ANSEP
ALASKA NATIVE SCIENCE & ENGINEERING PROGRAM


EXIT
CHAMPS

ANSEP Components

K- 5 Academy
K, 1st, 2nd, 3rd, 4th & 5th grade

Middle School Academy
5th, 6th, 7th & 8th grade

STEM Career Explorations
Returning Middle School Students

Acceleration Academy
9th—12th Grade

Bridge
Incoming 1st year University Students

University Success
Undergraduate & Graduate Students

Alaska Grown PhD
Graduates Earn PhDs & Return as Faculty

ANSEP

ALASKA NATIVE SCIENCE & ENGINEERING PROGRAM* (ANSEP)

LOGIC MODEL

ASSESSING THE NEED

INSTITUTIONAL

ALASKA K-12 SYSTEM
Teachers · Curriculum · Other resources

UNIVERSITY OF ALASKA
Faculty and staff · Student social and academic supports · Research resources · State STEM career preparation · Student diversity and climate for Alaska Natives

STEM INDUSTRY
STEM workforce · Interaction with Alaska Native communities · Staff diversity and climate for Alaska Natives

STUDENTS

Preparation for and awareness of STEM educational and career pathways
Motivation and commitment to STEM
Family and community resources

CONTEXT

Economic conditions and labor market · Policy and budget climate (K-12 system, University system, and federal, state, and local/village) · Historical and social conditions for Alaska Natives

INPUTS

STAFFING AND LEADERSHIP · FACILITIES · FUNDING · PARTNERSHIPS

FUNCTIONAL ACTIVITIES

RECRUITMENT AND SELECTION ADVOCACY · PARTNERSHIP AND RELATIONSHIP MANAGEMENT · FINANCIAL MANAGEMENT · FUNDRAISING · MARKETING AND COMMUNICATIONS · ALUMNI OUTREACH AND ACTIVITIES · POLICY WORK AND ADVOCACY

PROGRAMMATIC ACTIVITIES (COMPONENTS)

K5 ACADEMY
Hands-on STEM modules
Math skill development
Team-building work
Social activities
Field trips
Exposure to Alaska Native and other mentors

MIDDLE SCHOOL ACADEMY
Computer assembly
Residential experience on campus
Hands-on STEM modules
Team-building work
Social activities
Field trips
Exposure to Alaska Native and other mentors

CAREER EXPLORATIONS
Recurrent component
Residential experience on campus
Hands-on STEM modules
Team-building work
Social activities
Field trips
Exposure to Alaska Native and other mentors

ACCELERATION COMPONENTS
Recurrent component
Hands-on STEM modules
Team-building work
Academic preparation
Peer study groups
Weekly meetings and employer networking
Supports and advising
Social activities
Exposure to Alaska Native and other mentors
Scholarships for college
Summer time Acceleration Academy
• Residential experience on campus
Full time Acceleration High School
• Regular ANSEP high school

SUMMER BRIDGE
Freshman-year academic preparation
Residential experience on campus
Team-building work
Paid internship
Supports and advising
Social activities
Professionalization and skill-building
Exposure to Alaska Native and other mentors
Scholarships for college

UNIVERSITY SUCCESS
Performance requirements
Merit-based scholarships
Residential experience on campus
Team-building work
Paid internship
Peer study groups
Weekly meetings and employer networking
Study/social space and resources
Supports and advising
Job-placement assistance
Informal mentoring/networking
Teaching and research opportunities
Research exposure
Exposure to Alaska Native and other mentors

GRADUATE SUCCESS
Scholarships and financial support
Supports and advising
Academic research skill-building
Career awareness and exposure to other universities
Team-building work
Exposure to Alaska Native and other mentors

OUTPUTS / SHORT-TERM OUTCOMES

ALASKA K-12 SYSTEM
Higher performing students returning to classroom · College application rates · Contact with university

UNIVERSITY OF ALASKA
Diversity rates · Retention rates · Resources

STEM INDUSTRY
Diverse workforce · Interns' work product · Alaska Native community relations

Knowledge of college life · Soft skills · Leadership development · Application to further ANSEP activities · Social integration · STEM professional identity and socialization

