| A. I have never had sexual intercourse | 50.0 |
| B. I have had sexual intercourse, but <br> not during the past 3 months | 17.4 |
| C. 1 person | 24.6 |
| D. 2 people | 4.6 |
| E. 3 people | 1.3 |
| F. 4 people | 0.5 |
| G. 5 people | 0.4 |
| H. 6 or more people | 1.2 |


| 67. Did you drink alcohol or use drugs before you <br> had sexual intercourse the last time? |  |
| :--- | ---: |
| A. I have never had sexual intercourse | 50.2 |
| B. Yes | 9.5 |
| C. No | 40.3 |


| 68. The last time you had sexual intercourse, did <br> you or your partner use a condom? |  |
| :--- | ---: |
| A. I have never had sexual intercourse | 50.3 |
| B. Yes | 28.5 |
| C. No | 21.2 |

69. The last time you had sexual intercourse with an opposite-sex partner, what one method did you or your partner use to prevent pregnancy? (Select only one response.)

| A. I have never had sexual intercourse <br> with an opposite-sex partner | 57.3 |
| :--- | ---: |
| B. No method was used to prevent <br> pregnancy | 6.3 |
| C. Birth control pills (Do not count <br> emergency contraception such as <br> Plan B or the "morning after" pill.) | 8.3 |
| D. Condoms | 14.6 |
| E. An IUD (such as Mirena or <br> ParaGard) or implant (such as <br> Implanon or Nexplanon) | 4.6 |
| F. A shot (such as Depo-Provera), <br> patch (such as Ortho Evra), or birth <br> control ring (such as NuvaRing) | 1.9 |
| G. Withdrawal or some other method | 3.3 |
| H. Not sure | 3.8 |

The next 2 questions ask about body weight.

| 70. How do you describe your weight? |  |
| :--- | ---: |
| A. Very underweight | 3.5 |
| B. Slightly underweight | 10.4 |
| C. About the right weight | 45.7 |
| D. Slightly overweight | 32.6 |
| E. Very overweight | 7.8 |


| 71. Which of the following are you trying to do <br> about your weight? |  |
| :--- | ---: |
| A. Lose weight | 58.9 |
| B. Gain weight | 14.9 |
| C. Stay the same weight | 14.4 |
| D. I am not trying to do anything <br> about my weight | 11.9 |

The next 10 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.
72. During the past 7 days, how many times did you drink 100\% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)

| A. I did not drink $100 \%$ fruit juice <br> during the past 7 days | 25.0 |
| :--- | ---: |
| B. 1 to 3 times during the past 7 days | 40.8 |
| C. 4 to 6 times during the past 7 days | 18.2 |
| D. 1 time per day | 3.4 |
| E. 2 times per day | 5.8 |
| F. 3 times per day | 1.8 |
| G. 4 or more times per day | 5.1 |

73. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)

| A. I did not eat fruit during the past 7 <br> days | 10.4 |
| :--- | ---: |
| B. 1 to 3 times during the past 7 days | 39.7 |
| C. 4 to 6 times during the past 7 days | 25.8 |
| D. 1 time per day | 5.8 |
| E. 2 times per day | 7.1 |
| F. 3 times per day | 4.2 |
| G. 4 or more times per day | 6.9 |


| 74. During the past 7 days, how many times did you <br> eat green salad? |  |
| :--- | ---: |
| A. I did not eat green salad during the <br> past 7 days | 44.5 |
| B. 1 to 3 times during the past 7 days | 38.7 |
| C. 4 to 6 times during the past 7 days | 8.0 |
| D. 1 time per day | 4.4 |
| E. 2 times per day | 2.0 |
| F. 3 times per day | 0.9 |
| G. 4 or more times per day | 1.4 |

75. During the past 7 days, how many times did you eat potatoes? (Do not count French fries, fried potatoes, or potato chips.)

| A. I did not eat potatoes during the <br> past 7 days | 37.3 |
| :--- | ---: |
| B. 1 to 3 times during the past 7 days | 46.5 |
| C. 4 to 6 times during the past 7 days | 11.3 |
| D. 1 time per day | 3.0 |
| E. 2 times per day | 1.6 |
| F. 3 times per day | 0.0 |
| G. 4 or more times per day | 0.3 |

76. During the past 7 days, how many times did you eat carrots?

| A. 1 did not eat carrots during the past <br> 7 days | 49.6 |
| :--- | ---: |
| B. 1 to 3 times during the past 7 days | 36.4 |
| C. 4 to 6 times during the past 7 days | 8.0 |
| D. 1 time per day | 1.6 |
| E. 2 times per day | 2.1 |
| F. 3 times per day | 1.2 |
| G. 4 or more times per day | 1.1 |

77. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)

| A. I did not eat other vegetables <br> during the past 7 days |  |
| :--- | ---: |
| B. 1 to 3 times during the past 7 days | 20.2 |
| C. 4 to 6 times during the past 7 days | 19.7 |
| D. 1 time per day | 5.3 |
| E. 2 times per day | 3.7 |
| F. 3 times per day | 1.0 |
| G. 4 or more times per day | 3.1 |

78. During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not count diet soda or diet pop.)

| A. I did not drink soda or pop during <br> the past 7 days | 27.8 |
| :--- | ---: |
| B. 1 to 3 times during the past 7 days | 43.2 |
| C. 4 to 6 times during the past 7 days | 18.2 |
| D. 1 time per day | 5.3 |
| E. 2 times per day | 2.7 |
| F. 3 times per day | 1.1 |
| G. 4 or more times per day | 1.6 |

79. During the past 7 days, how many times did you drink a can, bottle, or glass of a sports drink such as Gatorade or PowerAde? (Do not count low-calorie sports drinks such as Propel or G2.)

| A. I did not drink sports drinks during <br> the past 7 days | 29.3 |
| :--- | ---: |
| B. 1 to 3 times during the past 7 days | 40.0 |
| C. 4 to 6 times during the past 7 days | 15.7 |
| D. 1 time per day | 6.5 |
| E. 2 times per day | 3.6 |
| F. 3 times per day | 2.6 |
| G. 4 or more times per day | 2.4 |

80. During the past 7 days, how many glasses of milk did you drink? (Count the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)

| A. I did not drink milk during the past <br> 7 days | 28.9 |
| :--- | ---: |
| B. 1 to 3 glasses during the past 7 days | 37.3 |
| C. 4 to 6 glasses during the past 7 days | 10.8 |
| D. 1 glass per day | 11.0 |
| E. 2 glasses per day | 5.1 |
| F. 3 glasses per day | 2.8 |
| G. 4 or more glasses per day | 4.1 |


| 81. During the past 7 days, on how many days did <br> you eat breakfast? |  |
| :--- | ---: |
| A. 0 days | 17.9 |
| B. 1 day | 11.9 |
| C. 2 days | 13.7 |
| D. 3 days | 13.2 |
| E. 4 days | 8.5 |
| F. 5 days | 9.8 |
| G. 6 days | 4.4 |
| H. 7 days | 20.5 |

## The next 4 questions ask about physical activity.

82. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)

| A. 0 days | 11.1 |
| :--- | ---: |
| B. 1 day | 6.7 |
| C. 2 days | 15.3 |
| D. 3 days | 12.2 |
| E. 4 days | 12.6 |
| F. 5 days | 13.1 |
| G. 6 days | 8.1 |
| H. 7 days | 20.9 |

83. On an average school day, how many hours do you spend in front of a TV, computer, smart phone, or other electronic device watching shows or videos, playing games, accessing the Internet, or using social media (also called "screen time")? Do not count time spent doing schoolwork.)

| A. Less than 1 hour per day | 6.8 |
| :--- | ---: |
| B. 1 hour per day | 9.0 |
| C. 2 hours per day | 13.3 |
| D. 3 hours per day | 20.0 |
| E. 4 hours per day | 17.3 |
| F. 5 or more hours per day | 33.5 |


| 84. In an average week when you are in school, on <br> how many days do you go to physical education <br> (PE) classes? |  |
| :--- | ---: |
| A. 0 days | 47.1 |
| B. 1 day | 4.4 |
| C. 2 days | 15.1 |
| D. 3 days | 9.1 |
| E. 4 days | 10.2 |
| F. 5 days | 14.0 |

85. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)

| A. 0 teams | 44.0 |
| :--- | :--- |
| B. 1 team | 20.4 |
| C. 2 teams | 18.4 |
| D. 3 or more teams | 17.2 |

The next question asks about concussions. A concussion is when a blow or jolt to the head causes problems such as headaches, dizziness, being dazed or confused, difficulty remembering or concentrating, vomiting, blurred vision, or being knocked out.
86. During the last 12 months, how many times did you have a concussion from playing a sport or being physically active?

| A. 0 times | 84.6 |
| :--- | ---: |
| B. 1 time | 6.2 |
| C. 2 times | 4.4 |
| D. 3 times | 1.7 |
| E. 4 or more times | 3.0 |

The next 12 questions ask about other health-related topics.
87. Has a doctor or nurse ever told you that you have asthma?

| A. Yes | 21.5 |
| :--- | ---: |
| B. No | 68.7 |
| C. Not sure | 9.8 |


| 88. Do you still have asthma? |  |
| :--- | ---: |
| A. I have never had asthma | 51.7 |
| B. Yes | 15.7 |
| C. No | 21.5 |
| D. Not sure | 11.1 |

89. During the past 30 days, how many days of school did you miss because of your asthma?

| A. I do not have asthma | 70.6 |
| :--- | ---: |
| B. 0 days | 25.2 |
| C. 1 day | 2.2 |
| D. 2 days | 0.9 |
| E. 3 days | 0.3 |
| F. 4 days | 0.0 |
| G. 5 or more days | 1.0 |

90. When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?

| A. During the past 12 months | 63.9 |
| :--- | ---: |
| B. Between 12 and 24 months ago | 16.6 |
| C. More than 24 months ago | 4.1 |
| D. Never | 1.6 |
| E. Not sure | 13.9 |

91. During the past 30 days, how often was your mental health not good? (Poor mental health includes stress, anxiety, and depression.)

| A. Never | 18.6 |
| :--- | ---: |
| B. Rarely | 20.1 |
| C. Sometimes | 31.6 |
| D. Most of the time | 21.8 |
| E. Always | 7.9 |

92. On an average school night, how many hours of sleep do you get?

| A. 4 or less hours | 12.3 |
| :--- | ---: |
| B. 5 hours | 15.7 |
| C. 6 hours | 25.0 |
| D. 7 hours | 21.0 |
| E. 8 hours | 20.8 |
| F. 9 hours | 4.2 |
| G. 10 or more hours | 1.1 |

93. During the past 30 days, where did you usually sleep?

| A. In my parent's or guardian's home | 94.1 |
| :--- | ---: |
| B. In the home of a friend, family <br> member, or other person because I <br> had to leave my home or my parent <br> or guardian cannot afford housing | 2.4 |
| C. In a shelter or emergency housing | 0.2 |
| D. In a motel or hotel | 0.8 |
| E. In a car, park, campground, or other <br> public place | 0.6 |
| F. I do not have a usual place to sleep | 1.4 |
| G. Somewhere else | 0.5 |

94. During the past 30 days, did you ever sleep away from your parents or guardians because you were kicked out, ran away, or were abandoned?
A. Yes
B. No

| 7.8 |
| ---: |
| 92.2 |

95. During the past 30 days, how often did you go hungry because there was not enough food in your home?

| A. Never | 73.1 |
| :--- | ---: |
| B. Rarely | 18.6 |
| C. Sometimes | 5.7 |
| D. Most of the time | 1.8 |
| E. Always | 0.7 |


| 96. During the past 12 months, how would you <br> describe your grades in school? |  |
| :--- | ---: |
| A. Mostly A's | 22.6 |
| B. Mostly B's | 24.5 |
| C. Mostly C's | 23.9 |
| D. Mostly D's | 10.5 |
| E. Mostly F's | 6.1 |
| F. None of these grades | 1.3 |
| G. Not sure | 11.1 |

97. During the past 12 months, how many times did you use an indoor tanning device such as a sunlamp, sunbed, or tanning booth? (Do not count getting a spray-on tan.)

| A. 0 times | 94.6 |
| :--- | ---: |
| B. 1 or 2 times | 3.4 |
| C. 3 to 9 times | 0.5 |
| D. 10 to 19 times | 0.5 |
| E. 20 to 39 times | 0.5 |
| F. 40 or more times | 0.5 |

98. During the past 12 months, did you receive help from a resource teacher, speech therapist, or other special education teacher at school?

| A. Yes | 20.7 |
| :--- | :--- |
| B. No | 79.3 |

# Point of Interest 

## Graphs

## IMPORTANT!

The Native American Montana YRBS and Gender bar graphs (dark green) are weighted data obtained through random sampling procedures with 50 randomly selected Montana schools and classes within those schools. These data are scientifically valid to within $\pm 3$ percent and can be used to make inferences about all Native American students in Montana.


Data represented in the Reservation or Non-Reservation bar graphs is disaggregated by school location and includes all high school students in Montana who selected the response "American Indian or Alaska Native".

These two blue bar graphs can be compared with one another but cannot be used to "average" the Native American Montana YRBS data point.

## Unintentional Injuries and Violence

## Seat Belt Use - Rider

Statewide, 63.7 percent of Native American students did not always wear a seat belt when riding in a car driven by someone else.


## Seat Belt Use - Rider

Statewide, 10.8 of Native American students never or rarely wore a seat belt when riding in a car driven by someone else.


## Seat Belt Use - Driver

Among Native American students who drive a car, 45.2 percent did not always wear a seat belt when driving


Rode with a Driver Who Had Been Drinking Alcohol
During the past 30 days, 28.7 percent of Native American students rode one or more times in a car or other vehicle driven by someone who had been drinking alcohol.


## Unintentional Injuries and Violence

## Drove when Drinking Alcohol

Among Native American students who drove a car or other vehicle during the past 30 days, 7.5 percent drove when they had been drinking alcohol during the past 30 days.


## Texting and Driving

Among Native American students who drove a car or other vehicle during the past 30 days, 50.1 percent texted or e-mailed while driving.


## Internet or Apps Use on Cell Phone While Driving

Among Native American students who drove a car or other vehicle during the past 30 days, 52.2 percent used the Internet or Apps on their cell phone while driving.


## Carried a Weapon on School Property

Statewide, 7.3 percent of Native American students carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days.


## Unintentional Injuries and Violence

## Carried a Gun

During the past 12 months, 9.6 percent of Native American students carried a gun on one or more days (not counting for hunting or for a sport such as target shooting).


## Did Not Go to School Because of Safety Concerns

During the past 30 days, 9.4 percent of Native American students did not go to school on one or more days because they felt they would be unsafe at school or on their way to or from school.


Threatened or Injured with a Weapon on School Property
During the past 12 months, 5.4 percent of Native American students had been threatened or injured, one or more times, with a weapon such as a gun, knife, or club on school property.


## In a Physical Fight

Statewide, 24.9 percent of Native American students were in a physical fight one or more times during the past 12 months.


## Unintentional Injuries and Violence

## In a Physical Fight on School Property

Statewide, 4.8 percent of Native American students were in a physical fight on school property one or more times during the past 12 months.


## Forced Sexual Intercourse

Statewide, 13.7 percent of Native American students had ever been physically forced to have sexual intercourse when they did not want to.


## Experienced Sexual Violence

Statewide, 13.1 percent of Native American students had experienced sexual violence during the past 12 months (being forced by anyone to do sexual things such as kissing, touching, or being physically forced to have sexual intercourse, that they did not want to do).


## Sexual Dating Violence

Among Native American students who dated or went out with someone during the past 12 months, 5.2 percent of students had been forced by someone they were dating or going out with to do sexual things they did not want to do.


## Unintentional Injuries and Violence

## Physical Dating Violence

Among Native American students who dated or went out with someone during the past 12 months, 9.3 percent had been physically hurt on purpose by someone they were dating or going out with one or more times during the past 12 months.


## Bullied on School Property

During the past 12 months, 13.3 percent of Native American students had been bullied on school property.


## Electronic Bullying

Statewide, 14.2 percent of Native American students had been electronically bullied during the past 12 months.


## Bullying and Sexual Orientation

During the past 12 months, 14.8 percent of Native American students have been the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual.


## Unintentional Injuries and Violence

## Felt Sad or Hopeless

During the past 12 months, 49.0 percent of Native American students felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities.


## Seriously Considered Suicide

During the past 12 months, 26.7 percent of Native American students seriously considered attempting suicide.


## Made a Suicide Plan

During the past 12 months, 20.7 percent of Native American students made a plan about how they would attempt suicide.


## AtTEMPTED SUICIDE

During the past 12 months, 17.6 percent of Native American students actually attempted suicide one or more times.


## Unintentional Injuries and Violence

## Suicide Attempt Treated by a Doctor or Nurse

Among the 17.6 percent of Native American students who attempted suicide during the past 12 months, 26.5 percent had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse.


## Tobacco Use

## Lifetime Cigarette Use

Statewide, 52.2 percent of Native American students had ever tried cigarette smoking (even one or two puffs).


First Tried Cigarette Smoking Before Age 13 Years
Statewide, 28.0 percent of Native American students had first tried cigarette smoking before age 13 years.


## CURRENT SMOKER

Statewide, 14.4 percent of Native American students smoked cigarettes on one or more of the past 30 days.


## Tobacco Use

## Currently Smoked Cigarettes Frequently

Statewide, 2.2 percent of Native American students had smoked cigarettes on 20 or more of the past 30 days.


## Currently smoked Cigarettes Daily

Statewide, 1.3 percent of Native American students had smoked a cigarette on each of the past 30 days.

| 100 |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 75 |  |  |  |  |
| 50 |  | 1.5 | 3.4 |  |
| 25 | 1.3 | Male | Female | On or Near a |
| 0 | $-\quad$ Reservation |  |  |  |

## Lifetime Electronic Vapor Product Use

Statewide, 55.0 percent of Native American students had ever used electronic vapor products (including e-cigarettes, vapes, vape pens, ecigars, e-hookahs, hookah pens, and mods [such as JUUL, SMOK, Suorin, Vuse, and blu]).


## Current Electronic Vapor Product Use

Statewide, 29.0 percent of Native American students used an electronic vapor product on one or more of the past 30 days.


## Tobacco Use

## Frequent Electronic Vapor Product Use

Statewide, 8.1 percent of Native American students used electronic vapor products on 20 or more of the past 30 days.


## Daily Electronic Vapor Product Use

Statewide, 5.2 percent of Native American students used electronic vapor products on all of the past 30 days.


## Electronic Vapor Product Use on School Property

Statewide, 13.9 percent of Native American students used an electronic vapor product on school property during the past 30 days.


## Access to Electronic Vapor Products

Among Native American students who used electronic vapor products during the past 30 days, 62.4 percent usually got their electronic vapor products from friends, family, or someone else.


## Tobacco Use

## Access to Electronic Vapor Products

Among Native American students who used electronic vapor products during the past 30 days, 4.2 percent usually got their own electronic vapor products by buying them in a convenience store, supermarket, discount store, or gas station.

| 100 |  |  |  |  |
| ---: | :--- | ---: | :--- | :--- |
| 75 |  |  |  |  |
| 50 |  |  |  |  |
| 25 | 4.2 | 4.3 | 4 | 3.5 |
| 0 | Male | Female | On or Near a |  |
|  | Native American |  | 1.2 |  |
|  | Montana YRBS |  |  |  |

## Flavor Preference of Electronic Vapor Products

Among Native American students who used electronic vapor products during the past 30 days, 35.5 percent reported an electronic vapor product flavored to taste like an alcoholic drink, chocolate or other sweets, fruit, menthol, or mint as the product they used most often.


## Current Smokeless Tobacco Use

Statewide, 5.8 percent of Native American students used chewing tobacco, snuff, dip, snus, or dissolvable tobacco products (such as Copenhagen, Grizzly, Skoal, or Camel Snus) during the past 30 days.


## Current Cigar Use

During the past 30 days, 8.0 percent of Native American students smoked cigars, cigarillos, or little cigars.


## Tobacco Use

## Tobacco Product Cessation

Among Native American users of tobacco products during the past 12 months, 64.6 percent of students tried to quit using all products including cigarettes, electronic vapor products, smokeless tobacco, cigars, shisha or hookah tobacco, or pipe tobacco.


## Alcohol and Other Drug Use

## Drank Alcohol Before Age 13 Years

Statewide, 20.7 percent of Native American students had their first drink of alcohol other than a few sips before age 13 years.


## CURRENT AlCOHOL USE

Statewide, 24.4 percent of Native American students had at least one drink of alcohol on one or more of the past 30 days.


## Binge Drinking

During the past 30 days, 15.1 percent of Native American students had four or more drinks of alcohol in a row for female students or five or more drinks of alcohol in a row for male students, within a couple of hours.


## Alcohol and Other Drug Use

## 10 or More Drinks of Alcohol

Statewide, 5.0 percent of Native American students had ten or more drinks of alcohol in a row, that is, within a couple of hours during the past 30 days.


## Obtained Alcohol from Someone

Among Native American students who reported current alcohol use, 23.6 percent usually got the alcohol they drank from someone who gave it to them during the past 30 days.


## TYPE OF ALCOHOL - LIQUOR

Among Native American students who drank alcohol during the past 30 days, 35.5 percent of students drank vodka or some other type of liquor (such as rum, scotch, bourbon, whiskey, or tequila) most often.


## Type of Alcohol - Beer

Among Native American students who drank alcohol during the past 30 days, 30.8 percent of students drank beer most often.


## Alcohol and Other Drug Use

## Lifetime Marijuana Use

Statewide, 55.1 percent of Native American students had used marijuana one or more times during their life.


## Tried MariJuana Before Age 13 Years

Statewide, 23.7 percent of Native American students had tried marijuana for the first time before age 13 years.


## Current Marijuana Use

During the past 30 days, 32.0 percent of Native American students used marijuana one or more times.


## LIFETIME SYnthetic MariJuana

Statewide, 13.4 percent of Native American students had ever used synthetic marijuana during their life.


## Alcohol and Other Drug Use

## Lifetime Prescription Pain Medicine

Statewide, 14.5 percent of Native American students took prescription pain medicine (such as codeine, Vicodin, OxyContin, Hydrocodone and Percocet) without a doctor's prescription or differently than how a doctor told them to use it during their life.


## Lifetime Cocaine Use

Statewide, 6.6 percent of Native American students used any form of cocaine, including powder, crack, or freebase one or more times during their life.


## Lifetime Inhalant Use

Statewide, 7.1 percent of Native American students sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life.


## Lifetime Heroin Use

Statewide, 2.7 percent of Native American students used heroin one or more times during their life.


## Alcohol and Other Drug Use

## LIFETIME Methamphetamine Use

Statewide, 2.5 percent of Native American students had used methamphetamines one or more times during their life.


## Lifetime Ecstasy Use

Statewide, 6.8 percent of Native American students used ecstasy, also called "MDMA," one or more times during their life.


## Lifetime Injecting Drug Use

Statewide, 2.1 percent of Native American students used a needle to inject any illegal drug into their body during their lifetime.

| 100 |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| 75 |  |  |  |  |
| 50 |  | 2.5 | 2.4 |  |
| 25 | -2.1 | Male | Female | On or Near a |
| 0 | -1.9 | Non-Reservation |  |  |
|  | Native American |  |  |  |
|  |  |  |  |  |

## Were Offered, Sold, or Given an Illegal Drug on School Property

Statewide, 20.9 percent of Native American students were offered, sold, or given an illegal drug by someone on school property during the past 12 months.


## Alcohol and Other Drug Use

## Current Hallucinogenic Drug Use

Statewide, 11.2 percent of Native American students had used a hallucinogenic drug (such as LSD, acid, PCP, angel dust, mescaline, or mushrooms) during the past 30 days.