Commitment to complete algebra by the end of 8th grade
Commitment to complete trigonometry, chemistry, and physics by end of high school
Retention at university · Entry-level STEM employment
Retention in advanced degree

Completion of Academy
Completion of Career Explorations · Reinforcement of Middle School Academy experience
Completion of Component, with college credits · Application to university
Completion of Summer Bridge, with college credits
Completion of STEM major coursework

Excitement about STEM · Connection to academically focused peer group · Reinforcement of Alaska Native identity

Knowledge about STEM education and occupations for parents, social networks, and sending communities

Personal connection

LONG-TERM OUTCOMES

ALASKA K-12 SYSTEM
Pool of qualified Alaska Native and non-Alaska Native STEM teachers · STEM education practices that emphasize hands-on learning and career-focused curriculum · Resources committed to STEM

UNIVERSITY OF ALASKA
Recruitment and retention of Alaska Native students and other minorities · Use of existing university resources, visibility and attraction of STEM funding to campus · Filling Alaska's STEM occupational needs

STEM INDUSTRY
Access to skilled, stable workforce of scientists and engineers · Access to Alaska Native perspective and leadership on STEM and natural resource issues

College-readiness for STEM field · College enrollment · College degree attainment · Advanced degree attainment · Career advancement and wages · Commitment to STEM field

Empowerment and leadership · Commitment to Alaska Native community and Alaska

Alaska Natives in leadership roles
· Changing attitudes toward Alaska Natives and minorities · Greater sensitivity to diversity

*Adapted from Urban Institute (2015). Evaluation of the Alaska Native Science & Engineering Program (ANSEP), Research Report, Urban Institute, January 26, 2015.

Elementary & Middle School Academies

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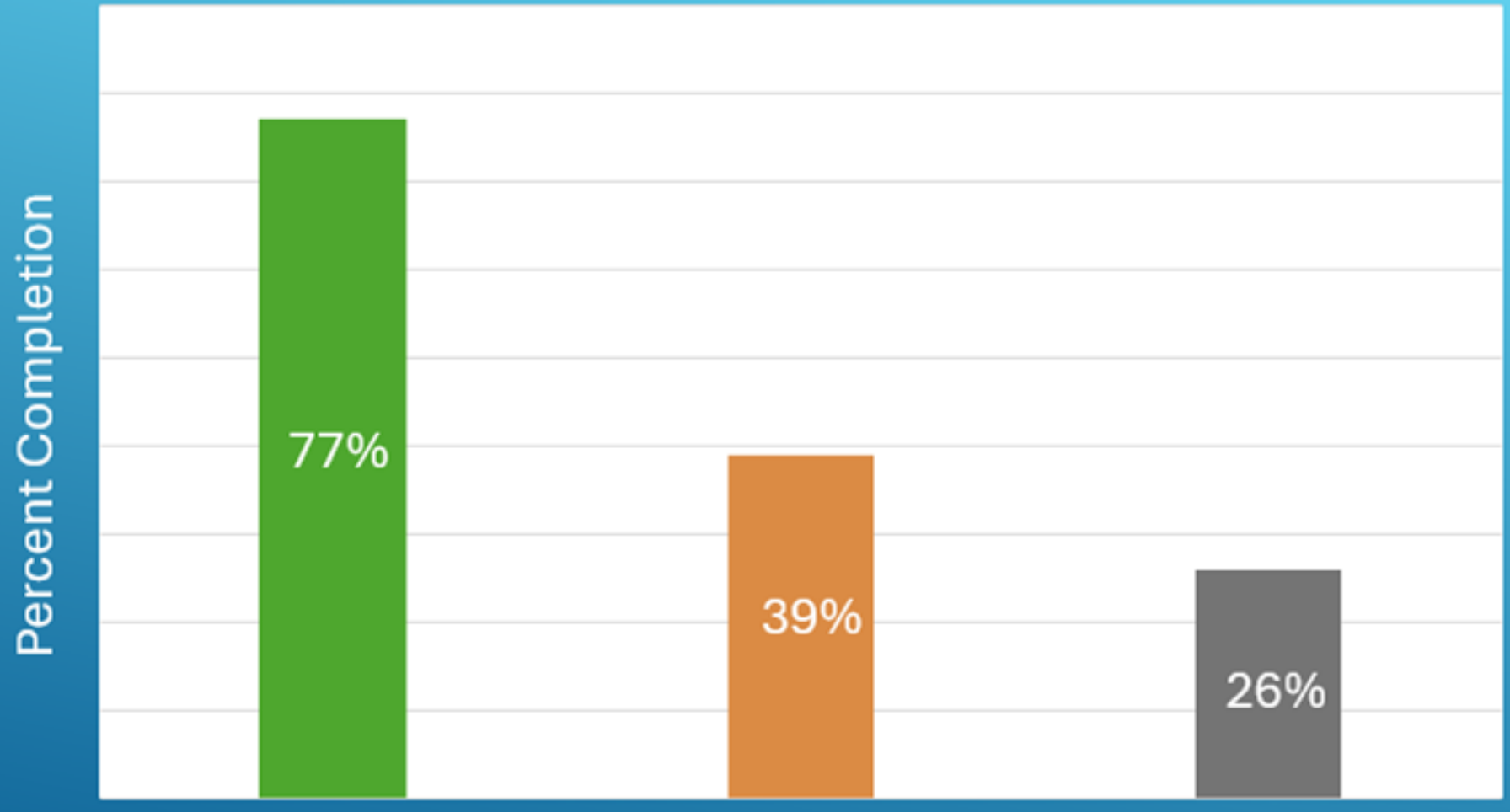
TEAM
INSPIRATION