## Sexual Behaviors

## LIFETIME SexUAL InTERCOURSE

Statewide, 49.8 percent of Native American students have ever had sexual intercourse during their life.


Sexual Intercourse Before Age 13 years
Statewide, 4.8 percent of Native American students had sexual intercourse for the first time before age 13 years.


## Multiple Sexual Partners

Among Native American high school students, 15.2 percent had sexual intercourse with four or more persons during their life.


## Sexual Behaviors

## Currently Sexually Active

During the past three months, 32.6 percent of Native American students had sexual intercourse with one or more people.


Drank Alcohol or Used Drugs Before Last Sexual Intercourse
Among Native American students, 22.4 percent drank alcohol or used drugs before last sexual intercourse.


## CONDOM USE

Among Native American students, 57.3 percent used a condom during last sexual intercourse.


## Birth Control Pill Use

Among Native American students, 19.4 percent used birth control pills to prevent pregnancy before last sexual intercourse.


## Sexual Behaviors

## Contraceptive Use

Among Native American students, 34.7 percent used birth control pills; an IUD or implant; or a shot, patch, or birth control ring to prevent pregnancy before last sexual intercourse.


## No Method Used to Prevent Pregnancy

Among Native American students, 14.8 percent used no method of birth control to prevent pregnancy before last sexual intercourse.


## Dietary Behaviors and Nutrition

## Described Themselves as Overweight

Statewide, 40.4 percent of Native American students described themselves as slightly or very overweight.


## Were Trying to Lose weight

Statewide, 58.9 percent of Native American students were trying to lose weight.


## Dietary Behaviors and Nutrition

## 100\% FRUIT JUICES

Statewide, 25.0 percent of Native American students did not drink fruit juice during the past seven days.


## FRUIT CONSUMPTION

Statewide, 10.4 percent of Native American students did not eat fruit on any of the past seven days.


## FRUIT - DAILY

Statewide, 24.0 percent of Native American students ate fruit daily on each of the past seven days.


## Green Salad

Statewide, 44.5 percent of Native American students did not eat a green salad on any of the past seven days.


## Dietary Behaviors and Nutrition

## Potatoes

Statewide, 37.3 percent of Native American students did not eat potatoes on any of the past seven days.


Carrots
Statewide, 49.6 percent of Native American students did not eat carrots on any of the past seven days.


Other Vegetables
Statewide, 20.2 percent of Native American students did not eat other vegetables, (other than green salad, potatoes, or carrots) during the past seven days.


## No SOdA OR POP

Statewide, 27.8 percent of Native American students did not drink a can, bottle, or glass of soda or pop during the past seven days.


## Dietary Behaviors and Nutrition

Drank Soda or Pop Daily
Statewide, 10.8 percent of Native American students drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days.


## No Milk Consumption

Statewide, 28.9 percent of Native American students did not drink milk during the past seven days.


## Daily Milk Consumption

Statewide, 23.0 percent of Native American students drank one or more glasses of milk per day during the past seven days.


## Drank a Sports Drink Daily

Statewide, 15.1 percent of Native American students drank a can, bottle, or glass of a sports drink such as Gatorade or PowerAde one or more times per day during the past seven days.


## Dietary Behaviors and Nutrition

## Dally Breakfast

Statewide, 20.5 percent of Native American students ate breakfast on all of the past seven days.


## No Breakfast

Statewide, 17.9 percent of Native American students did not eat breakfast on any of the past seven days.


## Physical Activity

## Met Recommended Levels of Physical Activity

Statewide, 42.1 percent of Native American students were physically active for a total of at least 60 minutes per day on five or more of the past seven days.


## No PhYsical Activity

Statewide, 11.1 percent of Native American students did not participate in at least 60 minutes of physical activity on any of the past seven days.


## Physical Activity

## Daily Physical Activity

Statewide, 20.9 percent of Native American students were physically active at least 60 minutes per day on all of the past seven days.


## Screen Time Three or More Hours per Day

Statewide, 70.9 percent of Native American students spent three or more hours on screen time of TV per day on an average school day. (In front of a TV, computer, smart phone, or other electronic device watching shows or videos, playing games, accessing the Internet, or using social media, not counting time spend doing schoolwork.)


## Physical Education Attendance

Statewide, 52.9 percent of Native American students attended physical education (PE) classes on one or more days in an average week when they were in school.


## Daily Physical Education Attendance

Statewide, 14.0 percent of Native American students attended physical education (PE) classes daily in an average week when they were in school.


## Physical Activity

## Played on at Least One Sports Team

Statewide, 56.0 percent of Native American students played on one or more sports teams during the past 12 months.


## Other Health-Related Behaviors

## Concussion

Statewide, 15.4 percent of Native American students had a concussion from playing a sport or being physically active during the past 12 months.


## Dental Care

Statewide, 63.9 percent of Native American students saw a dentist during the past 12 months.


## LIFETIME AstHMA

Statewide, 21.5 percent of Native American students had ever been told by a doctor or nurse that they had asthma.


## Other Health-Related Behaviors

## Current Asthma

Statewide, 15.7 percent of Native American students currently still have asthma.


## School Absence due to Asthma

Among students with asthma, 14.5 percent of Native American students missed one or more days of school because of their asthma during the past 30 days.


## Current Mental Health Status

Statewide, 29.8 percent of Native American students reported that their mental health was most of the time or always not good during the past 30 days.


## 8 Hours Of Sleep

Statewide, 26.0 percent of Native American students got 8 or more hours of sleep on an average school night.


## Other Health-Related Behaviors

## Homelessness

During the past 30 days, 5.9 percent of Native American students did not usually sleep in their parent's or guardian's home.


## Runaway Youth

During the past 30 days, 7.8 percent of Native American students had slept away from their parents or guardians because they were kicked out, ran away, or were abandoned, during the past 30 days.


## FOOD INSECURITY

During the past 30 days, 2.5 percent of Native American students most of the time or always went hungry because there was not enough food in their home.


## Mostly A's OR B's

Statewide, 47.1 percent of Native American students made mostly A's or B's in school during the past 12 months.


## Other Health-Related Behaviors

Indoor Tanning Devices
Statewide, 5.4 percent of Native American students used an indoor tanning device such as a sunlamp, sunbed, or tanning booth one or more times during the past 12 months.


## Students with Special Needs

Statewide, 20.7 percent of Native American students received help from a resource teacher, speech therapist, or other special education teacher at school during the past 12 months.


# 2021 Montana Youth Risk Behavior Survey Results <br> American Indian Students <br> Trend Charts (1993-2021) 

## Unintentional Injuries and Violence

Rarely or never wore a seat belt when riding in a car


Rarely or never wore a seat belt when driving a car


Rode with a driver who had been drinking alcohol (past 30 days)


Drove when they had been drinking alcohol (past 30 days)


2021 Montana Youth Risk Behavior Survey - American Indian Student Report - Page 46 Montana Office of Public Instruction, Elsie Arntzen, Superintendent

## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Texted or e-mailed while driving a car or other vehicle (past 30 days)


Used the Internet or Apps on their phone while driving (past 30 days)


## Carried a weapon on school property (past 30 days)



Carried a gun (do not count for hunting or for sport, such as target shooting, past 12 months)


## 2021 Montana Youth Risk Behavior Survey Results <br> American Indian Students <br> Trend Charts (1993-2021)

Were threatened or injured with a weapon on school property (past 12 months)


Did not go to school because they felt unsafe at school or on their way to or from school (past 30 days)


Were in a physical fight (past 12 months)


Were in a physical fight on school property (past 12 months)


## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Were ever forced to have sexual intercourse when they did not want to


Experienced sexual violence (unwanted kissing, touching, or sexual intercourse, past 12 months)


Experienced sexual dating violence (unwanted kissing, touching, or sexual intercourse by someone they were dating or going out with, past 12 months)


Experienced physical dating violence (being hit, slammed into something, or injured with an object or weapon by someone they were dating or going out with, past 12 months)


## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Were bullied on school property (past 12 months)


Were electronically bullied (past 12 months)


Were the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual (past 12 months)


Felt so sad or hopeless for two weeks or more in a row that they stopped doing some usual activities (past 12 months)


## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Seriously considered attempting suicide (past 12 months)


Made a plan about how they would attempt suicide (past 12 months)


Actually attempted suicide (past 12 months)


Had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (past 12 months)


2021 Montana Youth Risk Behavior Survey - American Indian Student Report - Page 51 Montana Office of Public Instruction, Elsie Arntzen, Superintendent

## 2021 Montana Youth Risk Behavior Survey Results <br> American Indian Students <br> Trend Charts (1993-2021)

Among students who attempted suicide, had an attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (past 12 months)


Tobacco Use

## Ever tried cigarette smoking



First tried cigarette smoking before age 13 years (whole cigarette 1993-2015), even one or two puffs (2017-current)


Currently smoked cigarettes (past 30 days)


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Currently smoked cigarettes frequently (on 20 or more of the past 30 days)


Currently smoked cigarettes daily (on all of the past 30 days)


Smoked more than 10 cigarettes per day (on the days they smoked during the past 30 days, among students who currently smoked cigarettes)


Ever used electronic vapor products (Including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods[such as JUUL, SMOK, Suorin, Vuse, and blu])


## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Currently used electronic vapor products (during the past 30 days)


Currently used electronic vapor products frequently (on 20 or more of the past 30 days)


Currently used electronic vapor products daily (on all of the past 30 days)


## Used an electronic vapor product on school property (past 30 days)



## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Usually got their own electronic vapor products by buying them in a store (such as a convenience store, supermarket, discount store, or gas station)


Currently used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, Copenhagen, Camel Snus, Marlboro Snus, General Snus, Ariva, Stonewall, or Camel Orbs, during the past 30 days)


Currently smoked cigars, cigarillos, or little cigars (past 30 days)


Tried to quit using all tobacco products (cigarettes, cigars, smokeless tobacco or electronic vapor products, past 12 months)


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# 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021) 

## Alcohol and Other Drug Use

## Had their first drink of alcohol before age 13



Currently drank alcohol (past 30 days)


Currently were binge drinking (past 30 days, 1993-2015: five or more drinks of alcohol, within a couple of hours. 2017current: four or more drinks in a row if female, five or more drinks in a row if male, within a couple of hours.)


Reported that the largest number of drinks they had in a row was $\mathbf{1 0}$ or more (past 30 days)


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Ever used marijuana (also called pot, weed, or cannabis, during their life)


## Tried marijuana for the first time before age 13 years



## Currently used marijuana (past 30 days)



Ever used synthetic marijuana (also called "Spice," "fake weed," "K2," or "Black Mamba") during their life


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, Oxycontin, Hydrocodone, and Percocet, during their life)


Ever used cocaine (any form of powder, crack, or freebase, during their life)


Ever used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, during their life)


Ever used heroin (also called "smack," "junk," or "China White," during their life)


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Ever used methamphetamines (also called "speed," "crystal meth," "crank," "ice," or "meth," during their life)


Ever used ecstasy (also called "MDMA," during their life)


Ever injected any illegal drug (using a needle to inject any illegal drug into their body during their life)


Were offered, sold, or given an illegal drug on school property (past 12 months)


# 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021) 

## Sexual Behaviors

Ever had sexual intercourse


Had sexual intercourse for the first time before age 13 years


Had sexual intercourse with four or more persons (during their life)


Were currently sexually active (sexual intercourse during the past 3 months)


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Drank alcohol or used drugs before last sexual intercourse (among currently sexually active)


Used a condom during last sexual intercourse (among students who were currently sexually active)


Used birth control pills before last sexual intercourse (to prevent pregnancy, among currently sexually active)


Did not use any method to prevent pregnancy during last sexual intercourse (among students who were currently sexually active)


# 2021 Montana Youth Risk Behavior Survey Results <br> American Indian Students <br> Trend Charts (1993-2021) 

## Nutrition and Dietary Behaviors

Did not drink 100\% fruit juice (such as orange juice, apple juice, or grape juice, not counting punch, Kool-Aid, sports drinks, or other fruit-flavored drinks, past 7 days)


Did not eat fruit (past 7 days)


Did not eat a green salad (past 7 days)


Did not eat potatoes (not counting French fries, fried potatoes, or potato chips, past 7 days)


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Did not eat carrots (past 7 days)


Did not eat other vegetables (past 7 days)


Did not eat vegetables (green salad, potatoes, carrots, or other vegetables, past 7 days)


Did not drink milk (past 7 days)


# 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021) 

Drank a can, bottle, or glass of soda or pop ONE or more times per day (past 7 days)


Did not eat breakfast (during the past 7 days)


## Physical Activity

Did not participate in at least 60 minutes of physical activity on at least 1 day (past 7 days)


Were physically active at least 60 minutes per day on 5 or more days (physical activity that increased their heart rate and made them breathe hard some of the time, past 7 days)


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Were physically active at least 60 minutes per day on all $\mathbf{7}$ days (past 7 days)


Spent 3 or more hours per day on screen time (in front of a TV, computer, smart phone, or other electronic device watching shows or videos, playing games, accessing the Internet, or using social media, not counting time spent doing schoolwork, on an average school day)


Attended physical education (PE) classes on 1 or more days (during an average school week)


Played on at least one sports team run by their school or community groups (past 12 months)


# 2021 Montana Youth Risk Behavior Survey Results <br> American Indian Students <br> Trend Charts (1993-2021) 

Had a concussion from playing a sport or being physically active (past 12 months)


Obesity, Overweight, and Weight Control

Had obesity (students who were $\geq 95^{\text {th }}$ percentile for body mass index, 2000 CDC growth charts)


Were overweight (were $\geq 85^{\text {th }}$ percentile but $<95^{\text {th }}$ percentile for body mass index, 2000 CDC growth charts)


Described themselves as slightly or very overweight


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# 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021) 

## Were trying to lose weight



Other Health Topics

## Ever told by a doctor or nurse that they had asthma



Saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, past 12 months)


Got 8 or more hours of sleep (on an average school night)


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## 2021 Montana Youth Risk Behavior Survey Results American Indian Students <br> Trend Charts (1993-2021)

Used an indoor tanning device (such as a sunlamp, sunbed, or tanning both, not counting spray-on tan, past 12 months)


Did not usually sleep in their parent's or guardian's home (past 30 days)


Described their grades in school as mostly A's or B's (past 12 months)


Received help from a resource teacher, speech therapist, or other special education teacher (past 12 months)


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# Montana <br> Youth Risk Behavior Survey 

## www.opi.mt.gov/yrbs

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Montana Office of Public Instruction

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# National Indian Education Study 2019 

American Indian and Alaska Native Students at Grades 4 and 8


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The National Indian Education Study (NIES) is designed to describe the condition of education for American Indian and Alaska Native students in the United States. NIES is conducted under the direction of the National Center for Education Statistics through the National Assessment of Educational Progress (NAEP) on behalf of the U.S. Department of Education's Office of Indian Education (OIE). NIES is authorized under Executive Order 13592, Improving American Indian and Alaska Native Educational Opportunities and Strengthening Tribal Colleges and Universities. Issued in 2011, Executive Order 13592 is the most recent authorization of Executive Order 13336, American Indian and Alaska Native Education (2004).

This study provides information on the academic performance of fourth- and eighth-grade American Indian/Alaska Native students in mathematics and reading, and on their educational experiences. From 2005 to 2011, NIES results were reported every two years. After 2011, the NIES reporting cycle was changed to every four years.

NAEP is a congressionally authorized project of the National Center for Education Statistics within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible for carrying out the NAEP project. The National Assessment Governing Board oversees and sets policy for NAEP.

NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement and relevant variables is collected. The privacy of individual students and their families is protected, and the identities of participating schools are not released.

## About This Report

This report presents results from the 2019 National Indian Education Study (NIES), which surveyed students, teachers, and school principals about the experiences of American Indian/Alaska Native (AI/AN) ${ }^{1}$ students in grades 4 and 8 . The survey, which has a particular emphasis on Native language and culture, also provides perspective on the overall educational context for AI/AN students in the United States. In addition to the survey results, this report provides performance results in reading and mathematics for AI/AN fourth- and eighth-graders in the nation as well as for 15 states that have relatively large proportions of AI/AN students such that their state-level results could be reported in 2019. Please note that the national survey and performance results presented here are made up of a nationally representative sample of participating AI/AN students across the nation, not just those from these 15 states (see table A-1).

NIES is administered as part of the National Assessment of Educational Progress (NAEP) to allow more in-depth reporting on the experiences and achievement of AI/AN students in grades 4 and 8. The NIES program provides tribal leaders, educators, policymakers, and researchers with reliable and accurate data regarding the education of AI/AN youth. At the same time, NIES is situated within a much larger context and the results contained here provide only a partial picture of a very complex mosaic; readers are encouraged to explore the list of Supplemental Resources provided later in this report. Finally, this report-in concord with the federal trust responsibility related to the education of AI/AN youth—seeks also to catalyze future research and collaboration among all interested stakeholders in this arena.

[^0]
## "I think that our school should have more classes about languages and cultures." <br> ~ AI/AN fourth-grader response from the NIES survey

"I am proud of my culture and my tribes and wish I could learn more about them in school."
~ AI/AN eighth-grader response from the NIES survey


## Organization of the Report

- The Introduction includes information on sampling, participation, reporting, and the school types reported in the tables and figures throughout this report, as well as guidance about making comparisons and interpreting results.
- The Survey Questionnaires section discusses the development of the NIES survey questions as well as their importance for setting context for interpreting the educational experiences of AI/AN students. In addition, this section discusses how individual survey questions provide the building blocks for the composite variables interspersed in the two subsequent sections.
- The AI/AN Culture and Language section provides an in-depth look at the findings from the student, teacher, and administrator survey questions that are focused on AI/AN culture and language. Indeed, this discussion of culture and language provides the most thorough examination of these questions since the inception of the NIES program in 2005.
- The Performance Results for the Nation section provides information about the achievement of AI/AN students at grades 4 and 8 on the NAEP reading and mathematics assessments from 2005 to 2019. A supplemental subsection—Perspectives Beyond the Average Score-examines individual and contextual factors that are associated with higher versus lower academic performance among AI/AN students, as well as variables related to engagement at school and perceptions about effort in school.
- The State Results section provides reading and mathematics performance results for the 15 states that had reportable results for AI/AN students in 2019.


#### Abstract

Explore Additional Results This report presents selected results from the NAEP and NIES 2019 survey questionnaires, which can be accessed at https://nces.ed.gov/nationsreportcard/ experience/survey_questionnaires.aspx. Complete 2019 NIES survey results and performance data for AI/AN students are available in the NAEP Data Explorer at https://www.nationsreportcard.gov/ndecore/landing. Copies of the most recent NIES report (The National Indian Education Study 2019), as well as reports from 2005, 2007, 2009, 2011, and 2015, may be downloaded from https://nces. ed.gov/nationsreportcard/nies/.


## Introduction

Since 2005, the National Indian Education Study (NIES) has provided family members, tribal leaders, educators, students, policymakers, and the public with information about the educational experiences and the academic performance of fourth- and eighth-grade American Indian and Alaska Native (AI/AN) students in the United States.

## Participation in NIES 2019

AI/AN students make up about 1 percent of students in elementary and secondary schools nationally. Students were identified as AI/AN based on school records and were sampled along with other students participating in the NAEP 2019 subject-area assessments. Students were assessed in either mathematics or reading, not both. In 2019, about 7,000 AI/AN fourth-graders and 6,300 AI/AN eighth-graders responded to the NIES survey (table 1). To maximize student sample sizes and to support the reporting of results, all fourthand eighth-grade AI/AN students in the sampled schools were selected for participation in the NIES survey. All students participating in the NIES survey completed the same grade-specific questionnaire regardless of the NAEP subject area in which they were assessed. Furthermore, questionnaires were administered to participating students' mathematics and reading/language arts teachers to collect information specific to instructional practices in those subject areas.

Table 1. Number of participating schools with AI/AN students and number of participating AI/AN students, by grade and type of school: 2019

| Type of school | Grade 4 |  |  |  | Grade 8 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools in NIES survey | Students |  |  | Schools in NIES survey | Students |  |  |
|  |  | NIES survey ${ }^{1}$ | Mathematics assessment | Reading assessment |  | $\begin{aligned} & \text { NIES } \\ & \text { survey }{ }^{1} \end{aligned}$ | Mathematics assessment | Reading assessment |
| Overall | 1,400 | 7,000 | 4,000 | 4,100 | 1,300 | 6,300 | 3,800 | 3,700 |
| Public | 1,200 | 4,900 | 3,000 | 3,100 | 1,200 | 4,700 | 3,000 | 2,900 |
| BIE | 100 | 1,900 | 900 | 900 | 100 | 1,600 | 800 | 800 |
| Private | 20 | $\ddagger$ | $\ddagger$ | $\ddagger$ | 10 | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| DoDEA | 20 | $\ddagger$ | $\ddagger$ | $\ddagger$ | 10 | $\ddagger$ | $\ddagger$ | $\ddagger$ |

$\ddagger$ Reporting standards not met.
${ }^{1}$ Some fourth- and eighth-grade AI/AN students assessed in the mathematics multistage testing (MST) special study in 2019 completed the NIES student survey questionnaires.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. DoDEA = Department of Defense Education Activity (overseas and domestic schools). NIES = National Indian Education Study. For overall, public, and BIE schools, the number of schools and the number of students are rounded to the nearest hundred. The number of private and Department of Defense schools are rounded to the nearest 10. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

To obtain large enough samples to report reliable results for AI/AN students, schools with higher proportions of AI/AN students in selected states were oversampled. That is, the AI/AN students were selected for the NAEP assessments at a higher rate than they would be otherwise. All Bureau of Education (BIE) schools having grades 4 and/or 8 were also selected.

In 2019, NAEP was able to report NIES results for 15 states, with Nebraska being added in 2019 (exhibit 1). While samples of AI/AN students were large enough to report performance results for students in 15 states in 2019, in a few cases, not all states had large enough samples to report results for both reading and mathematics at grades 4 and 8 (see tables in the State Results section).

Exhibit 1. Map of NIES 2019 states


NOTE: NIES = National Indian Education Study.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## Reporting Results

This report highlights results based on survey question responses from AI/AN students as well as responses from their teachers and school administrators. Survey question results are always reported as percentages of students (e.g., the percentage of students whose teachers reported on a particular factor). Students completed the survey questionnaire voluntarily and their responses were kept confidential. The privacy of individual students and their families is protected. Similarly, NAEP performance results are not reported for individual students.

Because AI/AN students' experiences may vary depending on the types of schools they attend, results for survey questions-as well as performance results-are reported for three mutually exclusive categories of schools as well as for an overall category:

- low density public schools (where less than 25 percent of all the students in the school were AI/AN);
- high density public schools (where 25 percent or more of all the students in the school were AI/AN);
- BIE schools; and
- all AI/AN students (includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools).

The public school categories (low density public and high density public) were defined by the Office of Indian Education (OIE).

Sixty percent of AI/AN fourth-graders attended low density public schools, 31 percent attended high density public schools, and 9 percent attended BIE schools. Similarly, 60 percent of AI/AN eighth-graders attended low density public schools, 32 percent attended high density public schools, and 8 percent attended BIE schools.

## What is the BIE? www.bie.edu

The Bureau of Indian Education (BIE), in the U.S. Department of Interior, supports elementary and secondary schools serving students across 23 states.

About two-thirds of the schools are tribally controlled under P.L. 93-638 Indian Self Determination Contracts or P.L. 100-297 Tribally Controlled Grant Schools Act, with the remaining schools operated by the BIE.

In addition, the BIE funds 33 tribal colleges, universities, tribal technical colleges, and postsecondary schools.

## Making Comparisons

Readers should note that there are multiple possible comparisons within the data presented in this report. Tables and figures with more than two groups may simply present results without marking statistical significance with an indicator (e.g., an asterisk). Only those differences that are found to be statistically significant are discussed in the accompanying text in terms of being "higher" or "lower" and "more likely" or "less likely." Along these lines, readers should note that numeric differences-even relatively "large" differences-are not always statistically different. Not all statistically significant differences are discussed.

It is important to note that a relationship between a variable (e.g., a response to a survey question) and a measure of educational achievement, like the ones presented in this report, does not imply that a variable causes differences in educational achievement. Many complex factors may influence differences across the school types presented in this report. These include, for example, educational policies and practices, available resources, and the demographic characteristics of the student body. When looking at results across school types, readers should note that AI/AN students attend schools with very different characteristics and that they represent various socioeconomic backgrounds (see table 31 for more information). The results presented in this report are descriptive and readers are cautioned not to draw causal inferences based solely on the results presented here.

## Survey Questionnaires

For NIES, in addition to assessing student performance in subjects such as reading and mathematics, NAEP also collects information from students, teachers, and school administrators through both NAEP and NIES questionnaires they complete as part of the NAEP administrations.

- Students complete a survey that asks them about their experiences inside and outside of school.
- Teachers complete a survey that asks them about their training and their reading and mathematics classroom practices.
- School administrators complete a survey that asks them about staffing, resources, and school activities.

This additional information helps put student performance results into context.
Because NAEP samples were designed to be representative of students but not of teachers or school administrators, it is important to note that survey results are always reported in terms of the percentages of students (e.g., 34 percent of fourth-grade AI/AN students in high density public schools had reading teachers who integrated materials about AI/AN culture or history into their lessons once a month).

In addition to the results from individual survey questions, this report also provides combined results across multiple conceptually-related survey questions in the form of composite variables. By combining results from multiple related questions, we can better understand the frequency or prevalence of factors beyond that which we would be able to observe from responses to a single question.

The AI/AN Culture and Language section of the report provides results from the following two composites:

- Cultural Knowledge
- Interest in Reading About Cultures

The Perspectives Beyond the Average Score section provides results from these composites:

- Engagement at School
- Perceptions About Effort in School

Each composite is made up of 3 or 4 survey questions. Only those students who responded to all questions that make up each of the composites are included in the analyses presented here. See the Technical Notes section for more information about the construction of the composite variables.

## AI/AN Culture and Language

This section of the report provides an in-depth look at the findings from the student, teacher, and school administrator survey questions that are focused on AI/AN culture and language. Experts in the field of AI/AN education-who guided the development of the NIES questionnaires-encourage readers to explore the following core background and contexts to bolster their understanding and interpretation of those findings.
NIES was envisioned to fulfill a unique role within a distinctive historical and educational space. Since its inception in 2005, the NIES program has been guided by presidential and legislative mandates focused on AI/AN cultures and languages. The program was initiated under the mandate articulated in President Bush's Executive Order 13336 of 2004, which aimed "to recognize the unique educational and culturally related academic needs of American Indian and Alaska Native students consistent with the unique political and legal relationship of the Federal Government with tribal governments" and to meet academic goals "in a manner that is consistent with tribal traditions, languages, and cultures." In the subsequent reauthorization set out in President Obama's Executive Order 13592 of 2011, this balance between sovereignty, educational goals, and Native cultures and languages was restated, with the goals of the Executive Order to advance "tribal self-determination and to help ensure that AI/AN students have an opportunity to learn their Native languages and histories and receive complete and competitive educations." The 2011 Executive Order also emphasized the unique relationship between AI/AN tribes and the U.S. government "as set forth in the Constitution of the United States, treaties, Executive Orders, and court decisions," and "guided by a trust responsibility," with the objective of "helping to ensure that the unique cultural, educational, and language needs of AI/AN students are met."

NIES also functions within the larger legislative umbrella that directly addresses AI/AN cultures and languages. This legislation includes, but is not limited to, the following landmark bills:

- The Native American Languages Act (NALA) of 1990 recognized that "the status of the cultures and languages of Native Americans is unique and the United States has the responsibility to act together with Native Americans to ensure the survival of these unique cultures and languages." It also included provisions to encourage states to remove teacher certification obstacles for qualified instructors of Native languages (e.g., tribal elders), in order "to support the use of Native American languages as a medium of instruction."
- The Esther Martinez Native American Languages Preservation Act (2006)² provided grant funding for a range of language and culture initiatives: Native American language nests, ${ }^{3}$ language survival schools, restoration programs, Native American language immersion programs, and Native American language and culture camps.
- The Every Student Succeeds Act (ESSA) of 2015 articulated provisions aimed "to ensure that Indian students gain knowledge and understanding of Native communities, languages, tribal histories, traditions, and cultures." In addition, it provided the establishment of language immersion programs and "activities that recognize and support the unique cultural and educational needs of Indian children, and incorporate appropriately qualified tribal elders and seniors."

The unifying threads of these presidential orders and pieces of legislation are the "culturally responsive schooling" of AI/AN students (Castagno \& Brayboy, 2008, page 1) and the preservation of $\mathrm{AI} / \mathrm{AN}$ culture and language. The NIES program exists at the crossroads of these factors, providing insight into the present state of AI/AN culture and language in the context of a large-scale assessment of reading and mathematics.

NIES also occupies a critically important shared space within the educational community. NIES functions within the challenging environment of a student population that is becoming more culturally and linguistically diverse-a population that grapples with cultural and linguistic mismatches between home and school environments (Ogbu, 1987; Phuntsog, 1998). These cultural and linguistic discontinuities highlight the importance of culturally relevant instruction for student success and the ability of educators to distinguish between language acquisition struggles and learning disabilities (Faircloth \& Tippeconnic, 2000; Kim \& Helphenstine, 2017; Thomas \& Collier, 1997).

While establishing the research base for an examination of culture and language within NIES, the earliest NIES reports drew on Demmert and Towner (2003) and fairly dated (but core) research such as Tharp (1982) and Bacon, Kidd, and Seaberg (1982). Subsequent research led to a major revision to the 2015 NIES questionnaire and reports, improving the alignment of NIES with the guidance of AI/AN education research concerning the need to assess AI/AN culture and language in the educational context. For example, McCarty (2011, pages 14 and 15) found that "strong, additive, academically rigorous Native language and culture programs" support both language and culture preservation, as well as student academic achievement. ${ }^{4}$ She goes on to argue that strong Native language and culture programs "enhance student motivation, self-esteem, and ethnic pride," which are tied to measurable outcomes such as better attendance, improved retention, and enhanced community relations. Reyhner (2017, page 6) finds that school initiatives in

[^1]this area have broader impacts: "Language and cultural revitalization efforts across Indian country are working to not just revitalize tribal languages; they are working to revitalize and heal Indian communities by restoring traditional cultural values." As well as addressing the positive impacts for AI/AN students, Oakes and Maday (2009, page 9) acknowledged that culturally responsive approaches for Native students also "hold potential for enriching the experience of non-Native learners."

NIES can become a culture and language research bridge. As the NIES program moves into the future, it has the opportunity to bridge Native and non-Native educators and researchers as envisioned in the originating 2004 Executive Order which aimed:
to seek ways to develop and enhance the capacity of tribal governments, tribal universities and colleges, and schools and educational programs serving American Indian and Alaska Native students and communities to carry out, disseminate, and implement education research, as well as to develop related partnerships or collaborations with non-tribal universities, colleges, and research organizations. (Executive Order No. 13336, 2004)

A more granular aspect of this opportunity is also articulated in the same Executive Order as "developing a national network of individuals, organizations, and communities to share best practices in AI/AN education and encouraging them to implement these practices." NIES has an integral voice in these potential conversations, from inviting researchers to engage with questions that arise from its particular dataset to initiating collaborations around culturally responsive assessment and how those assessment approaches could potentially inform NAEP as a whole (Montenegro \& Jankowski, 2017; Trumbull \& Nelson-Barber, 2019). With a growing population of young dual language learners reflecting a "superdiversity" in schools around the country (Park, Zong, \& Batalova, 2018), emerging AI/AN educational practices such as Native American language nests offer opportunities for shared practices-with NIES as a potential bridging partner. NIES can potentially function as an important bridge that not only provides learning about the AI/AN educational community, but can also provide opportunities for learning from the AI/AN community. In many ways, the goals of NIES align with and naturally grow out of the ideas of Cajete's groundbreaking work Look to the Mountain: An Ecology of Indigenous Education. His "exploration of Indigenous education attempts to develop insights into the community of shared metaphors and understandings that are specific to Indian cultures, yet reflect the nature of human learning as a whole" (Cajete, 1994, page 21). With this enveloping context in mind, this section will take a deep dive into the results from the 2019 surveys of students, teachers, and school administrators focused on AI/AN cultures and languages.

## How much do AI/AN students know about their culture?

The 2019 NIES student, teacher, and school surveys include questions about various aspects of AI/AN cultural knowledge and how that knowledge is shared with students. As part of the grade 4 survey, AI/AN students were asked a single question about how much they know about their American Indian tribe or Alaska Native group. Most grade 4 AI/AN students reported having at least "a little" knowledge of their AI/AN tribe or group, with 17 percent reporting knowing "nothing" (table 2). About 19 to 23 percent of grade 4 AI/AN students reported having "a lot" of cultural knowledge across school types.

Table 2. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on the extent of their cultural knowledge, by school type/density: 2019

| Grade and student survey question/composite | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: How much do you know about your American Indian tribe or Alaska Native group? For example, you may know about the history, traditions, or arts and crafts of your tribe or group. |  |  |  |  |
| Nothing | 17 | 18 | 21 | $18^{\text {b }}$ |
| A little | 31 | 30 | 33 | 30 |
| Some | 32 | 32 | 28 | 29 |
| A lot | 20 | 19 | 19 | $23^{\text {b }}$ |
| Grade 8: Amount of student cultural knowledge composite |  |  |  |  |
| Nothing | 18 | 23 | $12^{\text {a }}$ | $5^{\text {a,b }}$ |
| A little | 27 | 29 | 26 | $16^{\text {a,b }}$ |
| Some | 33 | 30 | $37^{\text {a }}$ | $45^{\text {a,b }}$ |
| A lot | 22 | 18 | $25^{\text {a }}$ | $34^{\text {a,b }}$ |

[^2]The grade 8 NIES survey also includes questions about how much students know about the culture of their AI/AN tribe or group, and these questions have been aggregated into a composite. This composite is made up of three survey questions included in the grade 8 questionnaire and represents the amount of knowledge students report having about multiple aspects of their culture. Specifically, this composite reflects how much students reported knowing about

- their AI/AN history;
- their AI/AN traditions, ways of life, and customs; and
- issues today that are important to AI/AN people.

Across school types, most (77 to 95 percent) grade 8 AI/AN students reported having at least "a little" knowledge of their AI/AN history, traditions, and current issues. Eighth-graders attending BIE schools were the least likely to report having no knowledge, with 5 percent of those students reporting no AI/AN cultural knowledge. By comparison, students in schools with lower proportions of AI/AN students were more likely to report knowing "nothing," with 12 percent of students in high density schools and 23 percent of students in low density schools reporting having no AI/AN cultural knowledge.

More generally, the data show an unsurprising pattern: students from schools with higher proportions of AI/AN students reported having more AI/AN cultural knowledge than students from schools with lower proportions of AI/AN students. Eighth-graders in BIE schools reported more knowledge of AI/AN culture than their peers in other types of schools, with 79 percent of them reporting "some" or "a lot" of knowledge, compared to 62 percent of high density public school students and 48 percent of low density public school students.

## Where do AI/AN students learn about their culture?

A primary way for AI/AN students to learn about their culture is through other people: family members, friends, teachers, tribal representatives or elders, and others who share their knowledge of AI/AN history, traditions, and other cultural memories with younger generations. These exchanges can take several forms, including storytelling, classroom lessons, or even hands-on lessons in traditional arts and crafts. As part of the 2019 NIES questionnaire, AI/AN students in both grades 4 and 8 were asked about who taught them most of their cultural knowledge.

Across grades, school types, and topics, AI/AN students consistently identified family members as the most common sources of cultural knowledge. Family members were identified as the people who taught students the most about AI/AN history with 45 percent of grade 4 students and 60 percent of grade 8 students so reporting (table 3). Similarly, 45 percent of grade 4 students and 57 percent of grade 8 students identified family members as the people who taught them the most about AI/AN traditions. In addition, fourth-graders were asked about arts and crafts, and eighth-graders were asked about current issues: 36 percent of AI/AN fourth-graders reported that they learned the most about arts and crafts from their families and 45 percent of AI/AN eighth-graders said that they learned the most about current issues important to AI/AN people from their family members (table 4).

Teachers were the second most commonly identified group of people important for educating students on AI/AN cultural topics. Twenty-three percent of grade 4 students and 17 percent of grade 8 students identified teachers as the group that taught them the most of what they know about AI/AN traditions. AI/AN students also reported teachers as the second most commonly identified group of people they learned the most from on the topics of arts and crafts ( 25 percent for grade 4) and current issues important to AI/AN people (21 percent for grade 8).

Table 3. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on learning about AI/AN history and traditions, by school type/density: 2019

| Grade and student survey question | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: Who taught you most of what you know about AI/AN history? |  |  |  |  |
| No one has taught me about AI/AN history | 12 | 12 | 14 | $16^{\text {a }}$ |
| Family members | 45 | 47 | 47 | $43^{\text {b }}$ |
| Friends | 5 | 5 | 6 | 7 |
| Teachers | 23 | 23 | 19 | 19 |
| Tribal representatives or elders | 6 | 6 | 6 | 7 |
| Someone else | 9 | 8 | 7 | 8 |
| Grade 8: Who taught you most of what you know about AI/AN history? |  |  |  |  |
| No one has taught me about AI/AN history | 8 | 11 | $5^{\text {a }}$ | $2^{\text {a,b }}$ |
| Family members | 60 | 59 | 61 | 59 |
| Friends | 1 | 1 | 1 | 2 |
| Teachers | 17 | 17 | 16 | 18 |
| Tribal representatives or elders | 8 | 7 | $11^{\text {a }}$ | $12^{\text {a }}$ |
| Someone else | 5 | 5 | 5 | $7{ }^{\text {b }}$ |
| Grade 4: Who taught you most of what you know about AI/AN traditions (ways of life, customs)? |  |  |  |  |
| No one has taught me about AI/AN traditions | 15 | 14 | $18^{\text {a }}$ | 17 |
| Family members | 45 | 48 | 45 | $41^{\text {a,b }}$ |
| Friends | 4 | 3 | $5^{\text {a }}$ | $7 \mathrm{a}, \mathrm{b}$ |
| Teachers | 23 | 22 | 19 | $18^{\text {a }}$ |
| Tribal representatives or elders | 7 | 6 | 7 | $10^{\text {a,b }}$ |
| Someone else | 7 | 7 | 6 | $7{ }^{\text {b }}$ |
| Grade 8: Who taught you most of what you know about AI/AN traditions (ways of life, customs)? |  |  |  |  |
| No one has taught me about AI/AN traditions | 12 | 15 | $8^{\text {a }}$ | $3^{\text {a,b }}$ |
| Family members | 57 | 56 | 59 | 58 |
| Friends | 2 | 2 | 2 | $2^{\text {a }}$ |
| Teachers | 17 | 16 | 17 | 18 |
| Tribal representatives or elders | 9 | 8 | $11^{\text {a }}$ | $14^{\text {a,b }}$ |
| Someone else | 3 | 3 | 3 | $4^{\text {b }}$ |

[^3]Table 4. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on learning about AI/AN arts and crafts or important issues, by school type/density: 2019

| Grade and student survey question | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: Who taught you most of what you know about AI/AN arts and crafts? |  |  |  |  |
| No one has taught me about AI/AN arts and crafts | 19 | 19 | 20 | 17 |
| Family members | 36 | 37 | 38 | 37 |
| Friends | 6 | 6 | 6 | 8 |
| Teachers | 25 | 24 | 22 | 23 |
| Tribal representatives or elders | 8 | 6 | 9 | $10^{\text {a }}$ |
| Someone else | 6 | 7 | 6 | 6 |

Grade 8: Who taught you most of what you know about issues today that are important to AI/AN people?

| No one has taught me about issues today that are <br> important to Al/AN people | 19 | 25 | $15^{\mathrm{a}}$ | $88^{\text {a,b }}$ |
| :--- | ---: | ---: | ---: | ---: |
| Family members | 45 | 44 | 47 | 44 |
| Friends | 2 | 2 | 3 | 3 |
| Teachers | 21 | 18 | 21 | $28^{\text {a,b }}$ |
| Tribal representatives or elders | 9 | 7 | $11^{\mathrm{a}}$ | $14^{\mathrm{a}, \mathrm{b}}$ |
| Someone else | 4 | 4 | 4 | 3 |

${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

Another avenue for AI/AN students to learn about their culture is to attend or get involved in cultural events. Demonstrations and performances give life to the ideas that students may have about their heritage, and students' participation in ceremonies and performances ensures that future generations of AI/AN people will also get the opportunity to have these cultural experiences as well.

As part of the 2019 NIES questionnaire, AI/AN students were asked a series of questions about whether they had attended or participated in AI/AN cultural events. Overall, 19 percent of grade 4 AI/AN students reported that they attended AI/AN ceremonies and gatherings "several times a year" (table 5). Grade 8 students were asked more specific questions, with 25 percent of AI/AN eighth-graders reporting that they participated in ceremonies and gatherings for their own tribes or groups "several times a year" and 21 percent reporting that they participated "several times a year" in events that brought many different tribes or groups together. Finally, as a means to capture participation in other types of perhaps less official cultural events or activities, 22 percent of AI/AN eighth-graders also reported participating in "other AI/AN activities" at the same frequency. The percentage of $\mathrm{Al} / \mathrm{AN}$ students participating at this frequency varies by school type, such that the percentage of grades 4 and 8 students in BIE schools reporting this frequency of participation was higher than the percentage of their peers in low or high density public schools. Twenty-four percent of grade 4 BIE students reported attending events "several times a year," and 32 to 46 percent of grade 8 students reported that they participate in ceremonies, gatherings, and other activities "several times a year." In low density public schools, attendance and participation was reported by 16 to 19 percent of AI/AN students across grades.

On the other end of the spectrum, nonparticipation in AI/AN cultural events by AI/AN students is also somewhat common. Almost half (45 percent) of grade 4 students reported having "never" gone to an AI/AN ceremony or gathering, and 38 to 42 percent of grade 8 students reported having "never" participated in ceremonies, gatherings, or other Al/AN activities, regardless of whether the event was held by their own tribe. These results vary by school type at grades 4 and 8 , with a general pattern of students in schools with higher AI/AN student densities being less likely to report "never" participating in AI/AN ceremonies and gatherings.

Table 5. Percentage distribution of fourth- and eighth-grade AI/AN students who reported how often they have participated in Al/AN activities, by school type/density: 2019

| Grade and student survey question | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | Ble schools |
| Grade 4: How often do you go to AI/AN ceremonies and gatherings? |  |  |  |  |
| Never | 45 | 48 | 45 | $40^{\text {a,b }}$ |
| Every few years | 19 | 18 | 21 | $22^{\text {a }}$ |
| At least once a year | 17 | 18 | 16 | 15 |
| Several times a year | 19 | 16 | 18 | $24^{\text {a,b }}$ |


| Grade 8: How often have you participated in ceremonies and gatherings for people from your American |
| :--- |
| Indian tribe or Alaska Native group? |
| Never |
| Every few years |
| At least once a year |
| Several times a year |

Grade 8: How often have you participated in ceremonies and gatherings that bring people together from many different American Indian tribes or Alaska Native groups?

| Never | 42 | 51 | $35^{\text {a }}$ | 19a,b |
| :---: | :---: | :---: | :---: | :---: |
| Every few years | 17 | 15 | $18^{\text {a }}$ | $18^{\text {a }}$ |
| At least once a year | 20 | 17 | $24^{\text {a }}$ | 29a,b |
| Several times a year | 21 | 18 | 23 | $34^{\text {a,b }}$ |
| Grade 8: How often have you participated in other A//AN activities? |  |  |  |  |
| Never | 39 | 45 | $31^{a}$ | $19^{\text {a,b }}$ |
| Every few years | 17 | 16 | 19 | $20^{\text {a }}$ |
| At least once a year | 22 | 19 | $25^{\text {a }}$ | $28^{\text {a,b }}$ |
| Several times a year | 22 | 19 | $25^{\text {a }}$ | $32^{\text {a,b }}$ |

[^4]
## How do teachers contribute to AI/AN student cultural knowledge?

Teachers can be an important source of cultural knowledge for AI/AN students. In addition to sharing AI/AN cultural information as a standalone subject, teachers have the opportunity to share cultural knowledge in the context of teaching core subjects. When teachers integrate information about AI/AN culture and history into reading/language arts and mathematics lessons, AI/AN students have an additional opportunity to consider the importance of their people's traditions and ideas. As part of the 2019 NIES questionnaire, teachers were asked whether these topics were being integrated into reading and mathematics lessons at their school. The results shown in the following tables 6 through 8 are based on teachers selecting the response option for each of the questions that best reflected how often they engaged in specific teaching practices.

These data suggest that a majority of AI/AN students had teachers who integrated AI/AN culture or history into reading lessons. Given AI/AN traditions of storytelling, reading is a natural fit for inclusion of AI/AN topics. Overall, 89 percent of grade 4 students and 76 percent of grade 8 students had teachers who reported using these concepts in reading lessons "at least once a year" or more. Some AI/AN students had these opportunities regularly, with 18 percent of grade 4 students and 11 percent of grade 8 students having teachers who integrated these concepts into lessons on at least a weekly basis (table 6).

Among BIE school students, 35 percent of grade 4 and 44 percent of grade 8 students had teachers who reported integrating AI/AN culture or history into reading lessons "at least once a week" or more. In contrast, AI/AN students in low density public schools were less likely than students in BIE schools to have teachers who integrated AI/AN cultural and historical concepts into reading lessons at this frequency. About 5 percent of grade 4 students and less than 1 percent of grade 8 students had teachers who reported using these concepts at least weekly. AI/AN students in low density public schools were more likely than students in BIE schools or high density public schools to have teachers who reported using these concepts in reading lessons "at least once a year" or not at all.


Table 6. Percentage distribution of fourth- and eighth-grade AI/AN students, whose teachers reported how often they integrate materials about AI/AN culture or history into their reading/language arts lessons, by school type/density: 2019

| How often do you integrate materials about AI/AN culture or history into your reading/ language arts lessons? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Never | 11 | 18 | $6^{a}$ | $2^{\text {a,b }}$ |
| At least once a year | 41 | 55 | $41^{a}$ | $18^{\text {a,b }}$ |
| At least once a month | 30 | 22 | $34^{\text {a }}$ | $45^{\text {a,b }}$ |
| At least once a week | 12 | 4 | 13 | $25^{\text {a,b }}$ |
| Every day or almost every day | 6 | 1 | $6^{\text {a }}$ | $11^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| Never | 24 | 33 | $15^{a}$ | \# ${ }^{\text {, b }}$ |
| At least once a year | 49 | 57 | $43^{\text {a }}$ | $21^{\text {a,b }}$ |
| At least once a month | 16 | 10 | $27^{\text {a }}$ | $35^{\text {a,b }}$ |
| At least once a week | 6 | \# | $12^{\text {a }}$ | 29a,b |
| Every day or almost every day | 5 | \# | 3 | $15^{\text {b }}$ |

\# Rounds to zero.
a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different $(p<.05)$ from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding. Teachers were prompted to select one of the response options shown in the questionnaire. Analysis is based on mutually exclusive, single responses.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

Some teachers who taught mathematics to AI/AN students reported integrating AI/AN culture or history into their instruction, but 67 percent of grade 4 students and 66 percent of grade 8 students had teachers who reported "never" doing so (table 7). Of the students whose teachers do integrate AI/AN culture and history topics into their lessons, they were in general most likely to have these lessons "at least once a year." The teachers of 18 percent of grade 4 students and 22 percent of grade 8 students chose this response. By contrast, about 9 percent of grade 4 students and 6 percent of grade 8 students had teachers who reported integrating AI/AN culture and history topics into their math lessons "at least once a week" or more. These numbers varied by school type, with a higher percentage of students attending BIE schools having mathematics teachers who integrated AI/AN culture and history compared to their peers attending high density public schools.