ANSEP 8th Grade Math Completion



STEM Career Explorations

Acceleration Academy
9th—12th Grade

Dual-credit

AY Sites:
- Anchorage
- Mat-Su
- Bethel
- Kotzebue
- Nome

Summer Statewide

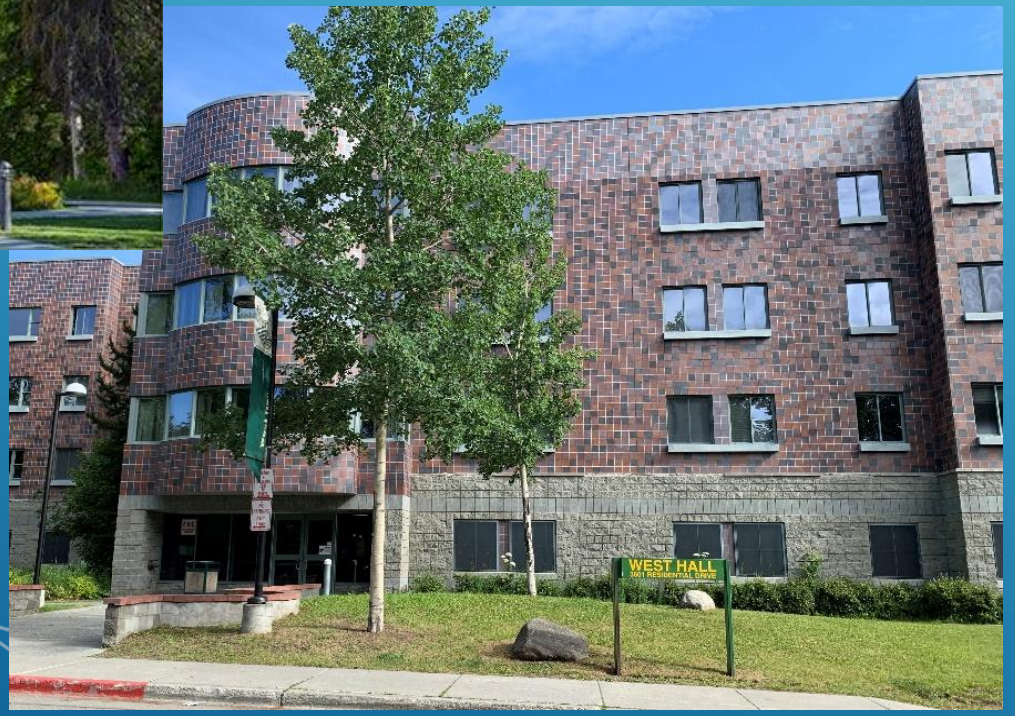
ANSEP


Microsoft
ANSEP

Acceleration Academy
Explore Careers

Bridge

Incoming 1st year University Students



University Success
Undergraduate & Graduate Students

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University Success
Requirements