Table 7. Percentage distribution of fourth- and eighth-grade AI/AN students, whose teachers reported how often they integrate materials about AI/AN culture or history into their mathematics lessons, by school type/density: 2019

| How often do you integrate materials about AI/AN culture or history into your mathematics lessons? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Never | 67 | 78 | $53^{\text {a }}$ | $33^{\text {a,b }}$ |
| At least once a year | 18 | 18 | $26^{\text {a }}$ | $26^{\text {a }}$ |
| At least once a month | 7 | 4 | $11^{\text {a }}$ | $24^{\text {a,b }}$ |
| At least once a week | 7 | 1 | $6^{\text {a }}$ | $14^{\text {a,b }}$ |
| Every day or almost every day | 1 | \# | 4 | 4 |
| Grade 8 |  |  |  |  |
| Never | 66 | 81 | $51^{\text {a }}$ | $32^{\text {a,b }}$ |
| At least once a year | 22 | 18 | $31^{\text {a }}$ | 27 |
| At least once a month | 6 | 1 | $12^{\text {a }}$ | $17^{\text {a }}$ |
| At least once a week | 3 | \# | 6 | $20^{\text {b }}$ |
| Every day or almost every day | 3 | \# | \# | 4 |

\# Rounds to zero.
${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding. Teachers were prompted to select one of the response options shown in the questionnaire. Analysis is based on mutually exclusive, single responses.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

In the 2019 NIES survey, teachers also answered additional, more specific, questions about the integration of AI/AN culture into the curriculum. Three of these questions inquired about the frequency with which teachers gave students assignments featuring literature by AI/AN authors and with AI/AN themes and current events. Overall, most students were exposed to all of these topics (table 8). According to their teachers, 80 to 90 percent of AI/AN students at grades 4 and 8 read literature with AI/AN themes "at least once a year" or more, and 8 to 12 percent read these materials at least weekly. Concerning AI/AN literature, 74 to 79 percent of AI/AN students at both grades read works by AI/AN authors "at least once a year" or more, and 6 to 7 percent read literature by AI/AN authors "at least once a week" or more. AI/AN students also had teachers who asked them to read about or discuss current issues of concern to the AI/AN community. Sixty-four to 66 percent of AI/AN students at grades 4 and 8 spent class time reading about or discussing these issues "at least once a year" or more, and 9 to 16 percent did so "at least once a week" or more. These responses followed a pattern similar to that of other questions, with students from BIE schools generally more likely to have teachers who integrated AI/AN authors, themes, and current issues into their instruction than did AI/AN students from low or high density public schools.

Table 8. Percentage distribution of fourth- and eighth-grade AI/AN students, whose teachers reported how often they have their students read literature with AI/AN themes, by school type/density: 2019

| Grade and student survey question | All Al/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: How often do you have your students read literature with AI/AN themes? |  |  |  |  |
| Never | 10 | 15 | 10 | $1^{\text {a }}$ |
| At least once a year | 53 | 65 | $52^{\text {a }}$ | $33^{\text {a,b }}$ |
| At least once a month | 25 | 16 | $31^{\text {a }}$ | $50^{\text {a,b }}$ |
| At least once a week | 11 | 3 | 4 | $13^{\text {a,b }}$ |
| Every day or almost every day | 1 | \# | 2 | $2^{\text {a }}$ |
| Grade 8: How often do you have your students read literature with AI/AN themes? |  |  |  |  |
| Never | 20 | 26 | $13^{\text {a }}$ | \#, b |
| At least once a year | 57 | 65 | $53^{\text {a }}$ | $30^{\text {a,b }}$ |
| At least once a month | 15 | 8 | $25^{\text {a }}$ | $43^{\text {a,b }}$ |
| At least once a week | 4 | \# | $8^{\text {a }}$ | $19^{\text {a,b }}$ |
| Every day or almost every day | 4 | \# | 2 | $8{ }^{\text {b }}$ |
| Grade 4: How often do you have your students read literature by AI/AN authors? |  |  |  |  |
| Never | 21 | 28 | $15^{\text {a }}$ | $8^{\text {a }}$ |
| At least once a year | 51 | 61 | 58 | $37^{\text {a,b }}$ |
| At least once a month | 22 | 9 | $22^{\text {a }}$ | $45^{\text {a,b }}$ |
| At least once a week | 6 | 2 | 3 | $8^{\text {a,b }}$ |
| Every day or almost every day | 1 | \# | 1 | $2^{\text {a }}$ |
| Grade 8: How often do you have your students read literature by AI/AN authors? |  |  |  |  |
| Never | 26 | 34 | 19a | $7^{\text {a,b }}$ |
| At least once a year | 53 | 59 | $47^{a}$ | $41^{\text {a }}$ |
| At least once a month | 14 | 7 | $27^{\text {a }}$ | $29^{\text {a }}$ |
| At least once a week | 3 | \# | $7^{\text {a }}$ | $15^{\text {a,b }}$ |
| Every day or almost every day | 4 | \# | 1 | $7{ }^{\text {b }}$ |
| Grade 4: How often do you have your students read about, or discuss, current issues of concern to the AI/AN community? |  |  |  |  |
| Never | 34 | 46 | $30^{\text {a }}$ | $5^{\text {a,b }}$ |
| At least once a year | 36 | 43 | 37 | $34^{\text {a }}$ |
| At least once a month | 14 | 10 | $26^{\text {a }}$ | $35^{\text {a,b }}$ |
| At least once a week | 15 | 1 | $6^{\text {a }}$ | $22^{\text {a,b }}$ |
| Every day or almost every day | 1 | 1 | 1 | $4^{\text {a,b }}$ |
| Grade 8: How often do you have your students read about, or discuss, current issues of concern to the AI/AN community? |  |  |  |  |
| Never | 36 | 47 | $24^{\text {a }}$ | $11^{\text {a,b }}$ |
| At least once a year | 42 | 48 | 39 | $13^{\text {a,b }}$ |
| At least once a month | 13 | 5 | $24^{\text {a }}$ | $43^{\text {a,b }}$ |
| At least once a week | 5 | \# | $13^{a}$ | $23^{\text {a,b }}$ |
| Every day or almost every day | 4 | \# | 1 | $10^{\text {b }}$ |

[^5]
## How does school administration contribute to AI/AN student cultural knowledge?

In 2019, school administrators were also asked questions about AI/AN cultural topics in school curriculum, reporting on whether students at their schools receive instruction on several aspects of $\mathrm{Al} / \mathrm{AN}$ culture. Similar to the results of the teacher questions, in general, AI/AN students at grades 4 and 8 attending BIE schools were more likely than students from low or high density public schools to have school administrators who reported that an AI/AN-related topic was part of instruction (table 9). Regarding instruction on AI/AN tribal history, traditions and customs, and arts topics, a majority of AI/AN students at both grades (from 68 to 72 percent at grade 4 and from 59 to 70 percent at grade 8) had school administrators who reported that these topics were a part of student instruction. In the case of BIE schools, 93 to 100 percent of students had school administrators who reported that these topics were part of school instruction.


Table 9. Percentage distribution of fourth- and eighth-grade AI/AN students, whose school administrators reported whether students in their school receive instruction about Al/AN cultures in various areas, by school type/density: 2019

| Do students in your school receive instruction about AI/AN cultures in any of the following areas? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: History of tribes or cultural groups |  |  |  |  |
| Yes | 72 | 60 | 79a | $93{ }^{\text {a,b }}$ |
| No | 28 | 40 | $21^{\text {a }}$ | $7 \mathrm{a}, \mathrm{b}$ |
| Grade 8: History of tribes or cultural groups |  |  |  |  |
| Yes | 70 | 57 | $88^{\text {a }}$ | $95^{\text {a }}$ |
| No | 30 | 43 | $12^{\text {a }}$ | $5^{\text {a }}$ |
| Grade 4: Traditions and customs |  |  |  |  |
| Yes | 71 | 60 | $80^{\text {a }}$ | $97^{\text {a,b }}$ |
| No | 29 | 40 | $20^{\text {a }}$ | $3 \mathrm{a}, \mathrm{b}$ |
| Grade 8: Traditions and customs |  |  |  |  |
| Yes | 65 | 50 | $86^{\text {a }}$ | $98^{\text {a,b }}$ |
| No | 35 | 50 | $14^{a}$ | $2^{\text {a,b }}$ |
| Grade 4: Arts, crafts, music, or dance |  |  |  |  |
| Yes | 68 | 54 | 79a | $98^{\text {a,b }}$ |
| No | 32 | 46 | $21^{\text {a }}$ | $2^{\text {a,b }}$ |
| Grade 8: Arts, crafts, music, or dance |  |  |  |  |
| Yes | 59 | 43 | 79a | $100^{\text {a,b }}$ |
| No | 41 | 57 | $21^{\text {a }}$ | \# ${ }^{\text {a,b }}$ |
| Grade 4: Tribal or village government |  |  |  |  |
| Yes | 38 | 24 | $47^{a}$ | $66^{\text {a,b }}$ |
| No | 62 | 76 | $53^{\text {a }}$ | $34^{\text {a,b }}$ |
| Grade 8: Tribal or village government |  |  |  |  |
| Yes | 37 | 28 | $51^{\text {a }}$ | $87^{\text {a,b }}$ |
| No | 63 | 72 | $49^{\text {a }}$ | $13^{\text {a,b }}$ |
| Grade 4: Current events and issues important to tribes or cultural groups |  |  |  |  |
| Yes | 40 | 23 | $55^{\text {a }}$ | $68^{\text {a,b }}$ |
| No | 60 | 77 | $45^{\text {a }}$ | $32^{\text {a,b }}$ |
| Grade 8: Current events and issues important to tribes or cultural groups |  |  |  |  |
| Yes | 44 | 36 | $57^{\text {a }}$ | $82^{\text {a,b }}$ |
| No | 56 | 64 | $43^{a}$ | $18^{\text {a,b }}$ |

\# Rounds to zero.
a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

Administrators also reported on whether tribal or village government and current events important to tribes or cultural groups were a part of student instruction. According to the administrators, less than half of students ( 23 to 36 percent) in low density public schools were exposed to these topics as a part of instruction. By contrast, high density public schools and BIE schools had higher percentages. Sixty-six to 68 percent of grade 4 students and 82 to 87 percent of grade 8 students in BIE schools had administrators who reported that these topics were covered as a part of instruction. Forty-seven to 55 percent of grade 4 students and 51 to 57 percent of grade 8 students in high density public schools had school administrators who did so.

In addition to including AI/AN culture and history in the classroom, having members of the AI/AN community visit the school is another way to share cultural knowledge and related information. As part of the 2019 NIES questionnaire, school administrators were asked about the frequency of visits from members of the AI/AN community to discuss topics relevant to AI/AN students.

The results from these questions showed that AI/AN students had opportunities for exposure to AI/AN cultural information through school visits from AI/AN community members. Overall, 54 to 57 percent of grade 4 students and 51 to 55 percent of grade 8 students attended schools where these visits occurred at least once during a typical school year (tables 10 and 11). In the case of BIE school students, 55 to 56 percent of grade 4 students and 62 to 68 percent of grade 8 students had school administrators who reported that AI/AN community members visited their schools to discuss education issues or traditions and culture three or more times a year. AI/AN students in low density public schools were less likely to have these experiences, with over half of these students attending schools that never have AI/AN community visitors.


Table 10. Percentage distribution of fourth- and eighth-grade AI/AN students, whose school administrators reported how many times a member of the AI/AN community visited the school to discuss education issues with students and staff, other than a conference regarding an individual student, by school type/density: 2019

| In a typical school year, how many times has a member of the AI/AN community visited the school to discuss education issues with students and staff, other than a conference regarding an individual student? |  | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | All AI/AN students | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Never | 39 | 58 | 19a | $16^{a}$ |
| 1-2 times | 24 | 17 | $37^{a}$ | $28^{\text {a }}$ |
| 3 or more times | 30 | 15 | 39a | $55^{\text {a,b }}$ |
| I don't know | 7 | 10 | 5 | $1^{\text {a }}$ |
| Grade 8 |  |  |  |  |
| Never | 41 | 51 | $22^{\text {a }}$ | $9^{\text {a,b }}$ |
| 1-2 times | 22 | 20 | 27 | 19 |
| 3 or more times | 29 | 20 | $45^{\text {a }}$ | $62^{\text {a,b }}$ |
| I don't know | 8 | 9 | 5 | 9 |

${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

Table 11. Percentage distribution of fourth- and eighth-grade AI/AN students, whose school administrators reported how many times a member of the AI/AN community visited the school to share AI/AN traditions and culture with students and staff, by school type/density: 2019

| In a typical school year, how many times has a member of the AI/AN community visited the school to share AI/AN traditions and culture with students and staff? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Never | 37 | 55 | $10^{a}$ | $9{ }^{\text {a }}$ |
| 1-2 times | 30 | 26 | $51^{\text {a }}$ | $35^{\text {a,b }}$ |
| 3 or more times | 27 | 10 | $37^{a}$ | $56^{\text {a,b }}$ |
| I don't know | 6 | 10 | $2^{\text {a }}$ | $1^{\text {a }}$ |
| Grade 8 |  |  |  |  |
| Never | 40 | 55 | $11^{\text {a }}$ | $7{ }^{\text {a }}$ |
| 1-2 times | 33 | 26 | $52^{\text {a }}$ | $22^{\text {b }}$ |
| 3 or more times | 21 | 11 | $35^{\text {a }}$ | $68^{\text {a,b }}$ |
| I don't know | 5 | 7 | 3 | $3^{\text {a }}$ |

[^6]
## Do AI/AN students see their culture represented in their educators?

Beyond questions of AI/AN culture represented in class lessons and visits from members of the AI/AN community, another important way AI/AN students can see themselves represented in their school is through the presence of AI/AN teachers and staff. AI/AN adults in positions of authority can act as role models for AI/AN students, and some research indicates that racial-minority students can benefit from working with a teacher of their own race (Egalite, Kisida, \& Winters, 2015; Gershenson, Holt, \& Papageorge, 2016). As part of the 2019 NIES questionnaire, school administrators were asked about the presence of AI/AN teachers and staff at their schools.

The results from these questions yield two important observations. First, though some schools have meaningful AI/AN representation among their faculty and staff, some AI/AN students attend schools where none or almost none of the adults share their native heritage. In low density public schools, 46 to 47 percent of students at grades 4 and 8 had no AI/AN teachers at their schools, and 40 to 41 percent of students had no AI/AN staff (table 12). Second, schools with a higher density of AI/AN students, including BIE schools, are more likely to have higher concentrations of AI/AN faculty and staff in general. According to BIE school administrators, for 44 to 52 percent of the students at grades 4 and 8 , more than half of the teachers were AI/AN, while for 44 to 66 percent of the students, more than half of the staff members were AI/AN.


Table 12. Percentage distribution of fourth- and eighth-grade AI/AN students, by school-identified percentage of AI/AN teachers and staff in their schools and school type/density: 2019

| Grade and percentage of AI/AN teachers and staff at school | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: Percentage of AI/AN teachers at your school |  |  |  |  |
| 0\% | 27 | 46 | $6^{\text {a }}$ | $5^{\text {a }}$ |
| 1-5\% | 18 | 24 | $10^{\text {a }}$ | $9^{\text {a }}$ |
| 6-10\% | 6 | 3 | $15^{\text {a }}$ | $11^{\text {a }}$ |
| 11-25\% | 17 | 5 | $19^{\text {a }}$ | $14^{\text {a }}$ |
| 26-50\% | 7 | \# | $21^{\text {a }}$ | 9a,b |
| 51-75\% | 8 | 1 | 14 | 16 |
| 76-100\% | 5 | \# | 8 | $37^{\text {b }}$ |
| I don't know | 13 | 21 | $8^{\text {a }}$ | \# |
| Grade 8: Percentage of AI/AN teachers at your school |  |  |  |  |
| 0\% | 29 | 47 | $1^{\text {a }}$ | $6^{\text {a,b }}$ |
| 1-5\% | 26 | 28 | 25 | 22 |
| 6-10\% | 8 | 4 | $18^{\text {a }}$ | $4^{\text {b }}$ |
| 11-25\% | 10 | 2 | $18^{\text {a }}$ | $7 \mathrm{7a}$ |
| 26-50\% | 8 | \# | 23 | 17 |
| 51-75\% | 3 | 1 | 4 | $13^{\text {a,b }}$ |
| 76-100\% | 4 | \# | 6 | $31^{\text {b }}$ |
| I don't know | 12 | 17 | $5^{\text {a }}$ | \# |
| Grade 4: Percentage of AI/AN staff other than teachers at your school |  |  |  |  |
| 0\% | 25 | 41 | $1^{\text {a }}$ | \# |
| 1-5\% | 21 | 30 | $17^{\text {a }}$ | 9,b |
| 6-10\% | 8 | 5 | $15^{\text {a }}$ | $4^{\text {b }}$ |
| 11-25\% | 6 | 1 | $18^{\text {a }}$ | $6^{\text {a,b }}$ |
| 26-50\% | 11 | \# | $13^{a}$ | $15^{\text {a }}$ |
| 51-75\% | 4 | \# | 10 | 17 |
| 76-100\% | 11 | \# | 19 | $49^{\text {b }}$ |
| I don't know | 14 | 23 | $6^{\text {a }}$ | \# |
| Grade 8: Percentage of AI/AN staff other than teachers at your school |  |  |  |  |
| 0\% | 25 | 40 | 1 | $6^{a}$ |
| 1-5\% | 27 | 35 | $18^{\text {a }}$ | $7 \mathrm{7ab}$ |
| 6-10\% | 8 | 4 | $17^{a}$ | $15^{\text {a }}$ |
| 11-25\% | 6 | 1 | $14^{\text {a }}$ | $13^{\text {a }}$ |
| 26-50\% | 9 | 1 | 24 | $15^{\text {b }}$ |
| 51-75\% | 5 | 1 | $12^{\text {a }}$ | $16^{\text {a }}$ |
| 76-100\% | 7 | 1 | $8^{\text {a }}$ | $28^{\text {a,b }}$ |
| I don't know | 12 | 18 | $5^{\text {a }}$ | \# |

\# Rounds to zero.
${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\text {b }}$ Significantly different $(p<.05)$ from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## Are AI/AN students interested in reading about cultures?

Student interest is key to learning. Motivation research suggests that intrinsic motivation is related to student learning outcomes. The depth of knowledge that AI/AN students possess about cultures and traditions is determined in part by their interest in learning about the topic (Cerasoli, Nicklin, \& Ford, 2014). Therefore, exploring AI/AN student interest in the overall topic of culture is a natural next step for this section of the report.

As part of the 2019 NIES survey, AI/AN students in grades 4 and 8 were asked questions about their interest in AI/AN culture and culture in general. Similar to the AI/AN cultural knowledge questions in the grade 8 survey, these questions have been aggregated into a composite, Interest in Reading About Cultures. Specifically, students were asked to report the extent to which they thought the three following statements described a person like them:

- When my teacher talks about AI/AN history or culture, I try to read more about it.
- I enjoy reading about AI/AN people.
- I enjoy reading about people who have different traditions and cultures (ways of life, customs) than I have.

Overall, the largest proportion of AI/AN students in both grades reported that these statements were "a little like me," with 49 to 55 percent of students selecting this response (table 13). The second largest proportion of grade 4 students ( 25 percent) reported that these statements were "not like me," but data from grade 8 students showed a different pattern, with the second largest proportion of grade 8 students (29 percent) reporting that the statements were "a lot like me."

Table 13. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on their interest in reading about cultures, by school type/density: 2019

| Extent to which survey statements about reading about cultures described a person like the student | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Not like me | 25 | 26 | 26 | $23{ }^{\text {b }}$ |
| A little like me | 55 | 51 | $57^{\text {a }}$ | 57a |
| A lot like me | 20 | 23 | $17^{\text {a }}$ | $20^{\text {b }}$ |
| Grade 8 |  |  |  |  |
| Not like me | 22 | 26 | $20^{\text {a }}$ | $13^{\text {a,b }}$ |
| A little like me | 49 | 46 | 50 | $53^{\text {a,b }}$ |
| A lot like me | 29 | 28 | 30 | $34^{\text {a,b }}$ |

[^7]There were also some differences in student responses based on school type. In low density public schools, 51 percent of grade 4 AI/AN students reported that the statements were "a little like me." By contrast, higher percentages of AI/AN students ( 57 percent) in high density public schools and BIE schools provided the same answer. As for the other responses from grade 4 students, a higher percentage of students in low density public schools (23 percent) than in high density public schools ( 17 percent) reported that the statements were "a lot like me." In grade 8, the results for BIE school students were different than those for AI/AN students in high density and low density public schools, with a smaller percentage of students reporting that the statements were "not like me" ( 13 percent for BIE compared to 20 percent for high density and 26 percent for low density) and a larger percentage of students reporting that the statements were "a lot like me" ( 34 percent for BIE compared to 30 percent for high density and 28 percent for low density).

## Do AI/AN students have access to books and other media about AI/AN people?

School resources are a consideration for AI/AN students' ability to read about cultures. For students in general, libraries provide important access to the Internet, books, and other media concerning cultural topics. Libraries and other kinds of media centers are the only access points to the Internet available for some AI/AN students, for whom access can be limited (American Indian Policy Institute, 2019). As part of the 2019 NIES survey, students were asked about their access to books, videos, and other materials about AI/AN people. In general, most students said they had access to a library or media center with materials about AI/AN people, with 61 percent of grade 4 and 75 percent of grade 8 AI/AN students answering "yes" (table 14). Student responses to this question were similar across school types.

Table 14. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on whether they have access to a library, media center, or resource center with books, videos, or other materials about AI/AN people, by school type/density: 2019

In school, do you have access to a library, media center, or resource center with books, videos, or other materials (including Internet resources) about AI/AN people?

| All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: |
|  | Low density public schools | High density public schools | BIE schools |
| 61 | 60 | 59 | 58 |
| 39 | 40 | 41 | 42 |
| 75 | 74 | 76 | 76 |
| 25 | 26 | 24 | 24 |

[^8]Having access to media is important for $\mathrm{Al} / \mathrm{AN}$ students, but that access is only meaningful if students take advantage of it. This access can be provided by libraries and other media centers in school as well as outside of school. Students must be motivated to access these materials, whether to complete school assignments or for their own interests. The 2019 NIES survey included questions about how frequently students used books and other media about AI/AN people during the school year.

Student responses to these questions show that various percentages of AI/AN students did not regularly use books, videos, or other materials about AI/AN people in school or outside of school, with 35 to 43 percent of AI/AN students at grades 4 and 8 who did not use such media in school and 46 to 47 percent of students who did not use such media outside of school (tables 15 and 16). Twenty-three to 30 percent of $\mathrm{Al} / \mathrm{AN}$ students at grades 4 and 8 reported using books and other materials about AI/AN people in school "three or more times" during the school year. Similarly, 23 to 26 percent of students reported using such media "three or more times" outside of school during the school year.

While the grade 4 results are similar across school types, the results for grade 8 vary by school density of AI/AN students. A larger percentage of BIE students at grade 8 reported using books and other materials about AI/AN people "three or more times" during the school year than students in low and high density public schools, including use in school (38 percent vs. 15 and 28 percent, respectively) and outside of school ( 31 percent vs. 21 and 25 percent, respectively). Given that these schools have a larger proportion of AI/AN students, it is unsurprising that BIE schools would feature more emphasis on AI/AN people and possibly more access to relevant books, videos, and other resources. These results also align with those of the Interest in Reading About Cultures composite variable.

Table 15. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on whether they have used books, videos, or other materials about AI/AN people in school, by school type/density: 2019

| During the school year, have you used books, videos, or other materials (including Internet resources) about AI/AN people in school? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Yes, once or twice | 35 | 35 | 33 | 33 |
| Yes, three or more times | 30 | 28 | 29 | 32 |
| No | 35 | 37 | 38 | 34 |
| Grade 8 |  |  |  |  |
| Yes, once or twice | 34 | 31 | 39a | $42^{\text {a }}$ |
| Yes, three or more times | 23 | 15 | $28^{\text {a }}$ | $38^{\text {a,b }}$ |
| No | 43 | 54 | $33^{a}$ | $20^{\text {a,b }}$ |

[^9]Table 16. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on whether they have used books, videos, or other materials about AI/AN people outside of school, by school type/density: 2019

| During the school year, have you used books, videos, or other materials (including Internet resources) about AI/AN people outside of school? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Yes, once or twice | 29 | 26 | 30 | 29 |
| Yes, three or more times | 26 | 25 | 25 | 25 |
| No | 46 | 48 | 45 | 46 |
| Grade 8 |  |  |  |  |
| Yes, once or twice | 30 | 26 | $33^{\text {a }}$ | $36^{\text {a,b }}$ |
| Yes, three or more times | 23 | 21 | $25^{\text {a }}$ | $31^{\text {a,b }}$ |
| No | 47 | 53 | $42^{\text {a }}$ | $33^{\text {a,b }}$ |

a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\text {b }}$ Significantly different $(p<.05)$ from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## Do teachers engage in culturally specific professional development for their AI/AN students?

Another way that AI/AN students have their interest in reading about culture nurtured is through their teachers. One of the primary ways that teachers share information with their students is through reading, either in class or as part of homework. Teachers can be better equipped to inspire curiosity in the topic of AI/AN culture by participating in professional development on instructional practices specifically designed for AI/AN students. Culturally specific instructional practices include assignment of reading and other activities that are contextualized in AI/AN cultural information (Apthorp, D'Amato, \& Richardson, 2002), and using such strategies can lead AI/AN students to develop interest in exploring the topic further. As a part of the 2019 NIES survey, teachers were asked about their participation in these types of professional development programs.


Overall, 60 percent of AI/AN students at grades 4 and 8 had teachers who reported "never" attending professional development programs aimed at developing AI/AN culturally specific instructional practices over the past two years (table 17). There was also a general pattern of higher percentages of students having teachers who reported occasional participation (e.g., 1 or 2 times) rather than more regular participation (e.g., 5 or more times). Teacher participation in this type of professional development varies by school type. In schools with greater proportions of AI/AN students, higher percentages of AI/AN students at grade 4 had teachers who reported participating " 3 or 4 times" and " 5 or more times." For example, in the case of BIE schools, 19 percent of AI/AN students at grade 4 had teachers who reported attending professional development programs aimed at developing culturally specific instructional practices "3 or 4 times" in the last two years and 16 percent had teachers who did so "5 or more times."

Table 17. Percentage distribution of fourth- and eighth-grade AI/AN students, whose teachers reported how many times they have attended professional or community-based development programs aimed at developing culturally specific instructional practices for AI/AN students during the last two years, by school type/density: 2019

| During the last two years, how many times have you attended professional or community-based development programs (such as in-service classes and workshops, including online classes) aimed at developing culturally specific instructional practices for AI/AN students? |  | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | All AI/AN students | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Never | 60 | 79 | $42^{\text {a }}$ | $30^{\text {a,b }}$ |
| 1 or 2 times | 22 | 17 | $38^{\text {a }}$ | $36^{\text {a }}$ |
| 3 or 4 times | 13 | 3 | $11^{\text {a }}$ | $19^{\text {a,b }}$ |
| 5 or more times | 4 | 1 | $9^{\text {a }}$ | $16^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| Never | 60 | 73 | $47^{a}$ | $24^{\text {a,b }}$ |
| 1 or 2 times | 22 | 16 | $33^{a}$ | $43^{\text {a }}$ |
| 3 or 4 times | 14 | 10 | 13 | $20^{\text {b }}$ |
| 5 or more times | 4 | 1 | 7 | $13^{\text {a }}$ |

[^10]
## Are AI/AN students exposed to their Heritage languages?

As part of the NIES student survey in 2019, AI/AN students were asked a series of questions about their exposure to their Heritage ${ }^{5}$ languages. AI/AN fourth- and eighth-graders have various sources for potential interactions with their Heritage languages-and for getting support for learning them. Overall, 37 percent of AI/AN fourth-graders and 45 percent of AI/AN eighth-graders reported that their primary source for learning about their Heritage languages was their family (table 18). Readers should note that about one quarter of all AI/AN fourth- and eighth-graders reported that no one had taught them about their Heritage languages. Looking at results by school type, there were no measurable differences in the percentages of AI/AN fourth-graders across the school types reporting that their families taught them the most about their Heritage languages. At grade 8, higher percentages of AI/AN students in BIE and high density public schools (51 and 48 percent, respectively) than in low density public schools (42 percent) reported their families as their foremost source of Heritage language knowledge.

Table 18. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on learning about AI/AN language, by school type/density: 2019

| Who taught you most of what you know about an AI/AN language? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| No one has taught me about an AI/AN language | 25 | 31 | $23^{\text {a }}$ | $19^{\text {a,b }}$ |
| Family members | 37 | 38 | 39 | 37 |
| Friends | 4 | 4 | 5 | 5 |
| Teachers | 20 | 15 | 19 | $22^{\text {a,b }}$ |
| Tribal representatives or elders | 8 | 7 | 8 | $10^{\text {a }}$ |
| Someone else | 6 | 6 | 6 | 7 |
| Grade 8 |  |  |  |  |
| No one has taught me about an AI/AN language | 24 | 32 | $16^{a}$ | $4^{\text {a,b }}$ |
| Family members | 45 | 42 | $48^{\text {a }}$ | $51^{\text {a }}$ |
| Friends | 2 | 1 | $3^{\text {a }}$ | $3^{\text {a }}$ |
| Teachers | 17 | 14 | 19 | $27^{\text {a,b }}$ |
| Tribal representatives or elders | 9 | 8 | 11 | $11^{\text {a }}$ |
| Someone else | 3 | 2 | 3 | 4 |

[^11][^12]Teachers were the next most commonly reported knowledge source, with 20 percent of AI/AN fourth-graders and 17 percent of AI/AN eighth-graders indicating that they learned the most about their Heritage languages from their teachers. AI/AN students at grades 4 and 8 attending BIE schools were more likely than their peers attending low and high density public schools to report that their teachers had taught them the most of what they knew about their Heritage languages.

While a plurality of AI/AN students indicated that their families taught them the most of what they know about their Heritage languages, 56 percent of AI/AN fourth-graders and 55 percent of AI/AN eighth-graders reported never or hardly ever hearing their family members talk in their American Indian or Alaska Native languages (table 19).

When considering school types, results at grades 4 and 8 show a stepwise decrease in the percentages of students reporting never or hardly ever hearing their families speak in their Heritage languages (i.e., the percentage of AI/AN students from low density public schools was higher than the percentage of students from high density public schools, which was in turn higher than that of BIE schools) and the opposite pattern reporting daily exposure to their Heritage languages at home-with students attending BIE schools more likely to hear their Native languages spoken at home daily or almost every day compared to their grade-level peers attending high density or low density public schools. For example, for AI/AN students attending BIE schools, the percentage of students who reported hearing their Native languages spoken at home daily or almost every day ranged from 30 percent at grade 4 to 51 percent at grade 8 .

Table 19. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on AI/AN language usage at home, by school type/density: 2019

| How often do members of your family talk to each other in your AI/AN language? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Never or hardly ever | 56 | 61 | $52^{\text {a }}$ | $37^{\text {a,b }}$ |
| Once or twice a month | 16 | 15 | 15 | $18^{\text {a,b }}$ |
| Once or twice a week | 11 | 10 | $13^{a}$ | $15^{\text {a,b }}$ |
| Every day or almost every day | 18 | 13 | $20^{\text {a }}$ | $30^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| Never or hardly ever | 55 | 66 | $46^{\text {a }}$ | $21^{\text {a,b }}$ |
| Once or twice a month | 12 | 13 | 12 | 11 |
| Once or twice a week | 11 | 9 | $15^{\text {a }}$ | $16^{\text {a }}$ |
| Every day or almost every day | 22 | 12 | $27^{a}$ | $51^{\text {a,b }}$ |

[^13]Some AI/AN students also have the opportunity to hear their Heritage languages spoken in their schools and perhaps engage in exchanges with teachers, principals, visitors, parents, and other school staff. However, a majority of AI/AN students never hear their Heritage languages spoken at their schools, with 65 percent of fourth-graders and 73 percent of eighth-graders reporting that they never or hardly ever heard people in their schools talk to each other in their American Indian or Alaska Native languages (table 20).

AI/AN students attending BIE schools at grades 4 and 8 were more likely to hear their Heritage languages spoken at school daily or almost every day compared to their grade-level peers attending high or low density public schools.

Table 20. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on AI/AN language usage in school, by school type/density: 2019

| How often do people in your school talk to each other in your AI/AN language? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Never or hardly ever | 65 | 74 | 66a | $48^{\text {a,b }}$ |
| Once or twice a month | 13 | 12 | 13 | 14 |
| Once or twice a week | 10 | 6 | 9a | $17 \mathrm{a}, \mathrm{b}$ |
| Every day or almost every day | 12 | 8 | $12^{\text {a }}$ | $20^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| Never or hardly ever | 73 | 86 | $64^{\text {a }}$ | $35^{\text {a,b }}$ |
| Once or twice a month | 9 | 7 | $13^{\text {a }}$ | $15^{\text {a,b }}$ |
| Once or twice a week | 9 | 4 | $13^{\text {a }}$ | $23^{\text {a,b }}$ |
| Every day or almost every day | 9 | 3 | $10^{\text {a }}$ | $27^{\text {a,b }}$ |

${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

In addition to the less formal avenues for Heritage language exposure within their schools, AI/AN students were asked about attending classes in school that were taught in AI/AN languages. ${ }^{6}$ Overall, approximately 35 percent of grade 4 AI/AN students and 25 percent of grade 8 AI/AN students attended schools where they attended classes with instruction in their own Native languages at least once a month (table 21).

On the other end of the access spectrum, the majority of AI/AN students at both grades reported that such classes were not offered at all or that they never attended them. For example, at grade 4, percentages of AI/AN students reporting that classes taught in Heritage languages were not offered at their schools at all or that they never attended such classes ranged from approximately 44 percent for students in BIE schools to 77 percent for those attending low density public schools.

[^14]Table 21. Percentage distribution of fourth-and eighth-grade AI/AN students who reported on attending classes taught in an AI/AN language, by school type/density: 2019

| How often do you attend classes in school that are taught in an AI/AN language? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| My school does not offer classes that are taught in an AI/AN language | 43 | 53 | $40^{\text {a }}$ | $26^{\text {a,b }}$ |
| Never or hardly ever | 23 | 24 | 24 | $18^{\text {a,b }}$ |
| Once or twice a month | 10 | 10 | 11 | $13^{\text {a,b }}$ |
| Once or twice a week | 11 | 8 | $13^{\text {a }}$ | $16^{\text {a,b }}$ |
| Every day or almost every day | 14 | 6 | $13^{a}$ | $26^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| My school does not offer classes that are taught in an AI/AN language | 50 | 66 | $34^{\text {a }}$ | $12^{\text {a,b }}$ |
| Never or hardly ever | 24 | 23 | $31^{\text {a }}$ | $16^{\text {a,b }}$ |
| Once or twice a month | 6 | 4 | $9^{\text {a }}$ | $9^{\text {a }}$ |
| Once or twice a week | 8 | 3 | $8{ }^{\text {a }}$ | $24^{\text {a,b }}$ |
| Every day or almost every day | 11 | 3 | $17^{a}$ | $40^{\text {a,b }}$ |

${ }^{\text {a }}$ Significantly different $(p<.05)$ from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## How do AI/AN students view their Heritage language abilities?

As part of the NIES student surveys in 2019, students were also asked to evaluate how well they could speak and read their Heritage languages. Overall, 40 and 42 percent of AI/AN students at grades 4 and 8 , respectively, reported that they could not speak their Heritage language (table 22) with 49 percent of AI/AN fourth-graders and 56 percent of AI/AN eighth-graders reporting that they could not read in their Heritage languages (table 23). ${ }^{7}$

Among the remainder of $\mathrm{Al} / \mathrm{AN}$ students—those who had at least some Heritage language abilities—the plurality, across both grades, reported that they could speak or read a few words or phrases. Looking at this group in the context of school types, the percentages of AI/AN students attending BIE schools at both grades with this level of language ability were higher than the percentages of their grade-level peers attending high density public schools, which were in turn higher than the percentages for students attending low density public schools.

[^15]Table 22. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on how they rate themselves in speaking an AI/AN language, by school type/density: 2019

| How do you rate yourself in speaking an AI/AN language? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| I cannot speak an AI/AN language | 40 | 48 | 39a | $29^{\text {a,b }}$ |
| I can speak a few words or phrases | 43 | 36 | $44^{\text {a }}$ | $52^{\text {a,b }}$ |
| I can speak well | 17 | 16 | 17 | $19^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| I cannot speak an AI/AN language | 42 | 54 | $31^{\text {a }}$ | $\mathrm{g}^{\text {a,b }}$ |
| I can speak a few words or phrases | 49 | 39 | $58^{\text {a }}$ | $78^{\text {a,b }}$ |
| I can speak well | 9 | 7 | $10^{\text {a }}$ | $12^{\text {a,b }}$ |

[^16]Table 23. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on how they rate themselves in reading an AI/AN language, by school type/density: 2019

| How do you rate yourself in reading an AI/AN language? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| I cannot read an AI/AN language | 49 | 55 | $45^{\text {a }}$ | $38^{\text {a,b }}$ |
| I can read a few words or phrases | 36 | 31 | $38^{\text {a }}$ | $44^{\text {a,b }}$ |
| I can read well | 15 | 14 | 17 | $19^{\text {a }}$ |
| Grade 8 |  |  |  |  |
| I cannot read an AI/AN language | 56 | 68 | $45^{\text {a }}$ | $22^{\text {a,b }}$ |
| I can read a few words or phrases | 36 | 26 | $45^{\text {a }}$ | $65^{\text {a,b }}$ |
| I can read well | 8 | 6 | $10^{\text {a }}$ | $13^{\text {a,b }}$ |

a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## Do AI/AN students have teachers who speak their Heritage languages?

While AI/AN students report that their teachers are their second-most likely source for learning about their Heritage languages (with their families being their primary source), small proportions of AI/AN students in 2019 had teachers who reported having even moderate levels of fluency.

Overall, approximately 9 percent of AI/AN fourth-graders and 7 percent of AI/AN eighth-graders had teachers who spoke (to at least a moderate level) Heritage languages spoken by their AI/AN students (table 24). For both grades in general, percentages of AI/AN students attending BIE schools who had teachers who were fluent native speakers were higher than for students attending high density or low density public schools; however, these percentages for BIE students were still relatively low: 24 percent at grade 4 and 18 percent at grade 8 .

At both grades, the overall picture shows that approximately 90 percent of AI/AN students have teachers with little or no Heritage language speaking capability (combining "nonspeaker" and "minimal ability" categories). These NIES results speak to the enormous challenges faced by schools in assisting with Native language preservation as they operate within the larger context where "three quarters of [Native languages] are endangered" (U.S. Departments of Education, Health and Human Services, and Interior, 2016, page 13).

Table 24. Percentage distribution of fourth- and eighth-grade AI/AN students, whose teachers reported the extent to which they speak any AI/AN Ianguages, by school type/density: 2019

| To what extent do you speak any of the native languages spoken by AI/AN students who attend this school? If you know more than one of these languages, answer for the one you know best. | All Al/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| No knowledge or skill; nonspeaker | 73 | 95 | $66^{\text {a }}$ | $24^{\text {a,b }}$ |
| Minimal functional or communicative ability; ability to use some words or phrases | 18 | 4 | $23^{a}$ | $43^{\text {a,b }}$ |
| Moderate communicative ability; can express some ideas and communicate in some situations, but limited and cannot always express ideas | 5 | \# | $4^{\text {a }}$ | 9a,b |
| Fluent nonnative speaker | \# | 1 | \# | 1 |
| Fluent native speaker | 4 | \# | $7{ }^{\text {a }}$ | $24^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| No knowledge or skill; nonspeaker | 77 | 96 | $60^{\text {a }}$ | $13^{a, b}$ |
| Minimal functional or communicative ability; ability to use some words or phrases | 16 | 4 | $33^{\text {a }}$ | $54^{\text {a,b }}$ |
| Moderate communicative ability; can express some ideas and communicate in some situations, but limited and cannot always express ideas | 2 | \# | $4^{\text {a }}$ | $15^{\text {a,b }}$ |
| Fluent nonnative speaker | \# | \# | 1 | \# |
| Fluent native speaker | 5 | \# | 2 | $18^{\text {b }}$ |

[^17]
# Do AI/AN students receive instruction in core subjects in their Heritage languages? 

As part of the NIES teacher surveys in 2019, teachers were asked whether they used their students' AI/AN languages to teach any of the core subjects. Response options ranged from "Instruction is entirely in English" to "Instruction is primarily in the students' American Indian or Alaska Native language(s)." Given the results from the previous survey question about language capabilities, it is not surprising that approximately 95 percent of AI/AN students had classroom instruction in core subjects entirely in English or with only the occasional use of a word or a phrase from their Heritage languages (table 25). Even in BIE schools, 83 percent of AI/AN fourth-graders and 87 percent of AI/AN eighth-graders received instruction in core subjects with only the occasional or no use of their Heritage languages. It should also be noted that regardless of school type, the likelihood of AI/AN students receiving instruction primarily in their Heritage languages is generally almost zero.

Table 25. Percentage distribution of fourth- and eighth-grade AI/AN students, whose teachers reported the extent to which they use AI/AN languages when teaching core subjects, by school type/density: 2019

| Grade and teacher survey question | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: To what extent do you use your students' AI/AN language(s) when you teach any core subject (reading, mathematics, science, and social studies)? |  |  |  |  |
| Instruction is entirely in English | 78 | 95 | $83^{\text {a }}$ | $48^{\text {a,b }}$ |
| Instruction is primarily in English, but words or phrases from the students' AI/AN language(s) are included occasionally | 16 | 4 | $13^{a}$ | $34^{\text {a,b }}$ |
| Instruction is primarily in English, but words or phrases from the students' AI/AN language(s) are included frequently | 6 | 1 | $4^{\text {a }}$ | $17^{\text {a,b }}$ |
| Instruction is primarily in the students' AI/AN language(s) | \# | \# | \# | 1 |

Grade 8: To what extent do you use your students' AI/AN language(s) when you teach reading/language arts?

| Instruction is entirely in English | 87 | 98 | $81^{\text {a }}$ | $46^{\text {a,b }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Instruction is primarily in English, but words or phrases from the students' AI/AN language(s) are included occasionally | 9 | 2 | $18^{\text {a }}$ | $41^{\text {a,b }}$ |
| Instruction is primarily in English, but words or phrases from the students' AI/AN language(s) are included frequently | 4 | \# | $1^{\text {a }}$ | $13^{\text {a,b }}$ |
| Instruction is primarily in the students' AI/AN language(s) | \# | \# | \# | \# |
| Grade 8: To what extent do you use your students' AI/AN language(s) when you teach mathematics? |  |  |  |  |
| Instruction is entirely in English | 89 | 99 | $85^{\text {a }}$ | $59^{\text {a,b }}$ |
| Instruction is primarily in English, but words or phrases from the students' AI/AN language(s) are included occasionally | 6 | 1 | $11^{\text {a }}$ | $29^{\text {a,b }}$ |
| Instruction is primarily in English, but words or phrases from the students' AI/AN language(s) are included frequently | 5 | \# | 4 | $13^{\text {b }}$ |
| Instruction is primarily in the students' AI/AN language(s) | \# | \# | \# | \# |

\# Rounds to zero.
${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\text {b }}$ Significantly different $(p<.05)$ from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## How are teachers of AI/AN students prepared to support language learning?

In 2019, teachers also answered a multipart question about the types of training that they had received to support language learning for students whose first language is not English. Overall, 56 percent of AI/AN fourth-graders and 50 percent of AI/AN eighth-graders had teachers who had taken at least one college-level course focused on supporting English language learners (table 26). ${ }^{8}$ At grade 4, higher percentages of AI/AN students in BIE schools than in high density public schools had teachers with this level of training to support language learning ( 64 vs .52 percent).

Overall, 22 and 23 percent of AI/AN students at grades 4 and 8 , respectively, had teachers with some type of advanced training in this area, such as an undergraduate or graduate major, minor, or special emphasis. But looking at results by school type, higher percentages of AI/AN students attending BIE schools than attending low and high density public schools had teachers with such advanced training, with almost half (49 percent) of BIE students having teachers with this level of preparation.

To complete this sequence of questions, the teachers were asked whether they had received any other training or professional development to support English language learners. Overall, 50 and 54 percent of fourth- and eighth-grade AI/AN students' teachers, respectively, reported that they had received some type of supplemental training. When looking at the results by school type, higher percentages of AI/AN students at both grades in low density public schools than in BIE schools had teachers who had some type of training or professional development for supporting students whose first language is not English.

These results suggest potential areas of research beyond NIES, such as questions about the availability of professional development and how it may be impacted by geography (e.g., relatively remote settings) and/or the availability of online training.

[^18]Table 26. Percentage distribution of fourth- and eighth-grade AI/AN students, whose teachers reported whether they have received training on teaching students whose first language is not English, by school type/density: 2019

| Have you received any of the following forms of <br> preparation for teaching students whose first <br> language is not English (sometimes called Limited <br> English Proficiency [LEP] students or English <br> Language Learners [ELL])? |
| :--- |
| All Al/AN |
| Grade 4: At least one college-level course on how to teach students whose first language is not English |
| (but not a major, minor, or special emphasis) |

[^19]
## What are some of the overarching language learning contexts for AI/AN students?

To conclude this exploration of access to and support for language learning, we will examine results from school data and responses from school administrators in 2019 that provide additional information about the overall school population and school programming that potentially impacts educational outcomes for AI/AN students. The schools that serve AI/AN students are, of course, embedded in larger legal and historical contexts that influence local decisions. Regardless, researchers have long noted that a key component of success-for all students-is an environment that promotes the recognition and nurturing of the funds of knowledge that students bring to their school, over and against approaches that view students from a deficit perspective. (Carjuzaa \& Ruff, 2016; Moll, Amanti, Neff, \& Gonzalez, 1992; WIDA, 2014).

Along this same line of thought-how students are "seen" holistically and, more specifically, how students are formally identified impacts the types of services that they will receive within their schools. The long-standing challenges around accurately identifying AI/AN students for special services is widely discussed (Faircloth \& Tippeconnic, 2000; Kim \& Helphenstine, 2017; Thomas \& Collier, 1997). In the United States, Heritage language learning is inextricably intertwined with varying local and state policies and practices around English language learning. Readers should note that while NIES does not directly gather data about local and state initiatives around Heritage language preservation and instruction on the one hand, or English-only approaches on the other, the NIES data can play a role in the larger research conversation about this complex and challenging educational space. Reinhardt (2017) provides some needed context for considering these complexities, with a core evaluation being where students currently are on the language-learning continuum-and where on that continuum that they, their families, and their communities are motivated to see them arrive in the future (exhibit 2).