ANSEP

Graduate Success

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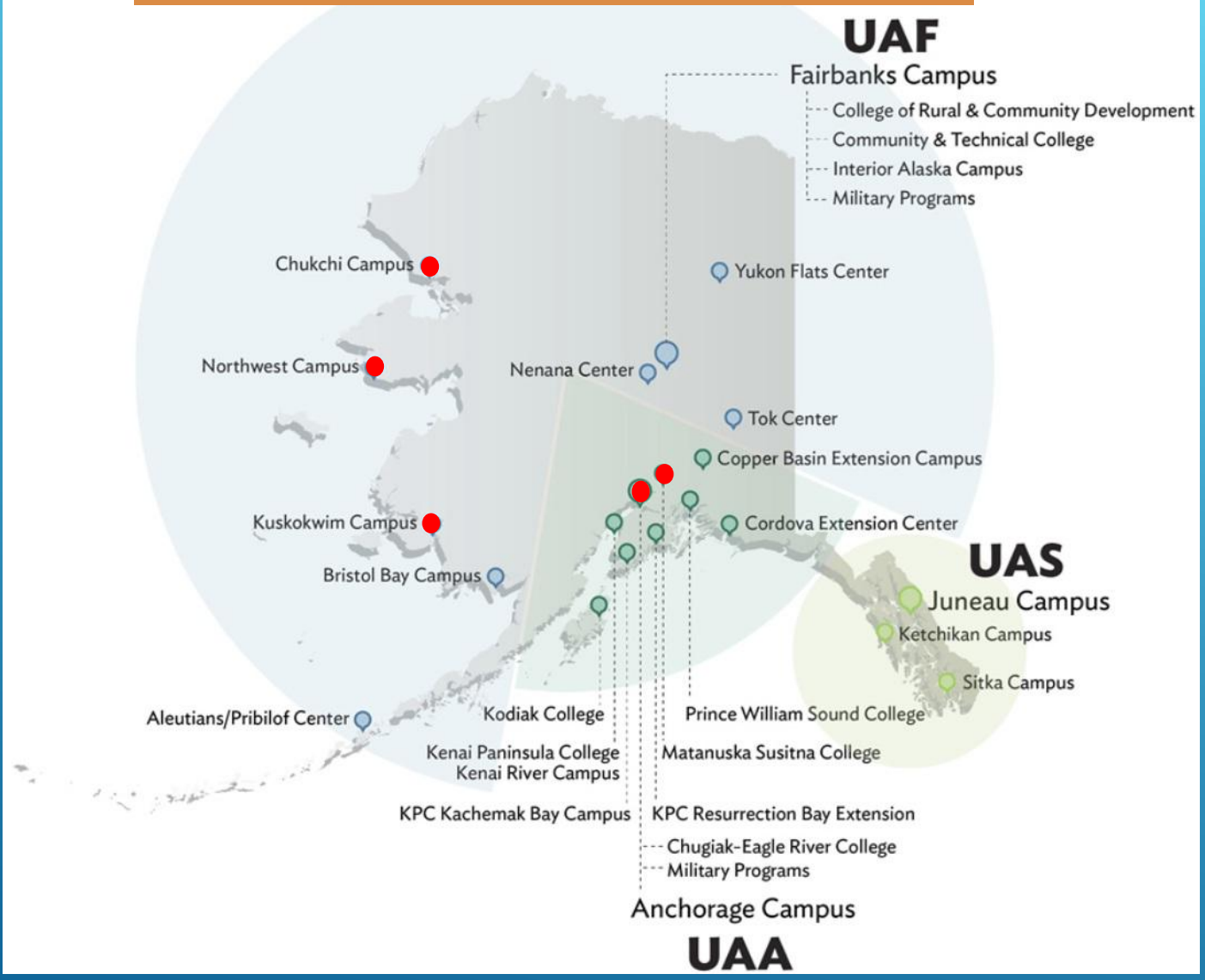
Acceleration Academy
Current Sites



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2026 ANSEP Acceleration graduate – Ethan Johnson

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