Exhibit 2. Indigenous language-learner continuum


SOURCE: Reinhardt, M. (2017). Curriculum development, lesson planning, and delivery: A guide to Native language immersion. Cogent Education, 4(1), 1340861. https://www.cogentoa.com/article/10.1080/2331186X.2017.1340861

## What proportion of AI/AN students are identified as English learners?

With this context in mind, NIES results show that, overall, 12 percent of AI/AN fourth-graders and 9 percent of AI/AN eighth-graders were identified as English learners ${ }^{9}$ in 2019 (table 27). Results by school type showed that larger percentages of AI/AN students attending BIE schools were identified as English learners compared to their grade-level peers in low density and high density public schools, with 30 percent of fourth-graders and 26 percent of eighth-graders in BIE schools identified as English learners. Again, readers are encouraged to keep in mind the earlier comments that introduced this subsection about the complex and varying local and state programming in this space, the ultimate goals of those programs, and the challenges around making accurate identifications of AI/AN students for special services.

Table 27. Percentage distribution of fourth- and eighth-grade AI/AN students, by school type/density and status as English learners: 2019

| Status as English learners | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Identified as English learners | 12 | 9 | 9 | $30^{\text {a,b }}$ |
| Not identified as English learners | 88 | 91 | 91 | $70^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| Identified as English learners | 9 | 3 | $9^{\text {a }}$ | $26^{\text {a,b }}$ |
| Not identified as English learners | 91 | 97 | $91^{\text {a }}$ | $74^{\text {a,b }}$ |

${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

As part of NAEP data collection in 2019, school administrators were asked to indicate the percentage of students enrolled in their schools who were identified as English learners. ${ }^{10}$ This type of information about school enrollment potentially impacts local decisions about programming, teacher deployment, and even the day-to-day scheduling and coordination of classes.

Overall, the majority of AI/AN students (approximately 72 percent at grade 4 and 75 percent at grade 8) attended schools where English learners represented 10 percent or less of the total student enrollment at their schools (table 28). Looking at these results by school type, the percentages of AI/AN fourth-graders attending schools with the same proportions (i.e., 10 percent or less) of English learner enrollment were approximately 67,69 , and 59 percent for students attending low density public schools, high density public schools, and BIE schools, respectively. The parallel percentages at grade 8 were 77,71 , and 58 percent.

[^20]At the other end of the spectrum regarding the relative proportions of English learner enrollments in schools serving AI/AN students, results for BIE schools showed that approximately 27 percent of their AI/AN fourth-graders and 17 percent of their AI/AN eighth-graders attended schools where over half of the students enrolled were identified as English learners.

Table 28. Percentage distribution of fourth- and eighth-grade AI/AN students, by school type/density and school-identified percentage of limited-English proficient students in their schools: 2019

| Of the students currently enrolled in your school, what percentage has been identified as limited English proficient? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| 0\% | 28 | 9 | $31^{\text {a }}$ | $31^{\text {a }}$ |
| 1-5\% | 31 | 39 | 31 | $21^{\text {a }}$ |
| 6-10\% | 12 | 19 | $7^{\text {a }}$ | $7^{\text {a }}$ |
| 11-25\% | 14 | 19 | 12 | $7^{\text {a }}$ |
| 26-50\% | 10 | 10 | 15 | 7 |
| 51-75\% | 3 | 3 | 2 | $8^{\text {a }}$ |
| 76-90\% | 1 | 1 | 1 | $6^{\text {a,b }}$ |
| Over 90\% | 1 | \# | \# | 12 |
| Grade 8 |  |  |  |  |
| 0\% | 22 | 15 | 33a | $32^{\text {a }}$ |
| 1-5\% | 40 | 46 | $28^{\text {a }}$ | $17^{\text {a,b }}$ |
| 6-10\% | 13 | 16 | 11 | $9{ }^{\text {a }}$ |
| 11-25\% | 16 | 17 | 14 | 17 |
| 26-50\% | 6 | 4 | 11 | $8^{\text {a }}$ |
| 51-75\% | 2 | 1 | 1 | 9a,b |
| 76-90\% | 1 | \# | 2 | \# |
| Over 90\% | 1 | \# | 1 | $7^{\text {a,b }}$ |

\# Rounds to zero.
a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent Al/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## What do school administrators report about Heritage language programming at their schools?

Native language immersion programs are a fairly recent development in the education of AI/AN students. The reasons that tribal communities have initiated immersion programs are multifold and bring us back full circle to our introductory comments: to directly address language extinction by bolstering Native language revitalization through focused and supportive immersive Indigenous language learning environments for young AI/AN students; to enhance AI/AN student academic achievement and self-worth; to address AI/AN student retention rates; to maintain irreplaceable worldviews that are inextricably tied to individual Indigenous languages; and to strengthen Native communities through educational sovereignty (McCarty \& Lee, 2014; Pease-Pretty on Top, 2003).

In many ways, these goals, as articulated by researchers and carried forward by programs around the country, are manifestations of the aspirational language of the Native American Languages Act of 1990, which made it a federal policy "to encourage and support the use of Native American languages as a medium of instruction in order to encourage and support (A) Native American language survival; (B) educational opportunity; (C) increased student success and performance; (D) increased student awareness and knowledge of their culture and history; and (E) increased student and community pride" (NALA, 1990).

With this important backdrop, and current context in mind, we will examine the last two school survey questions in this section regarding immersion schools and the availability of instruction in American Indian or Alaska Native oral and written languages in 2019.

Overall, 2 percent of AI/AN fourth-graders and 6 percent of AI/AN eighth-graders attended American Indian or Alaska Native language immersion schools in 2019 (table 29). Approximately one-quarter of AI/AN students attended BIE schools that their administrators reported as being language immersion schools ( 23 percent at grade 4 and 25 percent at grade 8 ).

Table 29. Percentage distribution of fourth- and eighth-grade AI/AN students, whose school administrators reported whether their school is an AI/AN Ianguage immersion school, by school type/density: 2019

| Is your school an AI/AN language immersion school? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Yes | 2 | \# | 3 | $23^{\text {a,b }}$ |
| No | 98 | 100 | 97 | $77^{\text {a,b }}$ |
| Grade 8 |  |  |  |  |
| Yes | 6 | 4 | 7 | $25^{\text {b }}$ |
| No | 94 | 96 | 93 | $75^{\text {b }}$ |

[^21]a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

School administrators were asked whether their students received instruction about Indigenous cultures, and specifically in terms of instruction about their oral or written languages. Please note that this survey question was for all administrators, whether they worked in immersion schools or not. Overall, 49 percent of AI/AN fourth-graders and 45 percent of AI/AN eighth-graders had school administrators who reported that their students received instruction about Native oral languages (table 30). Percentages for instruction about Native written languages for AI/AN fourth- and eighth-graders were 43 and 42 percent, respectively.

At both grades, AI/AN students attending BIE schools were more likely to receive instruction about both Native oral and Native written languages compared to their grade-level peers attending high or low density public schools, and in turn, Al/AN students attending high density public school were more likely than their low density public school peers to receive instruction about Native oral and written languages.

Table 30. Percentage distribution of fourth- and eighth-grade AI/AN students, whose school administrators reported whether students in school receive instruction about AI/AN cultures in oral language or written language, by school type/density: 2019

| Do students in your school receive instruction about AI/AN cultures in any of the following areas? | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4: Oral language |  |  |  |  |
| Yes | 49 | 27 | $61^{\text {a }}$ | $98^{\text {a,b }}$ |
| No | 51 | 73 | 39a | $2^{\text {a,b }}$ |
| Grade 8: Oral language |  |  |  |  |
| Yes | 45 | 24 | $72^{\text {a }}$ | $96^{\text {a,b }}$ |
| No | 55 | 76 | $28^{\text {a }}$ | $4^{\text {a,b }}$ |
| Grade 4: Written language |  |  |  |  |
| Yes | 43 | 26 | $48^{\text {a }}$ | $77^{\text {a,b }}$ |
| No | 57 | 74 | $52^{\text {a }}$ | $23^{\text {a,b }}$ |
| Grade 8: Written language |  |  |  |  |
| Yes | 42 | 24 | $65^{\text {a }}$ | $87^{\text {a,b }}$ |
| No | 58 | 76 | 35a | $13^{\text {a,b }}$ |

[^22]
## Performance Results for the Nation

AI/AN students in the United States represent a diverse spectrum of educational experiences and settings: broadly speaking, they not only attend different types of schools, but the specific types of schools that they attend also vary across multiple student factors. The following table provides information about some of these differing characteristics to provide context for the national performance results that follow later in this section.

For example, in 2019, the percentages of AI/AN fourth- and eighth-graders attending BIE schools who reported having a computer in their home were lower than the parallel percentages for their same-grade peers attending high density public schools, which were likewise lower than the percentages for AI/AN students attending low density public schools (table 31). A similar pattern in percentages (i.e., the percentage of BIE schools is lower than the percentage of high density public schools, which is in turn lower than that of low density public schools) is evident for eighth-grade students reporting more than 100 books in their homes and who have at least one parent with a college education. This stepwise pattern is reversed for both grades for students who attended rural schools and who were eligible for the National School Lunch Program: for these factors the percentages of BIE students were higher than for AI/AN students attending high density public schools, which were in turn higher than the percentages for AI/AN students attending low density public schools.

Table 31. Percentage of fourth- and eighth-grade AI/AN students, by school type/density and student characteristic: 2019

| Grade and student characteristic | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Attend city schools | 16 | 29 | $2^{\text {a }}$ | \# |
| Attend suburban schools | 16 | 28 | \# | $3^{\text {a }}$ |
| Attend town schools | 21 | 19 | $32^{\text {a }}$ | $7 \mathrm{7a,b}$ |
| Attend rural schools | 46 | 24 | $66^{\text {a }}$ | $90^{\text {a,b }}$ |
| Identified as English learners | 12 | 9 | 9 | $30^{\text {a,b }}$ |
| Identified as students with disabilities | 17 | 18 | 17 | $14^{\text {a,b }}$ |
| Eligible for National School Lunch Program | 74 | 67 | $88^{\text {a }}$ | $96^{\text {a,b }}$ |
| More than 100 books in home | 22 | 23 | $17^{\text {a }}$ | $16^{\text {a }}$ |
| Computer in home | 52 | 54 | $47^{\text {a }}$ | $44^{\text {a,b }}$ |
| No days absent from school | 34 | 36 | 31 | 33 |
| Grade 8 |  |  |  |  |
| Attend city schools | 17 | 26 | $3^{a}$ | $6^{\text {a }}$ |
| Attend suburban schools | 15 | 26 | \# | \# |
| Attend town schools | 26 | 23 | 33 | $12^{\text {a,b }}$ |
| Attend rural schools | 43 | 25 | $64^{\text {a }}$ | $82^{\text {a, b }}$ |
| Identified as English learners | 10 | 3 | $9^{\text {a }}$ | $26^{\text {a b }}$ |
| Identified as students with disabilities | 17 | 17 | 16 | 16 |
| Eligible for National School Lunch Program | 72 | 61 | $84^{\text {a }}$ | $96^{\text {a,b }}$ |
| Parent(s) graduated from college | 42 | 44 | $37^{\text {a }}$ | 29a,b |
| More than 100 books in home | 14 | 19 | $11^{\text {a }}$ | $7{ }^{\text {a,b }}$ |
| Computer in home | 68 | 76 | $60^{\text {a }}$ | $45^{\text {a,b }}$ |
| No days absent from school | 30 | 33 | 30 | 29 |

\# Rounds to zero.
${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density schools have less than 25 percent AI/AN students. High density schools have 25 percent or more. Information on parental education was not collected at grade 4 . SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

The following figures show whether NAEP reading and mathematics scores have changed over time for AI/AN students in the three school types and for all AI/AN students in public schools in the nation. These figures use asterisks to identify prior assessment years for which average scores are statistically different from average scores in 2019. While not noted in these figures, at both grades and for both subjects, scores for students in low density public schools in 2019 were higher than those for students in high density public or BIE schools, and scores for students in high density public schools were higher than those for students in BIE schools.

## Reading

- At grade 4, average reading scores in 2019 for AI/AN students in low density and high density public schools and for all AI/AN students (public) were not significantly different from the scores in all previous assessment years (figure 1). For fourth-graders attending BIE schools, the average reading score in 2019 was higher than in 2007 and 2009.
- At grade 8, the average reading scores in 2019 for AI/AN students in low density public schools and for all AI/AN students (public) were not significantly different from the scores in previous assessment years (figure 2). For AI/AN eighth-graders in high density public schools, the average reading score in 2019 was lower than scores in 2009 or 2015. For eighth-graders attending BIE schools, the average reading score in 2019 was higher than in 2007 and 2009.

Figure 1. Trend in fourth-grade NAEP reading average scores for AI/AN students, by school type/density: Various years, 2005-19
Scale score


O Low density public schools $\quad$ All AI/AN students (public)

[^23]Figure 2. Trend in eighth-grade NAEP reading average scores for AI/AN students, by school type/density: Various years, 2005-19
Scale score


High density public schools $\Delta$ BIE schools

* Significantly different ( $p$ < 05) from 2019.

NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. In 2019, NAEP reading results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP reading scale ranges from 0 to 500 . School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students. High density public schools have 25 percent or more. All AI/AN students (public) includes only students in public schools.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

## Mathematics

- At grade 4, the average mathematics score in 2019 for students in BIE schools was higher than the scores in 2007 and 2009 (figure 3). Across all other school types presented here, average mathematics scores in 2019 for AI/AN fourth-graders were not significantly different from the scores in all previous assessment years.
- At grade 8, for students attending BIE schools, the average mathematics score in 2019 was higher than the score in 2007 (figure 4). For AI/AN eighth-graders attending all other school types presented here, average mathematics scores in 2019 were not significantly different from their scores in previous assessment years.

Figure 3. Trend in fourth-grade NAEP mathematics average scores for AI/AN students, by school type/density: Various years, 2005-19


* Significantly different ( $p$ < 05) from 2019.

NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. In 2019, NAEP mathematics results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP mathematics scale ranges from 0 to 500 at grades 4 and 8 . School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students. High density public schools have 25 percent or more. All AI/AN students (public) includes only students in public schools. Performance results are not available for BIE schools at fourth grade in 2015 because school participation rates did not meet the 70 percent criteria. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

Figure 4. Trend in eighth-grade NAEP mathematics average scores for AI/AN students, by school type/density: Various years, 2005-19

Scale score


[^24]NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. In 2019, NAEP mathematics results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP mathematics scale ranges from 0 to 500 at grades 4 and 8 . School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent Al/AN students. High density public schools have 25 percent or more. All Al/AN students (public) includes only students in public schools. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

## Perspectives Beyond the Average Score

AI/AN students represent multiple tribal affiliations and a variety of Native languages. They come from homes with different levels of support and resources, and they attend schools with various percentages of AI/AN students and levels of available resources. The following subsections of this report will go beyond the average score via

- descriptions of AI/AN students based on analyses of Native students performing at or above the 75th percentile and below the 25th percentile (referred to subsequently as "higher-performing" and "lower-performing" AI/AN students, respectively), relative to other AI/AN students in either mathematics or reading; ${ }^{11}$ and
- a closer examination of results derived from the combination of multiple related survey questions (i.e., composite variables) centered around academic engagement and expectations. ${ }^{12}$

Just as in the AI/AN Culture and Language section, readers should note that the selection of the factors for this section and the construction of the composite variables presented here were based on guidance from a panel of experts in AI/AN education (for more information see the Technical Notes and the list of NIES Technical Review Panel members on the Acknowledgments page). Readers should also note that the results presented in this section are not to be interpreted as drawing causal links between factors and performance. There are many reasons why the performance of one group of students differs from another, including ones that are not asked about (and therefore, not measured) in NIES, such as opportunity, socioeconomic status, quality of teaching, or biases in curriculum.

## Factors Associated with Higher- and LowerPerforming AI/AN Students

The results presented in this section provide some selected factors that are associated with higher performance by AI/AN fourth- and eighth-graders and that may point the way for additional research. The questions about access were drawn from student self-reports: the first two from the NAEP questionnaires, and the last one from the NIES questionnaires (table 32). The questions about family involvement were drawn from the NIES school administrator questionnaires (table 33). The questions about motivation were drawn from the NAEP student questionnaires (table 34). Percentages that are statistically different from one another are indicated by an asterisk (*). Other pairs may be numerically different from one another, however those differences are not statistically significant.

[^25]
## Is the availability of media and resources at home and school related to higher vs. lower performance by AI/AN students?

Variables related to the availability of resources at home and at school showed fairly consistent patterns across both grades and subjects (table 32). Compared to their lower-performing peers, higher-performing AI/AN students were more likely to report that they had

- Internet access at home (at both grades 4 and 8 in reading and mathematics);
- more than 100 books in their homes (at grade 8 in reading and at grades 4 and 8 in mathematics); and
- a school library, media center, or resource center that contained materials about AI/AN people (at grades 4 and 8 in reading).

Table 32. Percentage of fourth- and eighth-grade AIIAN students in NAEP reading and mathematics, by performance level and selected factors: 2019

| Factor | Reading |  | Mathematics |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Higherperforming <br> AI/AN students | Lowerperforming AI/AN students | Higherperforming AI/AN students | Lowerperforming <br> AI/AN students |
| Grade 4 |  |  |  |  |
| Home has Internet access | 93* | 62 | 93* | 70 |
| Home has more than 100 books | 29 | 18 | 29* | 18 |
| School has materials about AI/AN people | 70* | 56 | 65 | 63 |
| Grade 8 |  |  |  |  |
| Home has Internet access | 95* | 85 | 95* | 84 |
| Home has more than 100 books | 30* | 5 | 28* | 7 |
| School has materials about AI/AN people | 80* | 68 | 80 | 71 |

* Significantly different ( $p<.05$ ) from corresponding result for lower-performing AI/AN students.

NOTE: AI/AN = American Indian/Alaska Native. Only selected response options are shown for each factor; not all response options are shown.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study and 2019 Reading and Mathematics Assessments.


## Is family involvement in school organizations related to higher vs. lower performance by AI/AN students?

School administrators who completed the 2019 NIES questionnaire answered a series of questions about whether the families of their students were involved in different types of school programs. The relationship of these school-level variables with student achievement showed varying patterns across grades and subjects, but a general pattern of differences can be observed when comparing student performance levels (table 33). In 2019, compared to their lower-performing peers, higher-performing AI/AN students were more likely to attend schools where their families were involved in

- volunteer programs (at grade 4 in reading and at grade 8 in mathematics); and
- parent-teacher organizations (at grades 4 and 8 in reading and at grade 4 in mathematics).

In the case of student academic clubs, a difference between lower- and higherperforming AI/AN students was observed in the grade 8 mathematics sample. In 2019, higher-performing AI/AN eighth-graders were more likely than their lower-performing peers to attend a school where their families were involved in academic clubs.

Table 33. Percentage of fourth- and eighth-grade AI/AN students in NAEP reading and mathematics, by performance level and selected factors: 2019

| Factor | Reading |  | Mathematics |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Higherperforming AI/AN students | Lowerperforming AI/AN students | Higherperforming <br> AI/AN students | Lowerperforming AI/AN students |
| Grade 4 |  |  |  |  |
| Families involved in volunteer programs | 76* | 53 | 73 | 62 |
| Families involved in parent-teacher organizations | 81* | 68 | 83* | 73 |
| Families involved in academic club | 31 | 21 | 26 | 19 |
| Grade 8 |  |  |  |  |
| Families involved in volunteer programs | 61 | 49 | 66* | 51 |
| Families involved in parent-teacher organizations | 71* | 56 | 67 | 61 |
| Families involved in academic club | 29 | 23 | 39* | 23 |

* Significantly different ( $p$ < .05) from corresponding result for lower-performing AI/AN students. NOTE: AI/AN = American Indian/Alaska Native. Only selected response options are shown for each factor; not all response options are shown.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study and 2019 Reading and Mathematics Assessments.


## Are motivational factors related to higher vs. lower performance by AI/AN students?

While almost all of the student-reported motivational factors presented here showed numeric differences between the percentages for higher- and lower-performing AI/AN students, measurable differences were consistently evident for fourth-graders in reading and mathematics. For example, compared to their lower-performing counterparts, higher-performing AI/AN fourth-grade students were more likely to report that the statement "I try very hard even after making mistakes" described them "very much" (table 34).

Compared to their lower-performing peers, higher-performing AI/AN fourth-graders were more likely to report that

- they "all or almost all of the time" started working on assignments right away rather than waiting until the last minute; and
- the statements "I want to become better in math this year" or "I want to become a better reader this year" described them "exactly."

Table 34. Percentage of fourth- and eighth-grade AI/AN students in NAEP reading and mathematics, by performance level and selected factors: 2019

| Factor | Reading |  | Mathematics |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Higherperforming AI/AN students | Lowerperforming AI/AN students | Higherperforming AI/AN students | Lowerperforming AI/AN students |
| Grade 4 |  |  |  |  |
| Students reported that trying very hard even after making mistakes described them "very much" | 59* | 44 | 58* | 39 |
| Students reported that they started working on assignments right away "all or almost all of the time" | 56* | 31 | 49* | 29 |
| Students reported that wanting to become better in math or a better reader during the current school year was "exactly" like them | 74* | 45 | 71* | 47 |
| Grade 8 |  |  |  |  |
| Students reported that trying very hard even after making mistakes described them "very much" | 39 | 28 | 30 | 30 |
| Students reported that they started working on assignments right away "all or almost all of the time" | 25 | 15 | 19 | 16 |
| Students reported that wanting to become better in math or a better reader during the current school year was "exactly" like them | 47 | 31 | 52 | 42 |

[^26]
## Composites Related to Engagement and Expectations

In addition to the array of questions about AI/AN culture and language that we examined in previous sections of the report, students also responded to survey questions that touched on such issues as self-efficacy and motivation. In this subsection, we will look at two composite variables that combine the results across multiple conceptually related survey questions focused on student engagement at school and how the students' academic efforts influence their expectations about the future.

## Engagement at School

This composite provides a look at what would be considered noncognitive factors that are potentially related to academic performance. Specifically, this composite is made up of AI/AN students' responses to four survey questions by which students indicated the extent to which they

- put a lot of effort into their schoolwork;
- desired to be one of the best students in their class;
- enjoyed being challenged in their classes; and
- felt they belonged at school.

Their composite score, then, reflects their self-view about their academic motivation and overall comfort in their schools.

Approximately 54 percent of AI/AN fourth-graders and 38 percent of eighth-graders indicated that the statements about school engagement described a person "a lot like" them (table 35). For each of the three response categories for this composite variable, percentages by school density showed no measurable differences among students who attended low density public schools, high density public schools, and BIE schools.

Table 35. Percentage distribution of fourth- and eighth-grade AI/AN students who reported on the extent to which survey statements about engagement at school described a person like them, by school type/density: 2019

| Extent to which survey statements about engagement at school described a person like the student and grade | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Grade 4 |  |  |  |  |
| Not like me | 7 | 7 | 9 | 8 |
| A little like me | 39 | 38 | 40 | 38 |
| A lot like me | 54 | 55 | 51 | 54 |
| Grade 8 |  |  |  |  |
| Not like me | 17 | 18 | 16 | 16 |
| A little like me | 45 | 44 | 46 | 46 |
| A lot like me | 38 | 38 | 38 | 38 |

NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## Perceptions About Effort in School (grade 8 only)

This composite is constructed from four related survey questions. All of the questions point toward the future and invite students to make a connection between their current work and their aspirations.

In the first three questions, eighth-graders indicated the extent to which they agreed that if they put in enough effort, they would

- succeed in school;
- get into college; and
- get a good job.

In the final question making up this composite, students were asked the extent to which

- the things they were learning in school would prepare them for the lives they wanted to lead in the future.

Approximately 93 percent of AI/AN eighth-grade students believed that their schooling would bolster their chances for a successful future (i.e., combining the percentages for "agree" and "strongly agree" in table 36). AI/AN eighth-graders attending BIE schools were more likely to report that they "strongly agree[d]" that their academic efforts would positively affect their futures, compared to their peers attending low density and high density public schools.

Table 36. Percentage distribution of eighth-grade AI/AN students who reported on the extent to which they agreed with survey statements about effort in school, by school type/density: 2019

| Extent to which survey statements about engagement at school described a person like the student | All AI/AN students | School type/density |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Low density public schools | High density public schools | BIE schools |
| Disagree | 7 | 8 | 7 | 6 |
| Agree | 41 | 43 | 40 | 39a |
| Strongly agree | 52 | 49 | 53 | $55^{\text {a,b }}$ |

[^27]
## State Results

Demographic data as well as reading and mathematics performance results for AI/AN fourth- and eighth-graders in the 15 states for which state-level results can be reported are presented in this section. These states have relatively large populations of AI/AN students, representing about 66 percent of the AI/AN student enrollment in the nation in the 2018-19 school year. State-level data include results from AI/AN students who attended public and BIE schools in 2019. The national AI/AN sample referenced as a point of comparison to these state results is also made up of public and BIE school students only.

Readers should note that these 15 states vary across multiple demographic factors, and, when comparing performance, this variation should be kept in mind (table 37). While the state demographics differ slightly by grade and subject, percentages derived from fourth-grade reading are shown here for considerations of space. All four subject/grade demographics charts are shown in the Appendix
Tables section.
Table 37. Percentage of fourth-grade AI/AN students in NAEP reading, by selected school and student characteristics and jurisdiction: 2019

| Jurisdiction | School type/density |  |  | School location |  |  |  | Eligible for National School Lunch Program | Identified as English learners | Identified as students with disabilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | High density density public schools | $\begin{array}{\|r\|} \hline \text { BIE } \\ \text { schools } \end{array}$ | City | Suburb | Town | Rural |  |  |  |
| Nation | 57 | 35 | 8 | 19 | 14 | 21 | 46 | 78 | 11 | 17 |
| Alaska | 35 | 65 | $\dagger$ | 16 | 2 | 19 | 64 | 74 | 20 | 19 |
| Arizona | 41 | 38 | 22 | 25 | 8 | 23 | 45 | 86 | 8 | 14 |
| Minnesota | 65 | 31 | 4 | 22 | 9 | 22 | 46 | 81 | 2 | 31 |
| Montana | 30 | 70 | \# | 15 | 1 | 43 | 41 | 93 | 23 | 21 |
| Nebraska | 66 | 34 | $\dagger$ | 30 | \# | 18 | 51 | 86 | \# | 27 |
| New Mexico | 25 | 45 | 30 | 22 | 4 | 25 | 48 | 95 | 39 | 12 |
| North Carolina | 48 | 47 | 5 | 2 | 4 | 24 | 70 | 67 | 1 | 16 |
| North Dakota | 31 | 45 | 24 | 14 | 7 | 11 | 67 | 83 | 1 | 21 |
| Oklahoma | 43 | 57 | \# | 6 | 11 | 33 | 50 | 73 | \# | 20 |
| Oregon | 85 | 15 | \# | 20 | 30 | 25 | 25 | 83 | 12 | 13 |
| South Dakota | 26 | 54 | 20 | 20 | 2 | 10 | 68 | 87 | \# | 20 |
| Utah | 63 | 31 | 6 | 7 | 41 | 9 | 43 | 76 | 19 | 20 |
| Washington | 81 | 16 | 3 | 17 | 24 | 22 | 37 | 82 | 20 | 19 |
| Wisconsin | 57 | 35 | 8 | 13 | 9 | 22 | 57 | 84 | \# | 28 |
| Wyoming | 50 | 50 | \# | 5 | \# | 34 | 61 | 86 | 2 | 17 |

$\dagger$ Not applicable.
\# Rounds to zero.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density schools have less than 25 percent AI/AN students. High density schools have 25 percent or more. The national and state results reported here include public and BIE schools only. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## Reading Grade 4

Among the 13 states with data available to report fourth-grade reading results for both 2015 and 2019, Alaska and Oklahoma had lower average scores in 2019 compared to 2015 (table 38). Nonetheless, Oklahoma fourth-graders were the only AI/AN students from among the reportable states who scored higher than their peers in the nation in 2019. Among the other 14 states, scores were not significantly different from the nation in 8 states and scores were lower than the nation in 6 states in 2019.

Table 38. Average scores in NAEP reading for fourth-grade AI/AN students, by jurisdiction: Various years, 2005-19

| Jurisdiction | 2005 | 2007 | 2009 | 2011 | 2015 | 2019 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Nation | 203 | 204 | 204 | 202 | 204 | 202 |
| Alaska | $183^{*}$ | $188^{*}$ | 179 | 175 | $184^{*}$ | 173 |
| Arizona | 184 | $184^{*}$ | 188 | $183^{*}$ | 189 | 193 |
| Minnesota | - | 205 | 199 | 195 | 197 | 194 |
| Montana | 201 | $204^{*}$ | $206^{*}$ | 199 | 199 | 194 |
| Nebraska | - | - | - | - | - | 186 |
| New Mexico | 186 | 193 | 188 | 190 | 184 | 191 |
| North Carolina | - | 202 | 202 | 192 | 198 | 200 |
| North Dakota | 198 | 201 | 202 | 205 | 202 | 199 |
| Oklahoma | 211 | 213 | 215 | 212 | $223^{*}$ | 216 |
| Oregon | - | 206 | 210 | 213 | 192 | 199 |
| South Dakota | 194 | 192 | 190 | 191 | 190 | 193 |
| Utah | - | - | 194 | 185 | $\ddagger$ | 191 |
| Washington | - | 204 | 212 | 201 | 196 | 203 |
| Wisconsin | - | - | - | - | 207 | 198 |
| Wyoming | - | - | - | - | 203 | 202 |

- Not available.
$\ddagger$ Reporting standards not met. Sample size insufficient to permit a reliable estimate.
* Significantly different ( $p$. 05) from 2019.

NOTE: AI/AN = American Indian/Alaska Native. In 2019, NAEP reading results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP reading scale ranges from 0 to 500 . The national and state results reported here include only public and Bureau of Indian Education (BIE) schools.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

## Reading Grade 8

At grade 8, Al/AN students in Montana, Oklahoma, and South Dakota scored lower in reading in 2019 compared to 2015 (table 39). In 2019, none of the reportable states scored higher than the nation in reading at grade 8 . Scores were not significantly different from the nation in 10 states and scores were lower than the nation in 5 states in 2019.

Table 39. Average scores in NAEP reading for eighth-grade AI/AN students, by jurisdiction: Various years, 2005-19

| Jurisdiction | 2005 | 2007 | 2009 | 2011 | 2015 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nation | 249 | 247 | 251 | 252 | 252 | 248 |
| Alaska | 240* | 236* | 239* | 234 | 231 | 229 |
| Arizona | 238 | 232 | 241 | 240 | 242 | 238 |
| Minnesota | - | 246 | 257 | 258 | 250 | 237 |
| Montana | 247* | 249* | 253* | 256* | 249* | 239 |
| Nebraska | - | - | - | - | - | 237 |
| New Mexico | 236 | 233 | 236 | 240 | 241 | 237 |
| North Carolina | - | 236 | 235 | 245 | 250 | 248 |
| North Dakota | 248 | 246 | 242 | 244 | 245 | 247 |
| Oklahoma | 254 | 256 | 258 | 256 | 260* | 253 |
| Oregon | - | 260 | 259 | 256 | $\ddagger$ | 257 |
| South Dakota | 238 | 241 | 242 | 240 | 245* | 239 |
| Utah | - | - | 235 | 244 | 247 | 232 |
| Washington | - | 251 | 253 | 253 | 251 | 237 |
| Wisconsin | - | - | - | - | 253 | 251 |
| Wyoming | - | - | - | - | $\ddagger$ | 243 |

— Not available.
$\ddagger$ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

* Significantly different ( $p$ < 05) from 2019.

NOTE: AI/AN = American Indian/Alaska Native. In 2019, NAEP reading results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP reading scale ranges from 0 to 500 . The national and state results reported here include only public and Bureau of Indian Education (BIE) schools.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

## Mathematics Grade 4

Among the 12 states with data available to report fourth-grade mathematics results for both 2015 and 2019, AI/AN students in Alaska scored lower in 2019 compared to 2015 (table 40). In 2019, Oklahoma AI/AN fourth-graders scored higher in mathematics than their peers in the nation. Among the other 14 reportable states in 2019, scores were not significantly different from the nation in 8 states and scores were lower than the nation in 6 states.

Table 40. Average scores in NAEP mathematics for fourth-grade AI/AN students, by jurisdiction: Various years, 2005-19

| Jurisdiction | 2005 | 2007 | 2009 | 2011 | 2015 | 2019 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Nation | 226 | 228 | 225 | 226 | 227 | 227 |
| Alaska | $220^{*}$ | $218^{*}$ | $216^{*}$ | 213 | $219^{*}$ | 209 |
| Arizona | 215 | 213 | 213 | 215 | 218 | 216 |
| Minnesota | - | 234 | 232 | 232 | 223 | 222 |
| Montana | $223^{*}$ | $222^{*}$ | $227^{*}$ | 220 | 216 | 216 |
| Nebraska | - | - | - | - | - | 221 |
| New Mexico | 215 | 217 | 214 | 218 | 218 | 219 |
| North Carolina | - | 229 | 232 | 225 | 229 | 222 |
| North Dakota | 221 | 223 | 223 | $220^{*}$ | 224 | 226 |
| Oklahoma | $229^{*}$ | 234 | 234 | 234 | 235 | 237 |
| Oregon | - | 220 | 223 | 220 | $\ddagger$ | 219 |
| South Dakota | 217 | 215 | 217 | 218 | 215 | 213 |
| Utah | - | - | 218 | 214 | $\ddagger$ | 223 |
| Washington | - | 226 | 225 | 222 | 216 | 223 |
| Wisconsin | - | - | - | - | 231 | 229 |
| Wyoming | - | - | - | - | 220 | 219 |

- Not available.
$\ddagger$ Reporting standards not met. Sample size insufficient to permit a reliable estimate.
* Significantly different ( $p<.05$ ) from 2019.

NOTE: AI/AN = American Indian/Alaska Native. In 2019, NAEP mathematics results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP mathematics scale ranges from 0 to 500 at grades 4 and 8 . The NAEP reading scale ranges from 0 to 500 . The national and state results reported here include only public and Bureau of Indian Education (BIE) schools.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

## Mathematics Grade 8

Among the 13 states with data available to report eighth-grade mathematics results for both 2015 and 2019, Alaska scored lower on average in 2019 compared to 2015 (table 41). As was the case in grade 4, Oklahoma AI/AN eighth-graders scored higher in mathematics than their peers in the nation in 2019. Among the other 13 reportable states in 2019, scores were not significantly different from the nation in 9 states and scores were lower than the nation in 4 states.

Table 41. Average scores in NAEP mathematics for eighth-grade AI/AN students, by jurisdiction: Various years, 2005-19

| Jurisdiction | 2005 | 2007 | 2009 | 2011 | 2015 | 2019 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Nation | 264 | 264 | $266^{*}$ | 265 | $266^{*}$ | 262 |
| Alaska | $264^{*}$ | $260^{*}$ | $262^{*}$ | $258^{*}$ | $257^{*}$ | 248 |
| Arizona | 256 | 255 | 254 | 253 | 258 | 257 |
| Minnesota | - | 266 | 275 | 263 | 261 | 267 |
| Montana | 259 | 260 | 260 | $263^{*}$ | 256 | 254 |
| Nebraska | - | - | - | - | - | $\ddagger$ |
| New Mexico | 251 | 250 | 252 | 256 | 258 | 253 |
| North Carolina | - | 261 | 256 | 265 | 261 | 262 |
| North Dakota | 260 | 260 | 260 | 262 | 259 | 264 |
| Oklahoma | 267 | 269 | 269 | 272 | 269 | 270 |
| Oregon | - | 264 | 273 | 260 | $\ddagger$ | 264 |
| South Dakota | 250 | 254 | 260 | 257 | 257 | 255 |
| Utah | - | - | 263 | 244 | 240 | 257 |
| Washington | - | 264 | 268 | 256 | 263 | 259 |
| Wisconsin | - | - | - | - | 273 | 266 |
| Wyoming | - | - | - | - | 252 | 258 |

— Not available.
$\ddagger$ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

* Significantly different ( $p<.05$ ) from 2019.

NOTE: AI/AN = American Indian/Alaska Native. In 2019, NAEP mathematics results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP mathematics scale ranges from 0 to 500 at grades 4 and 8 . The national and state results reported here include only public and Bureau of Indian Education (BIE) schools.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

> Readers are encouraged to explore the References and Supplemental Resources on the following pages. The authors specifically invite the emerging generation of future AI/AN educational experts, policymakers, and leaders to get engaged with the issues articulated in this report, as well as the points of view accessed via the resources.

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## Technical Notes

## Sampling

To maximize student sample sizes and to support the reporting of results, all fourth- and eighthgrade AI/AN students in the sampled schools were selected for participation in the NIES survey. All students participating in the NIES survey completed the same grade-specific questionnaire regardless of the NAEP subject area in which they were assessed. Furthermore, questionnaires were administered to participating students' mathematics and reading/language arts teachers to collect information specific to instructional practices in those subject areas.

To obtain large enough samples to report reliable results for AI/AN students, schools with higher proportions of AI/AN students in selected states were oversampled. That is, the AI/AN students were selected for the NAEP assessments at a higher rate than they would be otherwise. All Bureau of Education (BIE) schools having grades 4 and/or 8 were also selected.

## Average Scores

NAEP average scores are reported for grades 4 and 8 on a 0-500 scale. Scales are created for each subject and grade independently, so even when another subject's scale has the same numerical range (0-500), average scores should not be compared across subjects (e.g., average reading scores should not be compared to average mathematics scores), nor should comparisons be made of average scores across grade levels.

## Percentiles

Examining the performance of $\mathrm{A} / / \mathrm{AN}$ students at selected percentiles can indicate when the overall picture for students diverges by lower- or higher-performing students (table TN-1). A percentile indicates the percentage of AI/AN students whose scores fell at or below a particular score on the NAEP scale. The results for AI/AN students presented in this report are based on their performance in either the NAEP mathematics or reading assessment, and the references to "higher-performing" or "lower-performing" AI/AN students are in terms of those specific NAEP subject-area assessments (not general academic performance). Please note that the percentiles discussed in this report are based exclusively on the distribution for AI/AN students, not on the distribution of scores for all students participating in the NAEP reading or mathematics assessments.

Table TN-1. Scores in NAEP reading and mathematics at selected percentiles for fourth- and eighth-grade AI/AN students: 2019

| Grade and subject | 25th percentile | 75th percentile |
| :--- | ---: | ---: |
| Grade 4 reading | 179 | 232 |
| Grade 8 reading | 225 | 274 |
| Grade 4 mathematics | 206 | 248 |
| Grade 8 mathematics | 237 | 286 |

NOTE: The NAEP reading scale ranges from 0 to 500. The NAEP mathematics scale ranges from 0 to 500 at grades 4 and 8 . SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

## Statistical Testing

NAEP uses widely accepted statistical standards when making statistical comparisons. When making a number of comparisons in a single analysis, the probability of finding significance by chance for at least one comparison increases with the number of comparisons. NAEP findings are reported based on a statistical significance level of . 05 (i.e., no more than a 5 percent probability that differences could be attributed to chance) with appropriate adjustments for multiple comparisons. NAEP uses the Benjamini-Hochberg false discovery rate (FDR) procedure for these analyses.

The tests of significance used in the analyses for this report are based on Student's $t$ tests: these are statistical tests that consider both the size of the differences between the estimated average scores or percentages and the estimated standard errors of the statistics being compared. Standard errors are margins of error and estimates based on smaller student groups are likely to have larger margins of error.

The size of the standard errors may also be influenced by other factors such as the degree to which the assessed students are representative of the entire population. Standard errors for the estimates presented in this report are available in the NAEP Data Explorer (NDE). For the 2019 analyses, an additional component was included for the standard error calculation when linking scores across the two delivery modes from prior years (paper and computer).

## Composite Variables

The composite variables discussed in this report are made up of multiple conceptually-related questions from the NIES student survey questionnaires. The construction of the NIES composites was guided by a diverse team of experienced AI/AN educators, psychometricians, and experts in survey questionnaire development, psychological statistics, and research methods. The team brought technical/statistical knowledge to the task, as well as direct classroom experience with AI/AN students. The NIES composites were guided by the concept of meaningful grouping; i.e., the NIES composites are constructed from a group of related survey questions. The NIES composite development process was a lengthy process, involving multiple review stages that worked systematically through the questionnaires making evaluations as outlined in the chart below.

## Figure TN-1. NIES composite development process

## NIES Composite Development Process

Step 1: Conceptually meaningful groups of survey questions
Survey Questionnaire (SQ) Team, shared with Technical Review Panel

Step 2: Survey question groups that have similar response options
Reporting, Psychometric, and SQ Teams

Step 3: Composites with response categories that can be reduced/simplified
Reporting, Psychometric, and SQ Teams

Composite scores were tabulated by assigning a higher numeric value to responses representing a higher frequency or extent (e.g., "almost every day" or "a lot like me") and a lower numeric value to responses that reflected a lower frequency or extent (e.g., "never" or "not like me"). Individual response values were then added together to get an overall composite value. For example, in the composite Interest in Reading About Cultures, student responses were assigned numeric values as follows:

- "This is not like me" = 1
- "This is a little like me" = 2
- "This is a lot like me" = 3

So, if a student responded "This is a lot like me" to all three of the questions that make up this composite, their "sum score" (or accumulated values assigned to their responses) would be 9 (i.e., numeric value of $3 \times 3$ questions). On the other end of the spectrum, a student who responded "This is not like me" to all three questions would have a sum score of 3 for Interest in Reading About Cultures (numeric value of $1 \times 3$ questions). The chart below shows how students with various sum scores were assigned to the final three overall composite categories (table TN-2). Only those students who responded to all of the questions within the given composite were included in the final analyses. Even so, missing data ranged from only 5 to 6 percent across all subject/grade/composite permutations so that the analyses presented here provide a valid representation of AI/AN student responses.

Table TN-2. Sum scores for the composite variable Interest in Reading About Cultures, by composite category: 2019

| Interest in reading about cultures |  |
| :--- | ---: |
| Composite category | Sum score |
| This is not like me | 3 |
|  | 4 |
| This is a little like me | 5 |
| This is a lot like me | 6 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

All of the NIES survey questionnaires may be accessed at https://nces.ed.gov/nationsreportcard/nies/questionnaire.aspx.

The exact wording of the survey prompts for each of the composites is outlined on the following pages.

## Cultural Knowledge (grade 8 only)

How much do you know about each of the following? Select one answer choice on each row.

|  | Nothing | A little | Some | A lot |
| :--- | :--- | :--- | :--- | :--- |
| a. Your American Indian or Alaska <br> Native history | © | © | © | (D) |
| b. Your American Indian or Alaska <br> Native traditions and culture (way of <br> life, customs) | (A) | © | © | (D) |
| c. Issues today that are important to <br> American Indian or Alaska Native <br> people | (A) | © | © | (D) |

While fourth-grade students were asked about their knowledge of their tribe or group, they were not asked multiple questions that would enable the construction of a composite.

## Interest in Reading About Cultures

Here are some sentences about reading. Select one answer choice on each row to show whether the sentence describes a person like you.

| This is |  |  |
| :---: | :---: | :---: |
| not like |  |  |
| me. | This is a <br> little like <br> me. | This is a <br> lot like <br> me. |

a. When my teacher talks about American Indian
(A)
(B) or Alaska Native history or culture, I try to read more about it.
b. I enjoy reading about American Indian or Alaska
(A)
(B) Native people.
(A)
(B) (c)
c. I enjoy reading about people who have different (c) traditions and cultures (ways of life, customs) than I have.

## Engagement at School

Here are some sentences about your school. Select one answer choice on each row to show whether the sentence describes a person like you.

|  | This is not like me. | This is a little like me. | This is a lot like me. |
| :---: | :---: | :---: | :---: |
| a. I put a lot of effort into my schoolwork. | (A) | (B) | (c) |
| b. I want to be one of the best students in my class. | (A) | (B) | (c) |
| c. I enjoy being challenged in my classes. | (A) | (B) | © |
| d. I feel that I belong at school. | (A) | (B) | © |

## Perceptions About Effort in School (grade 8 only)

How much do you agree with each of the following statements? Select one answer choice on each row.
a. If I put in enough effort, I will succeed in school.
b. If I put in enough effort in school, I will get into college.
c. If I put in enough effort in school, I

| Strongly <br> disagree | Disagree | Agree | Strongly <br> agree |
| :---: | :---: | :---: | :---: |
| (A) | (B) | (C) | (D) |
| (A) | (B) | (C) | (D) |
| (A) | (B) | © | (D) |

How much are the things you are learning in school preparing you for the life you want to lead?
(A) Not at all
(B) A little
(C) A fair amount
(D) Very much

These questions about connections between school and the future were only presented to eighth-grade AI/AN students.

## Appendix Tables

Table A-1. Total enrollment, AI/AN enrollment, and AI/AN students as a percentage of total enrollment in public elementary and secondary schools, and number of AI/AN students assessed at grades 4 and 8 in NAEP reading or mathematics, by jurisdiction: 2018-19 and 2019

| Jurisdiction | Total enrollment (all students) | AI/AN enrollment | AI/AN <br> as percent of total | Number of AI/AN students assessed in NAEP reading or mathematics |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Grade 4 | Grade 8 |
| Nation | 50,705,568 | 489,435 | 1.0 | 8,100 | 7,500 |
| Total for reportable states | 8,838,679 | 325,171 | 3.7 | 7,100 | 6,600 |
| Alaska | 130,963 | 29,839 | 22.8 | 900 | 800 |
| Arizona | 1,141,511 | 51,012 | 4.5 | 1,200 | 900 |
| Minnesota | 889,304 | 14,839 | 1.7 | 300 | 300 |
| Montana | 148,844 | 16,533 | 11.1 | 500 | 500 |
| Nebraska | 326,392 | 4,353 | 1.3 | 200 | 100 |
| New Mexico | 333,537 | 33,152 | 9.9 | 1,000 | 900 |
| North Carolina | 1,552,497 | 18,105 | 1.2 | 300 | 300 |
| North Dakota | 113,845 | 9,567 | 8.4 | 600 | 600 |
| Oklahoma | 698,891 | 91,944 | 13.2 | 700 | 700 |
| Oregon | 609,507 | 7,279 | 1.2 | 200 | 100 |
| South Dakota | 138,975 | 15,001 | 10.8 | 600 | 600 |
| Utah | 677,031 | 7,124 | 1.1 | 100 | 200 |
| Washington | 1,123,736 | 13,451 | 1.2 | 200 | 200 |
| Wisconsin | 859,333 | 9,530 | 1.1 | 200 | 200 |
| Wyoming | 94,313 | 3,442 | 3.6 | 200 | 200 |

NOTE: AI/AN = American Indian/Alaska Native. The numbers of students assessed in NAEP reading or mathematics are rounded to the nearest hundred. The national results include public, private, Bureau of Indian Education (BIE), and Department of Defense schools. The state results include public and BIE schools only. Total enrollment includes pre-kindergarten through twelfth grade.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Public Elementary/Secondary Education Survey", 2018-19 v.1a. National Assessment of Educational Progress (NAEP), 2019 Reading and Mathematics Assessments.

Table A-2. Percentage of fourth-grade AI/AN students in NAEP reading, by selected school and student characteristics and jurisdiction: 2019

| Jurisdiction | School type/density |  |  | School location |  |  |  | Eligible for National School Lunch Program | Identified as English learners | Identified as students with disabilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low density public schools |  | $\begin{array}{\|r} \text { BIE } \\ \text { schools } \end{array}$ | City | Suburb | Town | Rural |  |  |  |
| Nation | 57 | 35 | 8 | 19 | 14 | 21 | 46 | 78 | 11 | 17 |
| Alaska | 35 | 65 | $\dagger$ | 16 | 2 | 19 | 64 | 74 | 20 | 19 |
| Arizona | 41 | 38 | 22 | 25 | 8 | 23 | 45 | 86 | 8 | 14 |
| Minnesota | 65 | 31 | 4 | 22 | 9 | 22 | 46 | 81 | 2 | 31 |
| Montana | 30 | 70 | \# | 15 | 1 | 43 | 41 | 93 | 23 | 21 |
| Nebraska | 66 | 34 | t | 30 | \# | 18 | 51 | 86 | \# | 27 |
| New Mexico | 25 | 45 | 30 | 22 | 4 | 25 | 48 | 95 | 39 | 12 |
| North Carolina | 48 | 47 | 5 | 2 | 4 | 24 | 70 | 67 | 1 | 16 |
| North Dakota | 31 | 45 | 24 | 14 | 7 | 11 | 67 | 83 | 1 | 21 |
| Oklahoma | 43 | 57 | \# | 6 | 11 | 33 | 50 | 73 | \# | 20 |
| Oregon | 85 | 15 | \# | 20 | 30 | 25 | 25 | 83 | 12 | 13 |
| South Dakota | 26 | 54 | 20 | 20 | 2 | 10 | 68 | 87 | \# | 20 |
| Utah | 63 | 31 | 6 | 7 | 41 | 9 | 43 | 76 | 19 | 20 |
| Washington | 81 | 16 | 3 | 17 | 24 | 22 | 37 | 82 | 20 | 19 |
| Wisconsin | 57 | 35 | 8 | 13 | 9 | 22 | 57 | 84 | \# | 28 |
| Wyoming | 50 | 50 | \# | 5 | \# | 34 | 61 | 86 | 2 | 17 |

$\dagger$ Not applicable.
\# Rounds to zero.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density schools have less than 25 percent AI/AN students. High density schools have 25 percent or more. The national and state results reported here include public and BIE schools only. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

Table A-3. Percentage of eighth-grade AI/AN students in NAEP reading, by selected school and student characteristics and jurisdiction: 2019

| Jurisdiction | School type/density |  |  | School location |  |  |  | Eligible for National School Lunch Program | Identified as English learners | Identified as students with disabilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | High density public schools | Ble | City | Suburb | Town | Rural |  |  |  |
| Nation | 57 | 36 | 7 | 17 | 13 | 26 | 44 | 73 | 8 | 14 |
| Alaska | 34 | 66 | $\dagger$ | 15 | 2 | 17 | 66 | 70 | 27 | 18 |
| Arizona | 47 | 35 | 18 | 34 | 8 | 20 | 38 | 86 | 7 | 12 |
| Minnesota | 71 | 25 | 4 | 4 | 6 | 14 | 75 | 72 | \# | 32 |
| Montana | 37 | 61 | 2 | 19 | 1 | 35 | 44 | 90 | 12 | 17 |
| Nebraska | 60 | 40 | † | 19 | 13 | 14 | 54 | 70 | 4 | 27 |
| New Mexico | 19 | 58 | 23 | 22 | 4 | 29 | 45 | 95 | 28 | 17 |
| North Carolina | 51 | 41 | 8 | 4 | 2 | 37 | 57 | 70 | \# | 15 |
| North Dakota | 36 | 49 | 15 | 15 | 5 | 13 | 67 | 78 | 4 | 16 |
| Oklahoma | 38 | 61 | 1 | 6 | 9 | 30 | 55 | 70 | 1 | 15 |
| Oregon | 85 | 15 | \# | 27 | \# | 41 | 32 | 80 | 8 | 14 |
| South Dakota | 19 | 61 | 21 | 10 | \# | 26 | 64 | 89 | \# | 14 |
| Utah | 71 | 29 | \# | 21 | 24 | 18 | 37 | 60 | 15 | 29 |
| Washington | 75 | 21 | 4 | 22 | 15 | 29 | 35 | 82 | 14 | 25 |
| Wisconsin | 73 | 21 | 7 | 24 | 13 | 17 | 46 | 84 | 6 | 17 |
| Wyoming | 40 | 60 | \# | 6 | \# | 27 | 67 | 85 | 8 | 12 |

$\dagger$ Not applicable.
\# Rounds to zero.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density schools have less than 25 percent AI/AN students. High density schools have 25 percent or more. The national and state results reported here include public and BIE schools only. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

Table A-4. Percentage of fourth-grade AI/AN students in NAEP mathematics, by selected school and student characteristics and jurisdiction: 2019

| Jurisdiction | School type/density |  |  |  | School location |  |  | Eligible for National School Lunch Program | Identified as English learners | Identified as students with disabilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low density public schools | High density public schools | $\begin{array}{\|r} \text { BIE } \\ \text { schools } \end{array}$ | City | Suburb | Town | Rural |  |  |  |
| Nation | 58 | 34 | 8 | 18 | 17 | 20 | 45 | 75 | 11 | 18 |
| Alaska | 35 | 65 | † | 18 | 2 | 16 | 64 | 77 | 21 | 20 |
| Arizona | 41 | 36 | 23 | 24 | 9 | 20 | 46 | 89 | 7 | 16 |
| Minnesota | 69 | 28 | 3 | 21 | 15 | 22 | 43 | 75 | \# | 26 |
| Montana | 26 | 74 | \# | 15 | 2 | 38 | 46 | 92 | 20 | 21 |
| Nebraska | 69 | 31 | $\dagger$ | 13 | 10 | 34 | 42 | 78 | \# | 22 |
| New Mexico | 27 | 44 | 29 | 20 | 5 | 25 | 51 | 95 | 42 | 14 |
| North Carolina | 56 | 39 | 5 | 1 | 17 | 35 | 47 | 73 | 4 | 19 |
| North Dakota | 36 | 40 | 24 | 15 | 10 | 13 | 62 | 83 | 1 | 18 |
| Oklahoma | 42 | 58 | \# | 8 | 13 | 28 | 51 | 70 | 2 | 20 |
| Oregon | 83 | 17 | \# | 18 | 23 | 28 | 30 | 84 | 4 | 14 |
| South Dakota | 24 | 56 | 20 | 19 | 2 | 9 | 70 | 88 | \# | 20 |
| Utah | 60 | 31 | 9 | 13 | 16 | 27 | 43 | 83 | 31 | 25 |
| Washington | 78 | 20 | 2 | 13 | 30 | 26 | 31 | 76 | 26 | 18 |
| Wisconsin | 50 | 43 | 7 | 21 | 7 | 18 | 54 | 72 | \# | 12 |
| Wyoming | 37 | 63 | \# | 3 | \# | 28 | 69 | 96 | 3 | 20 |

$\dagger$ Not applicable.
\# Rounds to zero.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density schools have less than 25 percent AI/AN students. High density schools have 25 percent or more. The national and state results reported here include public and BIE schools only. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

Table A-5. Percentage of eighth-grade AI/AN students in NAEP mathematics, by selected school and student characteristics and jurisdiction: 2019

| Jurisdiction | School type/density |  |  |  | School location |  |  | Eligible for National School Lunch Program | Identified as English learners | Identified as students with disabilities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | High density public schools | $\begin{array}{r} \text { BIE } \\ \text { schools } \end{array}$ | City | Suburb | Town | Rural |  |  |  |
| Nation | 57 | 35 | 7 | 17 | 15 | 25 | 44 | 72 | 8 | 18 |
| Alaska | 31 | 69 | $\dagger$ | 15 | 1 | 16 | 68 | 70 | 26 | 19 |
| Arizona | 48 | 35 | 18 | 31 | 8 | 25 | 36 | 81 | 7 | 15 |
| Minnesota | 73 | 24 | 4 | 15 | 7 | 13 | 65 | 70 | \# | 12 |
| Montana | 35 | 64 | 1 | 16 | \# | 43 | 40 | 86 | 10 | 17 |
| Nebraska | $\ddagger$ | $\ddagger$ | $\dagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| New Mexico | 19 | 58 | 23 | 22 | 3 | 31 | 44 | 92 | 27 | 17 |
| North Carolina | 51 | 41 | 8 | 2 | 5 | 42 | 51 | 73 | 1 | 25 |
| North Dakota | 38 | 48 | 14 | 16 | 6 | 13 | 66 | 81 | 1 | 20 |
| Oklahoma | 41 | 58 | 1 | 7 | 15 | 27 | 51 | 65 | 1 | 17 |
| Oregon | 84 | 16 | \# | 10 | 4 | 52 | 34 | 79 | 8 | 19 |
| South Dakota | 26 | 54 | 20 | 16 | \# | 25 | 58 | 85 | \# | 11 |
| Utah | 62 | 38 | \# | 7 | 24 | 29 | 40 | 78 | 20 | 14 |
| Washington | 73 | 22 | 4 | 19 | 29 | 18 | 33 | 93 | 17 | 20 |
| Wisconsin | 63 | 30 | 7 | 5 | 18 | 42 | 35 | 71 | \# | 29 |
| Wyoming | 47 | 53 | \# | 9 | \# | 25 | 66 | 79 | 9 | 25 |

$\dagger$ Not applicable.
\# Rounds to zero.
$\ddagger$ Reporting standards not met. Sample size insufficient to permit a reliable estimate.
NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density schools have less than 25 percent AI/AN students. High density schools have 25 percent or more. The national and state results reported here include public and BIE schools only. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

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NIES is directed by NCES and carried out by Educational Testing Service, Pearson Educational Measurement, American Institutes for Research, Westat, Tribal Tech, and Huntington Ingalls Industries-formerly Fulcrum.

This report would not have been possible without the participation of thousands of students, teachers, and principals across the country, and the support of various education agencies, communities, and parents.

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## U.S. Department of Education

The National Assessment of Educational Progress (NAEP) is a congressionally authorized project sponsored by the U.S. Department of Education. The National Center for Education Statistics, a department within the Institute of Education Sciences, administers NAEP. The Commissioner of Education Statistics is responsible by law for carrying out the NAEP project.

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## National Indian Education Study 2019

May 2021

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"The Department of Education's mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access."


## MACIE GOALS and MEMBER CONCERNS

1. Community, family, and parental engagement with local school system

Goal 1: MACIE will advocate for and alongside communities, families, parents, and school systems that serve NA/AI student populations with the intent of recognizing the impact of historical trauma while promoting efforts to ensure safe, secure, and stable educational environments where students and parents feel welcome and supported.

## * Member Concerns

- Suicide (2)
- Parental Involvement
- Students being able to make it to school
- Unstable housing/family situation
- Overcoming historical trauma
- Teachers knowing about historical trauma and how to deal with it
- Positive parental involvement

2. School programs targeting systemic racism, disparate discipline, student achievement, historical trauma

Goal 2: MACIE will encourage the adoption of school-based programing which addresses the presence of systemic racism and the associated disparate discipline of NA/AI students in public schools, with the intent of supporting efforts focused on exploring the impact these conditions have upon student achievement.

* Member Concerns
- Roots of the achievement gap that are not being addressed
- Disparate discipline (MACIE must address the findings in the ACLU report)
- How to address systemic racism

3. Culture, language, and culturally relevant curriculum

Goal 3: MACIE will act as an advocate for the meaningful integration of culture and indigenous language in Montana schools by promoting the adoption of culturally relevant curriculum and instruction in support of the expression of NA/AI student self-identity and self-actualization.

## * Member Concerns

- Language/Culture in public schools and curriculum
- Teach at least one of the Native American languages that is prevalent in the locale of the K-12 school
- Culturally relevant teacher training (more IEFA in teacher prep)
- Cross-cultural instruction for ALL staff members
- Culturally relevant curriculum (2)
- Cultural history (where you came from, where you are at today, and where do you want to be in the near and long term future)

4. Equitable access to virtual teaching-learning platforms and connectivity

Goal 4: MACIE supports community programs that are focused on providing equitable access for NA/AI students to technological resources and internet connectivity within rural communities and school systems in response to the growing demand for the integration of virtual teaching and learning.

* Member Concerns
- Social Distancing
- Virtual Teaching

5. Member concerns not addressed in goals above

* Community support
* Community support for the value of education in modern society
* Fiscal responsibility/entrepreneurship


## MACIE Strategic Practice Training Process \& Outcomes

Primary Objectives of the Strategic Practice Training Process;

1) Review previous goal setting framework; and processes
2) Reconsideration of member proposed annual goals in alignment the Council's operational objectives
3) Discussion of Best Practice Strategies for consistent adoption and implementation of annual goals
4.) Review of pending Council initiatives in the context of proposed operational practices Q . Did the process guide and inform the practice?
4) Discussion of how MACIE Agenda Items are adopted/approved
5) Final thoughts / questions

## Advisory Council Structure- Guidance vs. Governance

Unlike Governing "Boards" the role of an Advisory "Council" is different \& unique

- The goal of an advisory council is to provide valuable assistance, advocacy, and expertise (guidance)
- Advisory Council members are hand-selected and recruited for the expertise that they can bring to the process.
- Advisory Council members help to fill in gaps of knowledge, experience and perspective.
- Unlike the board of directors, an advisory council doesn't have formal legal responsibilities or decision-making authority and can't issue directives that must be followed.
- An advisory council makes recommendations, provides information, and access to resources to the problem solvers (strategic partners).


## MACIE - Goal Setting Framework (Review)

## Transforming the Council's Vision into Measurable Goals

- The Vision (purpose) is the destination that the Council wants to achieve (Article II MACIE Constitution).
- Setting clear, concise and measurable goals helps the Council set the path toward achievement of its vision (purpose), with the goals acting as milestones.
- MACIE's vision (guiding principles) - to advise; to promote; to improve; to monitor; to evaluate; to advocate for; to carry out; to complete and to be a strong voice.


## Setting Measurable (Realistic) Goals

- Goals require action (organizational capacity)
- Goals must be attainable in a specified period of time
- Goals must be tied to measurable outcomes (tasks)
- Goals must support the vision (purpose) of the Council
- Goals must be "SMART" - Specific / Measurable / Achievable / Relevant / Timely
- Goals must produce results


## MACIE - Aligning the Guiding Principles to the Goals $A$

The Guiding Principles should Inform and Support the Goals
GUIDING PRINCIPLES


## MACIE - Goal Setting Framework

Monitoring, Evaluating and Adapting Goals

- Within the goal setting framework, monitoring and evaluation (systems of internal management) of the established goals should incorporate the following who?, when? and how?
- Monitoring progression toward a stated goal is a crucial process that comes into play between the initial setting and attaining a goal, ensuring that the goals are translated into action.
- Evaluation (assessment) of the attainment of a particular goal requires frequent monitoring at predetermined time intervals (weekly, monthly, quarterly or annually).
- The measurable benefit of monitoring and evaluating progression towards stated goals comes from harnessing the knowledge it provides to drive adaptation.
- An adaptive approach provides a framework for making good decisions in the face of critical uncertainties.


## MACIE - Goal Setting Framework

- The Goal setting process needs to be fluid and flexible
- Adapting and evolving to reflect the changing issues and concerns of the MACIE constituency
- The Operational framework should support the goal setting process, not impede or limit its ability to be responsive
- Goals will "shift" and "drift" as the MACIE membership realigns the focus and priorities
- Goals are a product of the moving issues forward into through initiative process



## MACIE - Operational Framework



## MACIE - Operational Framework

## Transforming Issues $\Rightarrow$ into Initiatives that result in $\Rightarrow$ Action

Identifiving Issues: MACIE effectively engages with both Montana's education and indigenous communities to identify current issues related to promoting high quality and equitable educational opportunities for all American Indian students (Internal Processes)

Adopting Initiatives: MACIE promotes educational initiatives which provide support and guidance to both the Board of Public Education (BPE) and the Office of Public Instruction (OPI) to ensure that a quality education is being provided to American Indian students throughout the State of Montana.
Mobilizing for Action: MACIE communicates and collaborates with both the Board of Public Education (BPE) and the Office of Public Instruction (OPI) to efficiently monitor the implementation of initiatives under the direction of these strategic partners to ensure that the perspectives and priorities of the delegate members of MACIE and communities which they represent result in agency action.

# MACIE - Transforming Issues into Action 

## Connecting the Constituency (Tribal Communities) to the Problem Solvers (OPI \& BPE)

## Best Practice Objectives

- Once an "issue" has been identified as being within the sphere of influence of the MACIE Advisory Council and meets the threshold for consideration and review by the leadership, how does the process work to elevate it to an "organizational initiative" which becomes actionable by the Council's partners?
- MACIE intends to follow internal processes (committee system), that once engaged, are intended to direct and guide advisory council efforts in collecting relevant information (research \& analysis), positioning an issue within the decision-making framework for additional consideration (council review and discussion), and stewarding it through the internal controls (sequential steps) to produce an actionable initiative or position, which is then disseminated to strategic partners (OPI \& BPE) for further consideration and implementation.


## Transforming Issues into Initiatives that Result in Action

Step 1: Constituency/MACIE Representatives jointly identify potential issue(s) in relation to its role in promoting high quality and equitable educational opportunities for all American Indian students in Montana,

Step 2: MACIE leadership determines whether specific issue falls within their "advisory" and "advocacy" role,
Step 3: MACIE Leadership assigns issue to appropriate organizational committee(s) for additional consideration,
Step 4: Committee(s) meets to confer and discuss what information, data, or analysis will be required to provide an assessment/recommendation to MACIE leadership as to whether the issue merits elevation to an organizational initiative,

Step 5: MACIE committee(s) makes formal request to OPI or BPE leadership to gather information, data and analysis required to provide an assessment/recommendation to MACIE leadership as to whether the issue merits elevation to an organizational initiative,

OPI leadership reviews committee request for agency staff support and then assigns responsibility for fulfilling MACIE Committee request to appropriate internal divisions heads (1) Student Support Services, (2) Teaching and Learning, or (3) School Innovation and Improvement

OPI division head reviews MACIE Committee request and determines which staff within each unit will gather appropriate information, and data or will provide an assessment or analysis to be provided to MACIE in fulfillment of the committee request,

## Transforming Issues into Initiatives that Result in Action

OPI unit level staff gather appropriate information, and data and/or provide assessment or analysis on specific request from MACIE committee, and draft a comprehensive response,

Report containing information, data, assessment, or analysis is provided to OPI division head for final review and approval.

OPI response to specific MACIE Committee request is shared with OPI and MACIE leadership along with MACIE committee that made the initial request.

Step 11: MACIE Committee reviews report received from OPI with intent of providing a recommendation to MACIE leadership for further internal action with respect to the findings around the specific issue,

Step 12: If MACIE Committee makes recommendation to leadership that additional internal organizational action is required, the issue, by resolution of the entire MACIE membership is elevated to an organizational initiative.

Question: Once an initiative is adopted by formal action of the Advisory Council, what specific steps are taken following this action to elevate the initiative to an actionable platform by the BPE, OPI or other aligned strategic partners?

- Agency Action: All organizational initiatives (positions) adopted by the MACIE membership are provided to strategic partners (OPI \& BPE) for implementation planning and additional action.
- MACIE's role then shifts to one of monitoring the implementation of agency action.


## MACIE - Advisory Council Role in Monitoring Initiatives

- In fulfilling its advisory responsibility and obligations to the BPE and OPI, MACIE in its issue advocacy role, continues to actively monitor the implementation and integration of the initiatives it has identified, elevated and supported through ongoing communication and collaboration with its strategic partners.


[^0]:    ${ }^{1}$ This reporting group does not include Native Hawaiian students.

[^1]:    ${ }^{2}$ The Esther Martinez Native American Languages Preservation Act was reauthorized in 2019.
    ${ }^{3}$ Cross-generational language immersion programs that connect AI/AN elders and youth for Heritage language learning.
    ${ }^{4}$ For McCarty, "strong" programs are consistent, immersive, and tied to core curriculum-in contradistinction to pullouts and sporadic programming, which lead to "subtractive bilingualism."

[^2]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^3]:    a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^4]:    a Significantly different ( $p<05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^5]:    \# Rounds to zero.
    a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different $(p<.05)$ from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding. Teachers were prompted to select one of the response options shown in the questionnaire. Analysis is based on mutually exclusive, single responses.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^6]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^7]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^8]:    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^9]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^10]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^11]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^12]:    ${ }^{5}$ Heritage languages may also be referred to as Native, Indigenous, Treasure, Amerindian, North American Native, American Indian, Alaska Native, and/or traditional languages. Authors will use a subset of this terminology interchangeably, reflecting and acknowledging the fact that preferred terms may differ across communities.

[^13]:    a Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^14]:    ${ }^{6}$ Readers should note that the later teacher survey question exploring whether teachers taught core subjects using Heritage languages is distinct from this student survey question. The classes that are asked about here could potentially be in subjects other than reading/language arts or mathematics, supplemental culture or language classes, and/or classes taught by tribal elders or other community visitors to the school in addition to the students' classroom teachers.

[^15]:    ${ }^{7}$ Readers should note that the availability of materials in written text varies across Heritage languages.

[^16]:    ${ }^{\text {a }}$ Significantly different ( $p<05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^17]:    \# Rounds to zero.
    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\mathrm{b}}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^18]:    ${ }^{8}$ Note that the new designation by the U.S. Department of Education is "English learners." The table reflects the exact wording used in the survey questionnaire at the time of the administration of the NIES survey.

[^19]:    a Significantly different $(p<.05)$ from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^20]:    ${ }^{9}$ Note that the new designation by the U.S. Department of Education is "English learners," not "English language learners." This does not necessarily mean that a student is learning English in addition to a Native language (or any other language). It could simply mean that, within their school setting (and local/state definitions), a student may be struggling with English.
    ${ }^{10}$ Readers should note that at the time of the NAEP assessments and the NIES survey, the terminology used was "limited-English proficient," which is the label used in the accompanying table 28.

[^21]:    \# Rounds to zero.

[^22]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\text {b }}$ Significantly different $(p<.05)$ from high density public schools. Comparisons are among the school type/density categories. NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

[^23]:    * Significantly different ( $p<.05$ ) from 2019.

    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. In 2019, NAEP reading results are from a digitally based assessment; prior to 2019, results were from a paper-and-pencil-based assessment. The NAEP reading scale ranges from 0 to 500 . School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students. High density public schools have 25 percent or more. All AI/AN students (public) includes only students in public schools. Performance results are not available for BIE schools at fourth grade in 2015 because school participation rates did not meet the 70 percent criteria.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2005-19 National Indian Education Studies.

[^24]:    * Significantly different ( $p$ < .05) from 2019.

[^25]:    ${ }^{11}$ Please note that "higher-performing" and "lower-performing" refer to performance in specified subject areas (i.e., mathematics or reading) and do not reflect general academic performance.
    ${ }^{12}$ The composite variables Cultural Knowledge and Interest in Reading About Cultures were explored in the prior section of the report.

[^26]:    * Significantly different ( $p<.05$ ) from corresponding result for lower-performing AI/AN students.

    NOTE: AI/AN = American Indian/Alaska Native. Only selected response options are shown for each factor; not all response options are shown.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study and 2019 Reading and Mathematics Assessments.

[^27]:    ${ }^{\text {a }}$ Significantly different ( $p<.05$ ) from low density public schools. Comparisons are among the school type/density categories.
    ${ }^{\text {b }}$ Significantly different ( $p<.05$ ) from high density public schools. Comparisons are among the school type/density categories.
    NOTE: AI/AN = American Indian/Alaska Native. BIE = Bureau of Indian Education. School density indicates the proportion of AI/AN students enrolled. Low density public schools have less than 25 percent AI/AN students; high density public schools have 25 percent or more. All AI/AN students includes all AI/AN students sampled throughout the nation in public, private, BIE, and Department of Defense schools. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 National Indian Education Study.

